

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Legend

Technician (2018-2022) Technician (2014-2018)

differences 2018-2022 differences 2014-2018

Question numbers ---> T???? <--- indicate differences between the question pools.

Question numbers ---> T???? <--- indicate no changes from the Technician (2014-2018) question pool.

Question numbers ---> *NEW* T???? *NEW* <--- are new questions.

Lists of question numbers in the Technician (2014-2018) QP not in the Technician (2018-2022) QP, new question numbers, question numbers with no content differences, and question numbers with content differences are displayed at the end of this comparison.

-----> *NO CHANGES* T1A01 *NO CHANGES* <-----

Question

2022 Which of the following is a purpose of the Amateur Radio Service as stated in the FCC rules and regulations?

2018 Which of the following is a purpose of the Amateur Radio Service as stated in the FCC rules and regulations?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Providing personal radio communications for as many citizens as possible

2018 Providing personal radio communications for as many citizens as possible

Choice B

2022 Providing communications for international non-profit organizations

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2018 Providing communications for international non-profit organizations

Choice C

2022 Advancing skills in the technical and communication phases of the radio art
2018 Advancing skills in the technical and communication phases of the radio art

Choice D

2022 All of these choices are correct
2018 All of these choices are correct

Rules

2022 [97.1]
2018 [97.1]

-----> *CHANGES* T1A02 *CHANGES* <-----

Question

2022 Which agency regulates and enforces the rules for the Amateur Radio Service in the United States?
2018 Which agency regulates and enforces the rules for the Amateur Radio Service in the United States?

Answer

2022 C
2018 C

Figure

2022
2018

Choice A

2022 FEMA
2018 FEMA

Choice B

2022 Homeland Security
2018 The ITU

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 The FCC

2018 The FCC

Choice D

2022 All of these choices are correct

2018 Homeland Security

Rules

2022 [97.1]

2018 [97.1]

-----> *CHANGES* T1A03 *CHANGES* <-----

Question

2022 What are the FCC rules regarding the use of a phonetic alphabet for station identification in the Amateur Radio Service?

2018 Which part of the FCC regulations contains the rules governing the Amateur Radio Service?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 It is required when transmitting emergency messages

2018 Part 73

Choice B

2022 It is prohibited

2018 Part 95

Choice C

2022 It is required when in contact with foreign stations

2018 Part 90

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Choice D

2022 It is encouraged

2018 Part 97

Rules

2022 [97.119 (b) (2)]

2018

-----> *CHANGES* T1A04 *CHANGES* <-----

Question

2022 How many operator/primary station license grants may be held by any one person?

2018 Which of the following meets the FCC definition of harmful interference?

Answer

2022 A

2018 C

Figure

2022

2018

Choice A

2022 One

2018 Radio transmissions that annoy users of a repeater

Choice B

2022 No more than two

2018 Unwanted radio transmissions that cause costly harm to radio station apparatus

Choice C

2022 One for each band on which the person plans to operate

2018 That which seriously degrades, obstructs, or repeatedly interrupts a radio communication service operating in accordance with the Radio Regulations

Choice D

2022 One for each permanent station location from

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which the person plans to operate

2018 Static from lightning storms

Rules

2022 [97.5(b)(1)]

2018 [97.3(a)(23)]

-----> *CHANGES* T1A05 *CHANGES* <-----

Question

2022 What is proof of possession of an FCC-issued operator/primary license grant?

2018 Which of the following is a purpose of the Amateur Radio Service rules and regulations as defined by the FCC?

Answer

2022 C

2018 A

Figure

2022

2018

Choice A

2022 A printed operator/primary station license issued by the FCC must be displayed at the transmitter site

2018 Enhancing international goodwill

Choice B

2022 The control operator must have an operator/primary station license in his or her possession when in control of a transmitter

2018 Providing inexpensive communication for local emergency organizations

Choice C

2022 The control operator's operator/primary station license must appear in the FCC ULS consolidated licensee database

2018 Training of operators in military radio operating procedures

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022 [97.7]

2018 [97.1 (e)]

-----> *CHANGES* T1A06 *CHANGES* <-----

Question

2022 What is the FCC Part 97 definition of a "beacon"?

2018 Which of the following services are protected from interference by amateur signals under all circumstances?

Answer

2022 C

2018 D

Figure

2022

2018

Choice A

2022 A government transmitter marking the amateur radio band edges

2018 Citizens Radio Service

Choice B

2022 A bulletin sent by the FCC to announce a national emergency

2018 Broadcast Service

Choice C

2022 An amateur station transmitting communications for the purposes of observing propagation or related experimental activities

2018 Land Mobile Radio Service

Choice D

2022 A continuous transmission of weather

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

information authorized in the amateur bands by the
National Weather Service

2018 Radionavigation Service

Rules

2022 [97.3(a)(9)]

2018 [97.101(d), 97.303(o)(2)]

-----> *CHANGES* T1A07 *CHANGES* <-----

Question

2022 What is the FCC Part 97 definition of a "space
station"?

2018 What is the FCC Part 97 definition of
telemetry?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Any satellite orbiting the earth

2018 An information bulletin issued by the FCC

Choice B

2022 A manned satellite orbiting the earth

2018 A one-way transmission to initiate, modify or
terminate functions of a device at a distance

Choice C

2022 An amateur station located more than 50 km
above the Earth's surface

2018 A one-way transmission of measurements at a
distance from the measuring instrument

Choice D

2022 An amateur station using amateur radio
satellites for relay of signals

2018 An information bulletin from a VEC

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Rules

2022 [97.3(a)(41)]

2018 [97.3(a)(46)]

-----> *CHANGES* T1A08 *CHANGES* <-----

Question

2022 Which of the following entities recommends transmit/receive channels and other parameters for auxiliary and repeater stations?

2018 Which of the following entities recommends transmit/receive channels and other parameters for auxiliary and repeater stations?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Frequency Spectrum Manager appointed by the FCC

2018 Frequency Spectrum Manager

Choice B

2022 Volunteer Frequency Coordinator recognized by local amateurs

2018 Frequency Coordinator

Choice C

2022 FCC Regional Field Office

2018 FCC Regional Field Office

Choice D

2022 International Telecommunications Union

2018 International Telecommunications Union

Rules

2022 [97.3(a)(22)]

2018 [97.3(a)(22)]

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T1A09 *CHANGES* <-----

Question

2022 Who selects a Frequency Coordinator?

2018 Who selects a Frequency Coordinator?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The FCC Office of Spectrum Management and
Coordination Policy

2018 The FCC Office of Spectrum Management and
Coordination Policy

Choice B

2022 The local chapter of the Office of National
Council of Independent Frequency Coordinators

2018 The local chapter of the Office of National
Council of Independent Frequency Coordinators

Choice C

2022 Amateur operators in a local or regional area
whose stations are eligible to be repeater or
auxiliary stations

2018 Amateur operators in a local or regional area
whose stations are eligible to be auxiliary or
repeater stations

Choice D

2022 FCC Regional Field Office

2018 FCC Regional Field Office

Rules

2022 [97.3(a)(22)]

2018 [97.3(a)(22)]

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T1A10 *CHANGES* <-----

Question

2022 Which of the following describes the Radio Amateur Civil Emergency Service (RACES)?

2018 What is the FCC Part 97 definition of an amateur station?

Answer

2022 D

2018 A

Figure

2022

2018

Choice A

2022 A radio service using amateur frequencies for emergency management or civil defense communications

2018 A station in the Amateur Radio Service consisting of the apparatus necessary for carrying on radio communications

Choice B

2022 A radio service using amateur stations for emergency management or civil defense communications

2018 A building where Amateur Radio receivers, transmitters, and RF power amplifiers are installed

Choice C

2022 An emergency service using amateur operators certified by a civil defense organization as being enrolled in that organization

2018 Any radio station operated by a non-professional

Choice D

2022 All of these choices are correct

2018 Any radio station for hobby use

Rules

2022 [97.3(a)(38), 97.407]

2018 [97.3(a)(5)]

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-----> *CHANGES* T1A11 *CHANGES* <-----

Question

2022 When is willful interference to other amateur radio stations permitted?

2018 When is willful interference to other amateur radio stations permitted?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 To stop another amateur station which is breaking the FCC rules

2018 Only if the station being interfered with is expressing extreme religious or political views

Choice B

2022 At no time

2018 At no time

Choice C

2022 When making short test transmissions

2018 Only during a contest

Choice D

2022 At any time, stations in the Amateur Radio Service are not protected from willful interference

2018 At any time, amateurs are not protected from willful interference

Rules

2022 [97.101 (d)]

2018 [97.101 (d)]

-----> *CHANGES* T1B01 *CHANGES* <-----

Question

2022 What is the International Telecommunications

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Union (ITU)?

2018 What is the ITU?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 An agency of the United States Department of Telecommunications Management

2018 An agency of the United States Department of Telecommunications Management

Choice B

2022 A United Nations agency for information and communication technology issues

2018 A United Nations agency for information and communication technology issues

Choice C

2022 An independent frequency coordination agency

2018 An independent frequency coordination agency

Choice D

2022 A department of the FCC

2018 A department of the FCC

Rules

2022

2018

-----> *CHANGES* T1B02 *CHANGES* <-----

Question

2022 Which amateur radio stations may make contact with an amateur radio station on the International Space Station (ISS) using 2 meter and 70 cm band frequencies?

2018 Why are the frequency assignments for some U.S.

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Territories different from those in the 50 U.S. States?

Answer

2022 B

2018 A

Figure

2022

2018

Choice A

2022 Only members of amateur radio clubs at NASA facilities

2018 Some U. S. Territories are located in ITU regions other than region 2

Choice B

2022 Any amateur holding a Technician or higher-class license

2018 Territorial governments are allowed to select their own frequency allocations

Choice C

2022 Only the astronaut's family members who are hams

2018 Territorial frequency allocations must also include those of adjacent countries

Choice D

2022 Contacts with the ISS are not permitted on amateur radio frequencies

2018 Any territory that was in existence before the ratification of the Communications Act of 1934 is exempt from FCC frequency regulations

Rules

2022 [97.301, 97.207(c)]

2018 [97.301]

-----> *CHANGES* T1B03 *CHANGES* <-----

Question

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2022 Which frequency is within the 6 meter amateur band?

2018 Which frequency is within the 6 meter band?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 49.00 MHz

2018 49.00 MHz

Choice B

2022 52.525 MHz

2018 52.525 MHz

Choice C

2022 28.50 MHz

2018 28.50 MHz

Choice D

2022 222.15 MHz

2018 222.15 MHz

Rules

2022 [97.301(a)]

2018 [97.301(a)]

-----> *NO CHANGES* T1B04 *NO CHANGES* <-----

Question

2022 Which amateur band are you using when your station is transmitting on 146.52 MHz?

2018 Which amateur band are you using when your station is transmitting on 146.52 MHz?

Answer

2022 A

2018 A

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Figure

2022

2018

Choice A

2022 2 meter band

2018 2 meter band

Choice B

2022 20 meter band

2018 20 meter band

Choice C

2022 14 meter band

2018 14 meter band

Choice D

2022 6 meter band

2018 6 meter band

Rules

2022 [97.301(a)]

2018 [97.301(a)]

-----> *CHANGES* T1B05 *CHANGES* <-----

Question

2022 What is the limitation for emissions on the frequencies between 219 and 220 MHz?

2018 Which 70 cm frequency is authorized to a Technician Class license holder operating in ITU Region 2?

Answer

2022 B

2018 C

Figure

2022

2018

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Choice A

2022 Spread spectrum only

2018 53.350 MHz

Choice B

2022 Fixed digital message forwarding systems only

2018 146.520 MHz

Choice C

2022 Emergency traffic only

2018 443.350 MHz

Choice D

2022 Fast-scan television only

2018 222.520 MHz

Rules

2022 [97.305(c)]

2018 [97.301(a)]

-----> *CHANGES* T1B06 *CHANGES* <-----

Question

2022 On which HF bands does a Technician class operator have phone privileges?

2018 Which 23 cm frequency is authorized to a Technician Class licensee?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 None

2018 2315 MHz

Choice B

2022 10 meters only

2018 1296 MHz

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Choice C

2022 80 meters, 40 meters, 15 meters and 10 meters

2018 3390 MHz

Choice D

2022 30 meters only

2018 146.52 MHz

Rules

2022 [97.301(e), 97.305]

2018 [97.301(a)]

-----> *CHANGES* T1B07 *CHANGES* <-----

Question

2022 Which of the following VHF/UHF frequencies ranges are limited to CW only?

2018 What amateur band are you using if you are transmitting on 223.50 MHz?

Answer

2022 A

2018 D

Figure

2022

2018

Choice A

2022 50.0 MHz to 50.1 MHz and 144.0 MHz to 144.1 MHz

2018 15 meter band

Choice B

2022 219 MHz to 220 MHz and 420.0 MHz to 420.1 MHz

2018 10 meter band

Choice C

2022 902.0 MHz to 902.1 MHz

2018 2 meter band

Choice D

2022 All of these choices are correct

2018 1.25 meter band

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Rules

2022 [97.305 (a), (c)]

2018 [97.301(a)]

-----> *CHANGES* T1B08 *CHANGES* <-----

Question

2022 Which of the following is a result of the fact that the Amateur Radio Service is secondary in all or portions of some amateur bands (such as portions of the 70 cm band)?

2018 Which of the following is a result of the fact that the amateur service is secondary in some portions of the 70 cm band?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 U.S. amateurs may find non-amateur stations in those portions, and must avoid interfering with them

2018 U.S. amateurs may find non-amateur stations in the bands, and must avoid interfering with them

Choice B

2022 U.S. amateurs must give foreign amateur stations priority in those portions

2018 U.S. amateurs must give foreign amateur stations priority in those portions

Choice C

2022 International communications are not permitted in those portions

2018 International communications are not permitted on 70 cm

Choice D

2022 Digital transmissions are not permitted in

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

those portions

2018 Digital transmissions are not permitted on 70
cm

Rules

2022 [97.303]

2018 [97.303]

-----> *NO CHANGES* T1B09 *NO CHANGES* <-----

Question

2022 Why should you not set your transmit frequency to be exactly at the edge of an amateur band or sub-band?

2018 Why should you not set your transmit frequency to be exactly at the edge of an amateur band or sub-band?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 To allow for calibration error in the transmitter frequency display

2018 To allow for calibration error in the transmitter frequency display

Choice B

2022 So that modulation sidebands do not extend beyond the band edge

2018 So that modulation sidebands do not extend beyond the band edge

Choice C

2022 To allow for transmitter frequency drift

2018 To allow for transmitter frequency drift

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022 [97.101(a), 97.301(a-e)]

2018 [97.101(a), 97.301(a-e)]

-----> *CHANGES* T1B10 *CHANGES* <-----

Question

2022 Which of the following HF bands have frequencies available to the Technician class operator for RTTY and data transmissions?

2018 Which of the bands above 30 MHz that are available to Technician Class operators have mode-restricted sub-bands?

Answer

2022 D

2018 C

Figure

2022

2018

Choice A

2022 10 meters, 12 meters, 17 meters, and 40 meters

2018 The 6 meter, 2 meter, and 70 cm bands

Choice B

2022 10 meters, 15 meters, 40 meters, 80 meters

2018 The 2 meter and 13 cm bands

Choice C

2022 30 meters only

2018 The 6 meter, 2 meter, and 1.25 meter bands

Choice D

2022 10 meters only

2018 The 2 meter and 70 cm bands

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Rules

2022 [97.301(e), 97.305(c)]

2018 [97.301(e), 97.305(c)]

-----> *CHANGES* T1B11 *CHANGES* <-----

Question

2022 What is the maximum peak envelope power output for Technician class operators using their assigned portions of the HF bands?

2018 What emission modes are permitted in the mode-restricted sub-bands at 50.0 to 50.1 MHz and 144.0 to 144.1 MHz?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 200 watts

2018 CW only

Choice B

2022 100 watts

2018 CW and RTTY

Choice C

2022 50 watts

2018 SSB only

Choice D

2022 10 watts

2018 CW and SSB

Rules

2022 [97.313]

2018 [97.301(a), 97.305 (a) (c)]

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-----> *CHANGES* T1B12 *CHANGES* <-----

Question

2022 Except for some specific restrictions, what is the maximum peak envelope power output for Technician class operators using frequencies above 30 MHz?

2018 Why are frequency assignments for U.S. stations operating maritime mobile not the same everywhere in the world?

Answer

2022 D

2018 B

Figure

2022

2018

Choice A

2022 50 watts

2018 Amateur maritime mobile stations in international waters must conform to the frequency assignments of the country nearest to their vessel

Choice B

2022 100 watts

2018 Amateur frequency assignments can vary among the three ITU regions

Choice C

2022 500 watt

2018 Frequency assignments are determined by the captain of the vessel

Choice D

2022 1500 watts

2018 Amateur frequency assignments are different in each of the 90 ITU zones

Rules

2022 [97.313(b)]

2018 [97.301]

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-----> *CHANGES* T1C01 *CHANGES* <-----

Question

2022 For which license classes are new licenses currently available from the FCC?

2018 Which type of call sign has a single letter in both its prefix and suffix?

Answer

2022 D

2018 C

Figure

2022

2018

Choice A

2022 Novice, Technician, General, Advanced

2018 Vanity

Choice B

2022 Technician, Technician Plus, General, Advanced

2018 Sequential

Choice C

2022 Novice, Technician Plus, General, Advanced

2018 Special event

Choice D

2022 Technician, General, Amateur Extra

2018 In-memoriam

Rules

2022 [97.9(a), 97.17(a)]

2018 [97.3(a)(11)(iii)]

-----> *CHANGES* T1C02 *CHANGES* <-----

Question

2022 Who may select a desired call sign under the vanity call sign rules?

2018 Which of the following is a valid US amateur radio station call sign?

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Answer

2022 D

2018 B

Figure

2022

2018

Choice A

2022 Only a licensed amateur with a General or Amateur Extra class license

2018 KMA3505

Choice B

2022 Only a licensed amateur with an Amateur Extra class license

2018 W3ABC

Choice C

2022 Only a licensed amateur who has been licensed continuously for more than 10 years

2018 KDKA

Choice D

2022 Any licensed amateur

2018 11Q1176

Rules

2022 [97.19]

2018

-----> *CHANGES* T1C03 *CHANGES* <-----

Question

2022 What types of international communications is an FCC-licensed amateur radio station permitted to make?

2018 What types of international communications are permitted by an FCC-licensed amateur station?

Answer

2022 A

2018 A

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Figure

2022

2018

Choice A

2022 Communications incidental to the purposes of the Amateur Radio Service and remarks of a personal character

2018 Communications incidental to the purposes of the amateur service and remarks of a personal character

Choice B

2022 Communications incidental to conducting business or remarks of a personal nature

2018 Communications incidental to conducting business or remarks of a personal nature

Choice C

2022 Only communications incidental to contest exchanges, all other communications are prohibited

2018 Only communications incidental to contest exchanges, all other communications are prohibited

Choice D

2022 Any communications that would be permitted by an international broadcast station

2018 Any communications that would be permitted by an international broadcast station

Rules

2022 [97.117]

2018 [97.117]

-----> *NO CHANGES* T1C04 *NO CHANGES* <-----

Question

2022 When are you allowed to operate your amateur station in a foreign country?

2018 When are you allowed to operate your amateur station in a foreign country?

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Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 When the foreign country authorizes it

2018 When the foreign country authorizes it

Choice B

2022 When there is a mutual agreement allowing third party communications

2018 When there is a mutual agreement allowing third party communications

Choice C

2022 When authorization permits amateur communications in a foreign language

2018 When authorization permits amateur communications in a foreign language

Choice D

2022 When you are communicating with non-licensed individuals in another country

2018 When you are communicating with non-licensed individuals in another country

Rules

2022 [97.107]

2018 [97.107]

-----> *CHANGES* T1C05 *CHANGES* <-----

Question

2022 Which of the following is a valid call sign for a Technician class amateur radio station?

2018 Which of the following is a vanity call sign which a technician class amateur operator might select if available?

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Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 K1XXX

2018 K1XXX

Choice B

2022 KA1X

2018 KA1X

Choice C

2022 W1XX

2018 W1XX

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T1C06 *CHANGES* <-----

Question

2022 From which of the following locations may an FCC-licensed amateur station transmit?

2018 From which of the following locations may an FCC-licensed amateur station transmit, in addition to places where the FCC regulates communications?

Answer

2022 D

2018 D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 From within any country that belongs to the International Telecommunications Union

2018 From within any country that belongs to the International Telecommunications Union

Choice B

2022 From within any country that is a member of the United Nations

2018 From within any country that is a member of the United Nations

Choice C

2022 From anywhere within International Telecommunications Union (ITU) Regions 2 and 3

2018 From anywhere within in ITU Regions 2 and 3

Choice D

2022 From any vessel or craft located in international waters and documented or registered in the United States

2018 From any vessel or craft located in international waters and documented or registered in the United States

Rules

2022 [97.5(a)(2)]

2018 [97.5(a)(2)]

-----> *CHANGES* T1C07 *CHANGES* <-----

Question

2022 What may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide and maintain a correct mailing address with the FCC?

2018 What may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct mailing address?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Fine or imprisonment

2018 Fine or imprisonment

Choice B

2022 Revocation of the station license or suspension of the operator license

2018 Revocation of the station license or suspension of the operator license

Choice C

2022 Require the licensee to be re-examined

2018 Require the licensee to be re-examined

Choice D

2022 A reduction of one rank in operator class

2018 A reduction of one rank in operator class

Rules

2022 [97.23]

2018 [97.23]

-----> ***NO CHANGES* T1C08 *NO CHANGES*** <-----

Question

2022 What is the normal term for an FCC-issued primary station/operator amateur radio license grant?

2018 What is the normal term for an FCC-issued primary station/operator amateur radio license grant?

Answer

2022 C

2018 C

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Figure

2022

2018

Choice A

2022 Five years

2018 Five years

Choice B

2022 Life

2018 Life

Choice C

2022 Ten years

2018 Ten years

Choice D

2022 Twenty years

2018 Twenty years

Rules

2022 [97.25]

2018 [97.25]

-----> *NO CHANGES* T1C09 *NO CHANGES* <-----

Question

2022 What is the grace period following the expiration of an amateur license within which the license may be renewed?

2018 What is the grace period following the expiration of an amateur license within which the license may be renewed?

Answer

2022 A

2018 A

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Two years

2018 Two years

Choice B

2022 Three years

2018 Three years

Choice C

2022 Five years

2018 Five years

Choice D

2022 Ten years

2018 Ten years

Rules

2022 [97.21(a)(b)]

2018 [97.21(a)(b)]

-----> *CHANGES* T1C10 *CHANGES* <-----

Question

2022 How soon after passing the examination for your first amateur radio license may you operate a transmitter on an Amateur Radio Service frequency?

2018 How soon after passing the examination for your first amateur radio license may you operate a transmitter on an amateur service frequency?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Immediately

2018 Immediately

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Choice B

2022 30 days after the test date

2018 30 days after the test date

Choice C

2022 As soon as your operator/station license grant appears in the FCC's license database

2018 As soon as your operator/station license grant appears in the FCC's license database

Choice D

2022 You must wait until you receive your license in the mail from the FCC

2018 You must wait until you receive your license in the mail from the FCC

Rules

2022 [97.5a]

2018 [97.5a]

-----> *CHANGES* T1C11 *CHANGES* <-----

Question

2022 If your license has expired and is still within the allowable grace period, may you continue to operate a transmitter on **Amateur Radio Service frequencies?**

2018 If your license has expired and is still within the allowable grace period, may you continue to operate a transmitter on **amateur service frequencies?**

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 No, transmitting is not allowed until the FCC license database shows that the license has been renewed

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 No, transmitting is not allowed until the FCC license database shows that the license has been renewed

Choice B

2022 Yes, but only if you identify using the suffix GP

2018 Yes, but only if you identify using the suffix GP

Choice C

2022 Yes, but only during authorized nets

2018 Yes, but only during authorized nets

Choice D

2022 Yes, for up to two years

2018 Yes, for up to two years

Rules

2022 [97.21(b)]

2018 [97.21(b)]

-----> *CHANGES* T1D01 *CHANGES* <-----

Question

2022 With which countries are FCC-licensed amateur radio stations prohibited from exchanging communications?

2018 With which countries are FCC-licensed amateur stations prohibited from exchanging communications?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Any country whose administration has notified the International Telecommunications Union (ITU) that it objects to such communications

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Any country whose administration has notified the ITU that it objects to such communications

Choice B

2022 Any country whose administration has notified the American Radio Relay League (ARRL) that it objects to such communications

2018 Any country whose administration has notified the ARRL that it objects to such communications

Choice C

2022 Any country engaged in hostilities with another country

2018 Any country engaged in hostilities with another country

Choice D

2022 Any country in violation of the War Powers Act of 1934

2018 Any country in violation of the War Powers Act of 1934

Rules

2022 [97.111(a)(1)]

2018 [97.111(a)(1)]

-----> *CHANGES* T1D02 *CHANGES* <-----

Question

2022 Under which of the following circumstances may an amateur radio station make one-way transmissions?

2018 On which of the following occasions may an FCC-licensed amateur station exchange messages with a U.S. military station?

Answer

2022 B

2018 A

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Under no circumstances

2018 During an Armed Forces Day Communications Test

Choice B

2022 When transmitting code practice, information bulletins, or transmissions necessary to provide emergency communications

2018 During a Memorial Day Celebration

Choice C

2022 At any time, as long as no music is transmitted

2018 During an Independence Day celebration

Choice D

2022 At any time, as long as the material being transmitted did not originate from a commercial broadcast station

2018 During a propagation test

Rules

2022 [97.113 (b) , 97.111 (b)]

2018 [97.111 (a) (5)]

-----> *CHANGES* T1D03 *CHANGES* <-----

Question

2022 When is it permissible to transmit messages encoded to hide their meaning?

2018 When is the transmission of codes or ciphers that hide the meaning of a message allowed by an amateur station?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Only during contests

2018 Only during contests

Choice B

2022 Only when operating mobile

2018 Only when operating mobile

Choice C

2022 Only when transmitting control commands to space stations or radio control craft

2018 Only when transmitting control commands to space stations or radio control craft

Choice D

2022 Only when frequencies above 1280 MHz are used

2018 Only when frequencies above 1280 MHz are used

Rules

2022 [97.211(b), 97.215(b), 97.114(a)(4)]

2018 [97.211(b), 97.215(b)]

-----> *CHANGES* T1D04 *CHANGES* <-----

Question

2022 Under what conditions is an amateur station authorized to transmit music using a phone emission?

2018 What is the only time an amateur station is authorized to transmit music?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 When incidental to an authorized retransmission of manned spacecraft communications

2018 When incidental to an authorized retransmission of manned spacecraft communications

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 When the music produces no spurious emissions

2018 When the music produces no spurious emissions

Choice C

2022 When the purpose is to interfere with an illegal transmission

2018 When the purpose is to interfere with an illegal transmission

Choice D

2022 When the music is transmitted above 1280 MHz

2018 When the music is transmitted above 1280 MHz

Rules

2022 [97.113(a)(4), 97.113(c)]

2018 [97.113(a)(4), 97.113(c)]

-----> ***NO CHANGES* T1D05 *NO CHANGES*** <-----

Question

2022 When may amateur radio operators use their stations to notify other amateurs of the availability of equipment for sale or trade?

2018 When may amateur radio operators use their stations to notify other amateurs of the availability of equipment for sale or trade?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 When the equipment is normally used in an amateur station and such activity is not conducted on a regular basis

2018 When the equipment is normally used in an amateur station and such activity is not conducted on a regular basis

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 When the asking price is \$100.00 or less

2018 When the asking price is \$100.00 or less

Choice C

2022 When the asking price is less than its appraised value

2018 When the asking price is less than its appraised value

Choice D

2022 When the equipment is not the personal property of either the station licensee or the control operator or their close relatives

2018 When the equipment is not the personal property of either the station licensee or the control operator or their close relatives

Rules

2022 [97.113(a)(3)(ii)]

2018 [97.113(a)(3)(ii)]

-----> ***NO CHANGES* T1D06 *NO CHANGES*** <-----

Question

2022 What, if any, are the restrictions concerning transmission of language that may be considered indecent or obscene?

2018 What, if any, are the restrictions concerning transmission of language that may be considered indecent or obscene?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The FCC maintains a list of words that are not permitted to be used on amateur frequencies

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The FCC maintains a list of words that are not permitted to be used on amateur frequencies

Choice B

2022 Any such language is prohibited

2018 Any such language is prohibited

Choice C

2022 The ITU maintains a list of words that are not permitted to be used on amateur frequencies

2018 The ITU maintains a list of words that are not permitted to be used on amateur frequencies

Choice D

2022 There is no such prohibition

2018 There is no such prohibition

Rules

2022 [97.113(a)(4)]

2018 [97.113(a)(4)]

-----> *CHANGES* T1D07 *CHANGES* <-----

Question

2022 What types of amateur stations can automatically retransmit the signals of other amateur stations?

2018 What types of amateur stations can automatically retransmit the signals of other amateur stations?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Auxiliary, beacon, or Earth stations

2018 Auxiliary, beacon, or Earth stations

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Repeater, auxiliary, or space stations

2018 Auxiliary, repeater, or space stations

Choice C

2022 Beacon, repeater, or space stations

2018 Beacon, repeater, or space stations

Choice D

2022 Earth, repeater, or space stations

2018 Earth, repeater, or space stations

Rules

2022 [97.113(d)]

2018 [97.113(d)]

-----> *CHANGES* T1D08 *CHANGES* <-----

Question

2022 In which of the following circumstances may the control operator of an amateur station receive compensation for operating that station?

2018 In which of the following circumstances may the control operator of an amateur station receive compensation for operating the station?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 When the communication is related to the sale of amateur equipment by the control operator's employer

2018 When engaging in communications on behalf of their employer

Choice B

2022 When the communication is incidental to

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

classroom instruction at an educational institution
2018 When the communication is incidental to
classroom instruction at an educational institution

Choice C

2022 When the communication is made to obtain
emergency information for a local broadcast station
2018 When re-broadcasting weather alerts during a
RACES net

Choice D

2022 All of these choices are correct
2018 When notifying other amateur operators of the
availability for sale or trade of apparatus

Rules

2022 [97.113(a)(3)(iii)]
2018 [97.113(a)(3)(iii)]

-----> *CHANGES* T1D09 *CHANGES* <-----

Question

2022 Under which of the following circumstances are
amateur stations authorized to transmit signals
related to broadcasting, program production, or news
gathering, assuming no other means is available?
2018 Under which of the following circumstances are
amateur stations authorized to transmit signals
related to broadcasting, program production, or news
gathering, assuming no other means is available?

Answer

2022 A
2018 A

Figure

2022
2018

Choice A

2022 Only where such communications directly relate
to the immediate safety of human life or protection
of property

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Only where such communications directly relate to the immediate safety of human life or protection of property

Choice B

2022 Only when broadcasting communications to or from the space shuttle

2018 Only when broadcasting communications to or from the space shuttle

Choice C

2022 Only where noncommercial programming is gathered and supplied exclusively to the National Public Radio network

2018 Only where noncommercial programming is gathered and supplied exclusively to the National Public Radio network

Choice D

2022 Only when using amateur repeaters linked to the internet

2018 Only when using amateur repeaters linked to the Internet

Rules

2022 [97.113(5)(b)]

2018 [97.113(5)(b)]

-----> *CHANGES* T1D10 *CHANGES* <-----

Question

2022 What is the meaning of the term "broadcasting" in the FCC rules for the Amateur Radio Service?

2018 What is the meaning of the term "broadcasting" in the FCC rules for the amateur services?

Answer

2022 D

2018 D

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Two-way transmissions by amateur stations
2018 Two-way transmissions by amateur stations

Choice B

2022 Transmission of music
2018 Transmission of music

Choice C

2022 Transmission of messages directed only to
amateur operators
2018 Transmission of messages directed only to
amateur operators

Choice D

2022 Transmissions intended for reception by the
general public
2018 Transmissions intended for reception by the
general public

Rules

2022 [97.3(a)(10)]
2018 [97.3(a)(10)]

-----> *CHANGES* T1D11 *CHANGES* <-----

Question

2022 When may an amateur station transmit without
on-the-air identification?
2018 When may an amateur station transmit without
identifying?

Answer

2022 D
2018 D

Figure

2022
2018

Choice A

2022 When the transmissions are of a brief nature to
make station adjustments

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 When the transmissions are of a brief nature to make station adjustments

Choice B

2022 When the transmissions are unmodulated

2018 When the transmissions are unmodulated

Choice C

2022 When the transmitted power level is below 1 watt

2018 When the transmitted power level is below 1 watt

Choice D

2022 When transmitting signals to control model craft

2018 When transmitting signals to control a model craft

Rules

2022 [97.119(a)]

2018 [97.119(a)]

-----> *NO CHANGES* T1E01 *NO CHANGES* <-----

Question

2022 When is an amateur station permitted to transmit without a control operator?

2018 When is an amateur station permitted to transmit without a control operator?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 When using automatic control, such as in the case of a repeater

2018 When using automatic control, such as in the case of a repeater

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 When the station licensee is away and another licensed amateur is using the station

2018 When the station licensee is away and another licensed amateur is using the station

Choice C

2022 When the transmitting station is an auxiliary station

2018 When the transmitting station is an auxiliary station

Choice D

2022 Never

2018 Never

Rules

2022 [97.7(a)]

2018 [97.7(a)]

-----> *CHANGES* T1E02 *CHANGES* <-----

Question

2022 Who may be the control operator of a station communicating through an amateur satellite or space station?

2018 Who may a station licensee designate to be the control operator of an amateur station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Only an Amateur Extra class operator

2018 Any U.S. citizen or registered alien

Choice B

2022 A General class or higher licensee who has a

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

satellite operator certification

2018 Any family member of the station licensee

Choice C

2022 Only an Amateur Extra class operator who is also an AMSAT member

2018 Any person over the age of 18

Choice D

2022 Any amateur whose license privileges allow them to transmit on the satellite uplink frequency

2018 Only a person for whom an amateur operator/primary station license grant appears in the FCC database or who is authorized for alien reciprocal operation

Rules

2022 [97.301, 97.207(c)]

2018 [97.7(a)]

-----> *NO CHANGES* T1E03 *NO CHANGES* <-----

Question

2022 Who must designate the station control operator?

2018 Who must designate the station control operator?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The station licensee

2018 The station licensee

Choice B

2022 The FCC

2018 The FCC

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 The frequency coordinator

2018 The frequency coordinator

Choice D

2022 The ITU

2018 The ITU

Rules

2022 [97.103(b)]

2018 [97.103(b)]

-----> *CHANGES* T1E04 *CHANGES* <-----

Question

2022 What determines the transmitting privileges of an amateur station?

2018 What determines the transmitting privileges of an amateur station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The frequency authorized by the frequency coordinator

2018 The frequency authorized by the frequency coordinator

Choice B

2022 The frequencies printed on the license grant

2018 The class of operator license held by the station licensee

Choice C

2022 The highest class of operator license held by anyone on the premises

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The highest class of operator license held by anyone on the premises

Choice D

2022 The class of operator license held by the control operator

2018 The class of operator license held by the control operator

Rules

2022 [97.103(b)]

2018 [97.103(b)]

-----> *NO CHANGES* T1E05 *NO CHANGES* <-----

Question

2022 What is an amateur station control point?

2018 What is an amateur station control point?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The location of the station's transmitting antenna

2018 The location of the station's transmitting antenna

Choice B

2022 The location of the station transmitting apparatus

2018 The location of the station transmitting apparatus

Choice C

2022 The location at which the control operator function is performed

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The location at which the control operator function is performed

Choice D

2022 The mailing address of the station licensee

2018 The mailing address of the station licensee

Rules

2022 [97.3(a)(14)]

2018 [97.3(a)(14)]

-----> *CHANGES* T1E06 *CHANGES* <-----

Question

2022 When, under normal circumstances, may a Technician class licensee be the control operator of a station operating in an exclusive Amateur Extra class operator segment of the amateur bands?

2018 Under what type of control do APRS network digipeaters operate?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 At no time

2018 Automatic

Choice B

2022 When operating a special event station

2018 Remote

Choice C

2022 As part of a multi-operator contest team

2018 Local

Choice D

2022 When using a club station whose trustee is an

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Amateur Extra class operator licensee

2018 Manual

Rules

2022 [97.301]

2018 [97.109(d)]

-----> *NO CHANGES* T1E07 *NO CHANGES* <-----

Question

2022 When the control operator is not the station licensee, who is responsible for the proper operation of the station?

2018 When the control operator is not the station licensee, who is responsible for the proper operation of the station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 All licensed amateurs who are present at the operation

2018 All licensed amateurs who are present at the operation

Choice B

2022 Only the station licensee

2018 Only the station licensee

Choice C

2022 Only the control operator

2018 Only the control operator

Choice D

2022 The control operator and the station licensee are equally responsible

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The control operator and the station licensee are equally responsible

Rules

2022 [97.103(a)]

2018 [97.103(a)]

-----> *CHANGES* T1E08 *CHANGES* <-----

Question

2022 Which of the following is an example of automatic control?

2018 Which of the following is an example of automatic control?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Repeater operation

2018 Repeater operation

Choice B

2022 Controlling the station over the internet

2018 Controlling the station over the Internet

Choice C

2022 Using a computer or other device to send CW automatically

2018 Using a computer or other device to automatically send CW

Choice D

2022 Using a computer or other device to identify automatically

2018 Using a computer or other device to automatically identify

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022 [97.3(a)(6), 97.205(d)]

2018 [97.3(a)(6), 97.205(d)]

-----> *CHANGES* T1E09 *CHANGES* <-----

Question

2022 Which of the following is true of remote control operation?

2018 What type of control is being used when the control operator is at the control point?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The control operator must be at the control point

2018 Radio control

Choice B

2022 A control operator is required at all times

2018 Unattended control

Choice C

2022 The control operator indirectly manipulates the controls

2018 Automatic control

Choice D

2022 All these choices are correct

2018 Local control

Rules

2022 [97.109(c)]

2018 [97.109(b)]

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T1E10 *CHANGES* <-----

Question

2022 Which of the following is an example of remote control as defined in Part 97?

2018 Which of the following is an example of remote control as defined in Part 97?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Repeater operation

2018 Repeater operation

Choice B

2022 Operating the station over the internet

2018 Operating the station over the Internet

Choice C

2022 Controlling a model aircraft, boat, or car by amateur radio

2018 Controlling a model aircraft, boat or car by amateur radio

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022 [97.3(a) (39)]

2018 [97.3(a) (39)]

-----> *CHANGES* T1E11 *CHANGES* <-----

Question

2022 Who does the FCC presume to be the control operator of an amateur station, unless documentation to the contrary is in the station records?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Who does the FCC presume to be the control operator of an amateur station, unless documentation to the contrary is in the station records?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The station custodian

2018 The station custodian

Choice B

2022 The third-party participant

2018 The third party participant

Choice C

2022 The person operating the station equipment

2018 The person operating the station equipment

Choice D

2022 The station licensee

2018 The station licensee

Rules

2022 [97.103(a)]

2018 [97.103(a)]

-----> *CHANGES* T1F01 *CHANGES* <-----

Question

2022 When must the station licensee make the station and its records available for FCC inspection?

2018 What type of identification is being used when identifying a station on the air as Race Headquarters?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 A

Figure

2022

2018

Choice A

2022 At any time ten days after notification by the FCC of such an inspection

2018 Tactical call sign

Choice B

2022 At any time upon request by an FCC representative

2018 An official call sign reserved for RACES drills

Choice C

2022 Only after failing to comply with an FCC notice of violation

2018 SSID

Choice D

2022 Only when presented with a valid warrant by an FCC official or government agent

2018 Broadcast station

Rules

2022 [97.103(c)]

2018

-----> *NO CHANGES* T1F02 *NO CHANGES* <-----

Question

2022 When using tactical identifiers such as "Race Headquarters" during a community service net operation, how often must your station transmit the station's FCC-assigned call sign?

2018 When using tactical identifiers such as "Race Headquarters" during a community service net operation, how often must your station transmit the station's FCC-assigned call sign?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Never, the tactical call is sufficient

2018 Never, the tactical call is sufficient

Choice B

2022 Once during every hour

2018 Once during every hour

Choice C

2022 At the end of each communication and every ten minutes during a communication

2018 At the end of each communication and every ten minutes during a communication

Choice D

2022 At the end of every transmission

2018 At the end of every transmission

Rules

2022 [97.119 (a)]

2018 [97.119 (a)]

-----> ***NO CHANGES* T1F03 *NO CHANGES*** <-----

Question

2022 When is an amateur station required to transmit its assigned call sign?

2018 When is an amateur station required to transmit its assigned call sign?

Answer

2022 D

2018 D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 At the beginning of each contact, and every 10 minutes thereafter

2018 At the beginning of each contact, and every 10 minutes thereafter

Choice B

2022 At least once during each transmission

2018 At least once during each transmission

Choice C

2022 At least every 15 minutes during and at the end of a communication

2018 At least every 15 minutes during and at the end of a communication

Choice D

2022 At least every 10 minutes during and at the end of a communication

2018 At least every 10 minutes during and at the end of a communication

Rules

2022 [97.119(a)]

2018 [97.119(a)]

-----> ***NO CHANGES* T1F04 *NO CHANGES*** <-----

Question

2022 Which of the following is an acceptable language to use for station identification when operating in a phone sub-band?

2018 Which of the following is an acceptable language to use for station identification when operating in a phone sub-band?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Any language recognized by the United Nations

2018 Any language recognized by the United Nations

Choice B

2022 Any language recognized by the ITU

2018 Any language recognized by the ITU

Choice C

2022 The English language

2018 The English language

Choice D

2022 English, French, or Spanish

2018 English, French, or Spanish

Rules

2022 [97.119(b)(2)]

2018 [97.119(b)(2)]

-----> *CHANGES* T1F05 *CHANGES* <-----

Question

2022 What method of call sign identification is required for a station transmitting phone signals?

2018 What method of call sign identification is required for a station transmitting phone signals?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Send the call sign followed by the indicator RPT

2018 Send the call sign followed by the indicator RPT

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Send the call sign using a CW or phone emission

2018 Send the call sign using CW or phone emission

Choice C

2022 Send the call sign followed by the indicator R

2018 Send the call sign followed by the indicator R

Choice D

2022 Send the call sign using only a phone emission

2018 Send the call sign using only phone emission

Rules

2022 [97.119(b)(2)]

2018 [97.119(b)(2)]

-----> *NO CHANGES* T1F06 *NO CHANGES* <-----

Question

2022 Which of the following formats of a self-assigned indicator is acceptable when identifying using a phone transmission?

2018 Which of the following formats of a self-assigned indicator is acceptable when identifying using a phone transmission?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 KL7CC stroke W3

2018 KL7CC stroke W3

Choice B

2022 KL7CC slant W3

2018 KL7CC slant W3

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 KL7CC slash W3

2018 KL7CC slash W3

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022 [97.119(c)]

2018 [97.119(c)]

-----> *CHANGES* T1F07 *CHANGES* <-----

Question

2022 Which of the following restrictions apply when a non-licensed person is allowed to speak to a foreign station using a station under the control of a Technician **class** control operator?

2018 Which of the following restrictions apply when a non-licensed person is allowed to speak to a foreign station using a station under the control of a Technician **Class** control operator?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The person must be a U.S. citizen

2018 The person must be a U.S. citizen

Choice B

2022 The foreign station must be one with which the U.S. has a **third-party agreement**

2018 The foreign station must be one with which the U.S. has a **third party agreement**

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 The licensed control operator must do the station identification

2018 The licensed control operator must do the station identification

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022 [97.115(a)(2)]

2018 [97.115(a)(2)]

-----> *CHANGES* T1F08 *CHANGES* <-----

Question

2022 What is meant by the term "Third Party Communications"?

2018 Which indicator is required by the FCC to be transmitted after a station call sign?

Answer

2022 A

2018 D

Figure

2022

2018

Choice A

2022 A message from a control operator to another amateur station control operator on behalf of another person

2018 /M when operating mobile

Choice B

2022 Amateur radio communications where three stations are in communications with one another

2018 /R when operating a repeater

Choice C

2022 Operation when the transmitting equipment is

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

licensed to a person other than the control operator
2018 / followed the FCC Region number when operating
out of the region in which the license was issued

Choice D

2022 Temporary authorization for an unlicensed
person to transmit on the amateur bands for technical
experiments

2018 /KT, /AE or /AG when using new license
privileges earned by CSCE while waiting for an
upgrade to a previously issued license to appear in
the FCC license database

Rules

2022 [97.3(a)(47)]

2018 [97.119(f)]

-----> *NO CHANGES* T1F09 *NO CHANGES* <-----

Question

2022 What type of amateur station simultaneously
retransmits the signal of another amateur station on
a different channel or channels?

2018 What type of amateur station simultaneously
retransmits the signal of another amateur station on
a different channel or channels?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Beacon station

2018 Beacon station

Choice B

2022 Earth station

2018 Earth station

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Repeater station

2018 Repeater station

Choice D

2022 Message forwarding station

2018 Message forwarding station

Rules

2022 [97.3(a)(40)]

2018 [97.3(a)(40)]

-----> *NO CHANGES* T1F10 *NO CHANGES* <-----

Question

2022 Who is accountable should a repeater inadvertently retransmit communications that violate the FCC rules?

2018 Who is accountable should a repeater inadvertently retransmit communications that violate the FCC rules?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The control operator of the originating station

2018 The control operator of the originating station

Choice B

2022 The control operator of the repeater

2018 The control operator of the repeater

Choice C

2022 The owner of the repeater

2018 The owner of the repeater

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Both the originating station and the repeater owner

2018 Both the originating station and the repeater owner

Rules

2022 [97.205 (g)]

2018 [97.205 (g)]

-----> *CHANGES* T1F11 *CHANGES* <-----

Question

2022 Which of the following is a requirement for the issuance of a club station license grant?

2018 To which foreign stations do the FCC rules authorize the transmission of non-emergency third party communications?

Answer

2022 B

2018 A

Figure

2022

2018

Choice A

2022 The trustee must have an Amateur Extra class operator license grant

2018 Any station whose government permits such communications

Choice B

2022 The club must have at least four members

2018 Those in ITU Region 2 only

Choice C

2022 The club must be registered with the American Radio Relay League

2018 Those in ITU Regions 2 and 3 only

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of these choices are correct

2018 Those in ITU Region 3 only

Rules

2022 [97.5(b)(2)]

2018 [97.115(a)]

-----> *CHANGES* T2A01 *CHANGES* <-----

Question

2022 Which of the following is a common repeater frequency offset in the 2 meter band?

2018 What is the most common repeater frequency offset in the 2 meter band?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Plus or minus 5 Mhz

2018 Plus 500 kHz

Choice B

2022 Plus or minus 600 kHz

2018 Plus or minus 600 kHz

Choice C

2022 Plus or minus 500 kHz

2018 Minus 500 kHz

Choice D

2022 Plus or minus 1 Mhz

2018 Only plus 600 kHz

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T2A02 *CHANGES* <-----

Question

2022 What is the national calling frequency for FM simplex operations in the 2 meter band?

2018 What is the national calling frequency for FM simplex operations in the 70 cm band?

Answer

2022 A

2018 D

Figure

2022

2018

Choice A

2022 146.520 MHz

2018 146.520 MHz

Choice B

2022 145.000 MHz

2018 145.000 MHz

Choice C

2022 432.100 MHz

2018 432.100 MHz

Choice D

2022 446.000 MHz

2018 446.000 MHz

Rules

2022

2018

-----> *CHANGES* T2A03 *CHANGES* <-----

Question

2022 What is a common repeater frequency offset in the 70 cm band?

2018 What is a common repeater frequency offset in the 70 cm band?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Plus or minus 5 Mhz

2018 Plus or minus 5 MHz

Choice B

2022 Plus or minus 600 kHz

2018 Plus or minus 600 kHz

Choice C

2022 Plus or minus 500 kHz

2018 Minus 600 kHz

Choice D

2022 Plus or minus 1 Mhz

2018 Plus 600 kHz

Rules

2022

2018

-----> *CHANGES* T2A04 *CHANGES* <-----

Question

2022 What is an appropriate way to call another station on a repeater if you know the other station's call sign?

2018 What is an appropriate way to call another station on a repeater if you know the other station's call sign?

Answer

2022 B

2018 B

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Say "break, break," then say the station's call sign

2018 Say break, break then say the station's call sign

Choice B

2022 Say the station's call sign, then identify with your call sign

2018 Say the station's call sign then identify with your call sign

Choice C

2022 Say "CQ" three times, then the other station's call sign

2018 Say CQ three times then the other station's call sign

Choice D

2022 Wait for the station to call CQ, then answer it

2018 Wait for the station to call CQ then answer it

Rules

2022

2018

-----> *CHANGES* T2A05 *CHANGES* <-----

Question

2022 How should you respond to a station calling CQ?

2018 How should you respond to a station calling CQ?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Transmit "CQ" followed by the other station's call sign

2018 Transmit CQ followed by the other station's call sign

Choice B

2022 Transmit your call sign followed by the other station's call sign

2018 Transmit your call sign followed by the other station's call sign

Choice C

2022 Transmit the other station's call sign followed by your call sign

2018 Transmit the other station's call sign followed by your call sign

Choice D

2022 Transmit a signal report followed by your call sign

2018 Transmit a signal report followed by your call sign

Rules

2022

2018

-----> *CHANGES* T2A06 *CHANGES* <-----

Question

2022 Which of the following is required when making on-the-air test transmissions?

2018 What must an amateur operator do when making on-air transmissions to test equipment or antennas?

Answer

2022 A

2018 A

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Identify the transmitting station

2018 Properly identify the transmitting station

Choice B

2022 Conduct tests only between 10 p.m. and 6 a.m.
local time

2018 Make test transmissions only after 10:00 p.m.
local time

Choice C

2022 Notify the FCC of the transmissions

2018 Notify the FCC of the test transmission

Choice D

2022 All of these choices are correct

2018 State the purpose of the test during the test
procedure

Rules

2022

2018

-----> *CHANGES* T2A07 *CHANGES* <-----

Question

2022 What is meant by "repeater offset?"

2018 Which of the following is true when making a
test transmission?

Answer

2022 A

2018 D

Figure

2022

2018

Choice A

2022 The difference between a repeater's transmit
frequency and its receive frequency

2018 Station identification is not required if the
transmission is less than 15 seconds

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 The repeater has a time delay to prevent interference

2018 Station identification is not required if the transmission is less than 1 watt

Choice C

2022 The repeater station identification is done on a separate frequency

2018 Station identification is only required once an hour when the transmissions are for test purposes only

Choice D

2022 The number of simultaneous transmit frequencies used by a repeater

2018 Station identification is required at least every ten minutes during the test and at the end of the test

Rules

2022

2018

-----> *NO CHANGES* T2A08 *NO CHANGES* <-----

Question

2022 What is the meaning of the procedural signal "CQ"?

2018 What is the meaning of the procedural signal "CQ"?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Call on the quarter hour

2018 Call on the quarter hour

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 A new antenna is being tested (no station should answer)

2018 A new antenna is being tested (no station should answer)

Choice C

2022 Only the called station should transmit

2018 Only the called station should transmit

Choice D

2022 Calling any station

2018 Calling any station

Rules

2022

2018

-----> ***CHANGES* T2A09 *CHANGES*** <-----

Question

2022 What brief statement indicates that you are listening on a repeater and looking for a contact?

2018 What brief statement is often transmitted in place of "CQ" to indicate that you are listening on a repeater?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The words "Hello test" followed by your call sign

2018 The words "Hello test" followed by your call sign

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Your call sign

2018 Your call sign

Choice C

2022 The repeater call sign followed by your call sign

2018 The repeater call sign followed by your call sign

Choice D

2022 The letters "QSY" followed by your call sign

2018 The letters "QSY" followed by your call sign

Rules

2022

2018

-----> ***NO CHANGES* T2A10 *NO CHANGES*** <-----

Question

2022 What is a band plan, beyond the privileges established by the FCC?

2018 What is a band plan, beyond the privileges established by the FCC?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 A voluntary guideline for using different modes or activities within an amateur band

2018 A voluntary guideline for using different modes or activities within an amateur band

Choice B

2022 A mandated list of operating schedules

2018 A mandated list of operating schedules

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 A list of scheduled net frequencies

2018 A list of scheduled net frequencies

Choice D

2022 A plan devised by a club to indicate frequency band usage

2018 A plan devised by a club to indicate frequency band usage

Rules

2022

2018

-----> *CHANGES* T2A11 *CHANGES* <-----

Question

2022 What kind of communication is taking place when an amateur station is transmitting and receiving on the same frequency?

2018 Which of the following is an FCC rule regarding power levels used in the amateur bands, under normal, non-distress circumstances?

Answer

2022 C

2018 D

Figure

2022

2018

Choice A

2022 Full duplex

2018 There is no limit to power as long as there is no interference with other services

Choice B

2022 Diplex

2018 No more than 200 watts PEP may be used

Choice C

2022 Simplex

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Up to 1500 watts PEP may be used on any amateur frequency without restriction

Choice D

2022 Multiplex

2018 While not exceeding the maximum power permitted on a given band, use the minimum power necessary to carry out the desired communication

Rules

2022

2018 [97.313(a)]

-----> *CHANGES* T2A12 *CHANGES* <-----

Question

2022 Which of the following is a guideline when choosing an operating frequency for calling CQ?

2018 Which of the following is a guideline to use when choosing an operating frequency for calling CQ?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Listen first to be sure that no one else is using the frequency

2018 Listen first to be sure that no one else is using the frequency

Choice B

2022 Ask if the frequency is in use

2018 Ask if the frequency is in use

Choice C

2022 Make sure you are in your assigned band

2018 Make sure you are in your assigned band

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T2B01 *CHANGES* <-----

Question

2022 What is the most common use of the "reverse split" function of a VHF/UHF transceiver?

2018 What is the term used to describe an amateur station that is transmitting and receiving on the same frequency?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Reduce power output

2018 Full duplex communication

Choice B

2022 Increase power output

2018 Diplex communication

Choice C

2022 Listen on a repeater's input frequency

2018 Simplex communication

Choice D

2022 Listen on a repeater's output frequency

2018 Multiplex communication

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T2B02 *CHANGES* <-----

Question

2022 What term describes the use of a sub-audible tone transmitted along with normal voice audio to open the squelch of a receiver?

2018 What is the term used to describe the use of a sub-audible tone transmitted with normal voice audio to open the squelch of a receiver?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Carrier squelch

2018 Carrier squelch

Choice B

2022 Tone burst

2018 Tone burst

Choice C

2022 DTMF

2018 DTMF

Choice D

2022 CTCSS

2018 CTCSS

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T2B03 *CHANGES* <-----

Question

2022 If a station is not strong enough to keep a repeater's receiver squelch open, which of the following might allow you to receive the station's signal?

2018 Which of the following describes the muting of receiver audio controlled solely by the presence or absence of an RF signal?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Open the squelch on your radio

2018 Tone squelch

Choice B

2022 Listen on the repeater input frequency

2018 Carrier squelch

Choice C

2022 Listen on the repeater output frequency

2018 CTCSS

Choice D

2022 Increase your transmit power

2018 Modulated carrier

Rules

2022

2018

-----> *CHANGES* T2B04 *CHANGES* <-----

Question

2022 Which of the following could be the reason you are unable to access a repeater whose output you can

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

hear?

2018 Which of the following common problems might cause you to be able to hear but not access a repeater even when transmitting with the proper offset?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Improper transceiver offset

2018 The repeater receiver may require an audio tone burst for access

Choice B

2022 The repeater may require a proper CTCSS tone from your transceiver

2018 The repeater receiver may require a CTCSS tone for access

Choice C

2022 The repeater may require a proper DCS tone from your transceiver

2018 The repeater receiver may require a DCS tone sequence for access

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T2B05 *CHANGES* <-----

Question

2022 What might be the problem if a repeater user

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

says your transmissions are breaking up on voice peaks?

2018 What determines the amount of deviation of an FM (as opposed to PM) signal?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 You have the incorrect offset

2018 Both the frequency and amplitude of the modulating signal

Choice B

2022 You need to talk louder

2018 The frequency of the modulating signal

Choice C

2022 You are talking too loudly

2018 The amplitude of the modulating signal

Choice D

2022 Your transmit power is too high

2018 The relative phase of the modulating signal and the carrier

Rules

2022

2018

-----> *CHANGES* T2B06 *CHANGES* <-----

Question

2022 What type of tones are used to control repeaters linked by the Internet Relay Linking Project (IRLP) protocol?

2018 What happens when the deviation of an FM transmitter is increased?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 DTMF

2018 Its signal occupies more bandwidth

Choice B

2022 CTCSS

2018 Its output power increases

Choice C

2022 Echolink

2018 Its output power and bandwidth increases

Choice D

2022 Sub-audible

2018 Asymmetric modulation occurs

Rules

2022

2018

-----> *CHANGES* T2B07 *CHANGES* <-----

Question

2022 How can you join a digital repeater's "talk group"?

2018 What could cause your FM signal to interfere with stations on nearby frequencies?

Answer

2022 C

2018 A

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Register your radio with the local FCC office
2018 Microphone gain too high, causing over-deviation

Choice B

2022 Join the repeater owner's club
2018 SWR too high

Choice C

2022 Program your radio with the group's ID or code
2018 Incorrect CTCSS Tone

Choice D

2022 Sign your call after the courtesy tone
2018 All of these choices are correct

Rules

2022
2018

-----> *CHANGES* T2B08 *CHANGES* <-----

Question

2022 Which of the following applies when two stations transmitting on the same frequency interfere with each other?
2018 Which of the following applies when two stations transmitting on the same frequency interfere with each other?

Answer

2022 A
2018 A

Figure

2022
2018

Choice A

2022 Common courtesy should prevail, but no one has absolute right to an amateur frequency

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Common courtesy should prevail, but no one has absolute right to an amateur frequency

Choice B

2022 Whoever has the strongest signal has priority on the frequency

2018 Whoever has the strongest signal has priority on the frequency

Choice C

2022 Whoever has been on the frequency the longest has priority on the frequency

2018 Whoever has been on the frequency the longest has priority on the frequency

Choice D

2022 The station **that** has the weakest signal has priority on the frequency

2018 The station **which** has the weakest signal has priority on the frequency

Rules

2022

2018

-----> ***CHANGES* T2B09 *CHANGES*** <-----

Question

2022 **What is a "talk group" on a DMR digital repeater?**

2018 Which of the following methods is encouraged by the FCC when identifying your station when using phone?

Answer

2022 **B**

2018 **A**

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 A group of operators sharing common interests

2018 Use of a phonetic alphabet

Choice B

2022 A way for groups of users to share a channel at different times without being heard by other users on the channel

2018 Send your call sign in CW as well as voice

Choice C

2022 A protocol that increases the signal-to-noise ratio when multiple repeaters are linked together

2018 Repeat your call sign three times

Choice D

2022 A net that meets at a particular time

2018 Increase your signal to full power when identifying

Rules

2022

2018 [97.119(b) (2)]

-----> *NO CHANGES* T2B10 *NO CHANGES* <-----

Question

2022 Which Q signal indicates that you are receiving interference from other stations?

2018 Which Q signal indicates that you are receiving interference from other stations?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 QRM

2018 QRM

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 QRN

2018 QRN

Choice C

2022 QTH

2018 QTH

Choice D

2022 QSB

2018 QSB

Rules

2022

2018

-----> *NO CHANGES* T2B11 *NO CHANGES* <-----

Question

2022 Which Q signal indicates that you are changing frequency?

2018 Which Q signal indicates that you are changing frequency?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 QRU

2018 QRU

Choice B

2022 QSY

2018 QSY

Choice C

2022 QSL

2018 QSL

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 QRZ

2018 QRZ

Rules

2022

2018

-----> *CHANGES* T2B12 *CHANGES* <-----

Question

2022 Why are simplex channels designated in the VHF/UHF band plans?

2018 Under what circumstances should you consider communicating via simplex rather than a repeater?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 So that stations within mutual communications range can communicate without tying up a repeater

2018 When the stations can communicate directly without using a repeater

Choice B

2022 For contest operation

2018 Only when you have an endorsement for simplex operation on your license

Choice C

2022 For working DX only

2018 Only when third party traffic is not being passed

Choice D

2022 So that stations with simple transmitters can

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

access the repeater without automated offset

2018 Only if you have simplex modulation capability

Rules

2022

2018

-----> *CHANGES* T2B13 *CHANGES* <-----

Question

2022 Where may SSB phone be used in amateur bands above 50 MHz?

2018 Which of the following is true of the use of SSB phone in amateur bands above 50 MHz?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Only in sub-bands allocated to General class or higher licensees

2018 It is permitted only by holders of a General Class or higher license

Choice B

2022 Only on repeaters

2018 It is permitted only on repeaters

Choice C

2022 In at least some portion of all these bands

2018 It is permitted in at least some portion of all the amateur bands above 50 MHz

Choice D

2022 On any band as long as power is limited to 25 watts

2018 It is permitted only on when power is limited to no more than 100 watts

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NEW* T2B14 *NEW* <-----

Question

2022 Which of the following describes a linked repeater network?

Answer

2022 A

Figure

2022

Choice A

2022 A network of repeaters where signals received by one repeater are repeated by all the repeaters

Choice B

2022 A repeater with more than one receiver

Choice C

2022 Multiple repeaters with the same owner

Choice D

2022 A system of repeaters linked by APRS

Rules

2022

-----> *NO CHANGES* T2C01 *NO CHANGES* <-----

Question

2022 When do the FCC rules NOT apply to the operation of an amateur station?

2018 When do the FCC rules NOT apply to the operation of an amateur station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 When operating a RACES station

2018 When operating a RACES station

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 When operating under special FEMA rules

2018 When operating under special FEMA rules

Choice C

2022 When operating under special ARES rules

2018 When operating under special ARES rules

Choice D

2022 Never, FCC rules always apply

2018 Never, FCC rules always apply

Rules

2022 [97.103(a)]

2018 [97.103(a)]

-----> *CHANGES* T2C02 *CHANGES* <-----

Question

2022 What is meant by the term "NCS" used in net operation?

2018 What is one way to recharge a 12-volt lead-acid station battery if the commercial power is out?

Answer

2022 B

2018 C

Figure

2022

2018

Choice A

2022 Nominal Control System

2018 Cool the battery in ice for several hours

Choice B

2022 Net Control Station

2018 Add acid to the battery

Choice C

2022 National Communications Standard

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Connect the battery in parallel with a vehicle's battery and run the engine

Choice D

2022 Normal Communications Syntax

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T2C03 *CHANGES* <-----

Question

2022 What should be done when using voice modes to ensure that voice messages containing unusual words are received correctly?

2018 What should be done to insure that voice message traffic containing proper names and unusual words are copied correctly by the receiving station?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Send the words by voice and Morse code

2018 The entire message should be repeated at least four times

Choice B

2022 Speak very loudly into the microphone

2018 Such messages must be limited to no more than 10 words

Choice C

2022 Spell the words using a standard phonetic alphabet

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Such words and terms should be spelled out
using a standard phonetic alphabet

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T2C04 *NO CHANGES* <-----

Question

2022 What do RACES and ARES have in common?

2018 What do RACES and ARES have in common?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 They represent the two largest ham clubs in the
United States

2018 They represent the two largest ham clubs in the
United States

Choice B

2022 Both organizations broadcast road and weather
information

2018 Both organizations broadcast road and weather
information

Choice C

2022 Neither may handle emergency traffic supporting
public service agencies

2018 Neither may handle emergency traffic supporting
public service agencies

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Both organizations may provide communications during emergencies

2018 Both organizations may provide communications during emergencies

Rules

2022

2018

-----> *CHANGES* T2C05 *CHANGES* <-----

Question

2022 What does the term "traffic" refer to in net operation?

2018 Which of the following describes the Radio Amateur Civil Emergency Service (RACES)?

Answer

2022 A

2018 D

Figure

2022

2018

Choice A

2022 Formal messages exchanged by net stations

2018 A radio service using amateur frequencies for emergency management or civil defense communications

Choice B

2022 The number of stations checking in and out of a net

2018 A radio service using amateur stations for emergency management or civil defense communications

Choice C

2022 Operation by mobile or portable stations

2018 An emergency service using amateur operators certified by a civil defense organization as being enrolled in that organization

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Requests to activate the net by a served agency
2018 All of these choices are correct

Rules

2022
2018 [97.3(a)(38), 97.407]

-----> *CHANGES* T2C06 *CHANGES* <-----

Question

2022 Which of the following is an accepted practice to get the immediate attention of a net control station when reporting an emergency?
2018 Which of the following is an accepted practice to get the immediate attention of a net control station when reporting an emergency?

Answer

2022 C
2018 C

Figure

2022
2018

Choice A

2022 Repeat "SOS" three times followed by the call sign of the reporting station
2018 Repeat the words SOS three times followed by the call sign of the reporting station

Choice B

2022 Press the push-to-talk button three times
2018 Press the push-to-talk button three times

Choice C

2022 Begin your transmission by saying "Priority" or "Emergency" followed by your call sign
2018 Begin your transmission by saying "Priority" or "Emergency" followed by your call sign

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Play a pre-recorded emergency alert tone followed by your call sign

2018 Play a pre-recorded emergency alert tone followed by your call sign

Rules

2022

2018

-----> *CHANGES* T2C07 *CHANGES* <-----

Question

2022 Which of the following is an accepted practice for an amateur operator who has checked into a net?

2018 Which of the following is an accepted practice for an amateur operator who has checked into an emergency traffic net?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Provided that the frequency is quiet, announce the station call sign and location every 5 minutes

2018 Provided that the frequency is quiet, announce the station call sign and location every 5 minutes

Choice B

2022 Move 5 kHz away from the net's frequency and use high power to ask other hams to keep clear of the net frequency

2018 Move 5 kHz away from the net's frequency and use high power to ask other hams to keep clear of the net frequency

Choice C

2022 Remain on frequency without transmitting until

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

asked to do so by the net control station
2018 Remain on frequency without transmitting until
asked to do so by the net control station

Choice D

2022 All of the choices are correct
2018 All of the choices are correct

Rules

2022
2018

-----> *CHANGES* T2C08 *CHANGES* <-----

Question

2022 Which of the following is a characteristic of good traffic handling?
2018 Which of the following is a characteristic of good emergency traffic handling?

Answer

2022 A
2018 A

Figure

2022
2018

Choice A

2022 Passing messages exactly as received
2018 Passing messages exactly as received

Choice B

2022 Making decisions as to whether messages are worthy of relay or delivery
2018 Making decisions as to whether or not messages should be relayed or delivered

Choice C

2022 Ensuring that any newsworthy messages are relayed to the news media
2018 Communicating messages to the news media for broadcast outside the disaster area

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T2C09 *NO CHANGES* <-----

Question

2022 Are amateur station control operators ever permitted to operate outside the frequency privileges of their license class?

2018 Are amateur station control operators ever permitted to operate outside the frequency privileges of their license class?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 No

2018 No

Choice B

2022 Yes, but only when part of a FEMA emergency plan

2018 Yes, but only when part of a FEMA emergency plan

Choice C

2022 Yes, but only when part of a RACES emergency plan

2018 Yes, but only when part of a RACES emergency plan

Choice D

2022 Yes, but only if necessary in situations involving the immediate safety of human life or

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

protection of property

2018 Yes, but only if necessary in situations involving the immediate safety of human life or protection of property

Rules

2022

2018

-----> *CHANGES* T2C10 *CHANGES* <-----

Question

2022 What information is contained in the preamble of a formal traffic message?

2018 What is the preamble in a formal traffic message?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The email address of the originating station

2018 The first paragraph of the message text

Choice B

2022 The address of the intended recipient

2018 The message number

Choice C

2022 The telephone number of the addressee

2018 The priority handling indicator for the message

Choice D

2022 The information needed to track the message

2018 The information needed to track the message as it passes through the amateur radio traffic handling system

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T2C11 *CHANGES* <-----

Question

2022 What is meant by the term "check," in reference to a formal traffic message?

2018 What is meant by the term "check" in reference to a formal traffic message?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The number of words or word equivalents in the text portion of the message

2018 The check is a count of the number of words or word equivalents in the text portion of the message

Choice B

2022 The value of a money order attached to the message

2018 The check is the value of a money order attached to the message

Choice C

2022 A list of stations that have relayed the message

2018 The check is a list of stations that have relayed the message

Choice D

2022 A box on the message form that indicates that the message was received and/or relayed

2018 The check is a box on the message form that tells you the message was received

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T2C12 *NO CHANGES* <-----

Question

2022 What is the Amateur Radio Emergency Service (ARES)?

2018 What is the Amateur Radio Emergency Service (ARES)?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service

2018 Licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service

Choice B

2022 Licensed amateurs who are members of the military and who voluntarily agreed to provide message handling services in the case of an emergency

2018 Licensed amateurs who are members of the military and who voluntarily agreed to provide message handling services in the case of an emergency

Choice C

2022 A training program that provides licensing courses for those interested in obtaining an amateur license to use during emergencies

2018 A training program that provides licensing courses for those interested in obtaining an amateur license to use during emergencies

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 A training program that certifies amateur operators for membership in the Radio Amateur Civil Emergency Service

2018 A training program that certifies amateur operators for membership in the Radio Amateur Civil Emergency Service

Rules

2022

2018

-----> *NO CHANGES* T3A01 *NO CHANGES* <-----

Question

2022 What should you do if another operator reports that your station's 2 meter signals were strong just a moment ago, but now they are weak or distorted?

2018 What should you do if another operator reports that your station's 2 meter signals were strong just a moment ago, but now they are weak or distorted?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Change the batteries in your radio to a different type

2018 Change the batteries in your radio to a different type

Choice B

2022 Turn on the CTCSS tone

2018 Turn on the CTCSS tone

Choice C

2022 Ask the other operator to adjust his squelch control

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Ask the other operator to adjust his squelch control

Choice D

2022 Try moving a few feet or changing the direction of your antenna if possible, as reflections may be causing multi-path distortion

2018 Try moving a few feet or changing the direction of your antenna if possible, as reflections may be causing multi-path distortion

Rules

2022

2018

-----> *CHANGES* T3A02 *CHANGES* <-----

Question

2022 Why might the range of VHF and UHF signals be greater in the winter?

2018 Why are UHF signals often more effective from inside buildings than VHF signals?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Less ionospheric absorption

2018 VHF signals lose power faster over distance

Choice B

2022 Less absorption by vegetation

2018 The shorter wavelength allows them to more easily penetrate the structure of buildings

Choice C

2022 Less solar activity

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 This is incorrect; VHF works better than UHF
inside buildings

Choice D

2022 Less tropospheric absorption

2018 UHF antennas are more efficient than VHF
antennas

Rules

2022

2018

-----> *NO CHANGES* T3A03 *NO CHANGES* <-----

Question

2022 What antenna polarization is normally used for
long-distance weak-signal CW and SSB contacts using
the VHF and UHF bands?

2018 What antenna polarization is normally used for
long-distance weak-signal CW and SSB contacts using
the VHF and UHF bands?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Right-hand circular

2018 Right-hand circular

Choice B

2022 Left-hand circular

2018 Left-hand circular

Choice C

2022 Horizontal

2018 Horizontal

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Vertical

2018 Vertical

Rules

2022

2018

-----> *NO CHANGES* T3A04 *NO CHANGES* <-----

Question

2022 What can happen if the antennas at opposite ends of a VHF or UHF line of sight radio link are not using the same polarization?

2018 What can happen if the antennas at opposite ends of a VHF or UHF line of sight radio link are not using the same polarization?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The modulation sidebands might become inverted

2018 The modulation sidebands might become inverted

Choice B

2022 Signals could be significantly weaker

2018 Signals could be significantly weaker

Choice C

2022 Signals have an echo effect on voices

2018 Signals have an echo effect on voices

Choice D

2022 Nothing significant will happen

2018 Nothing significant will happen

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T3A05 *NO CHANGES* <-----

Question

2022 When using a directional antenna, how might your station be able to access a distant repeater if buildings or obstructions are blocking the direct line of sight path?

2018 When using a directional antenna, how might your station be able to access a distant repeater if buildings or obstructions are blocking the direct line of sight path?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Change from vertical to horizontal polarization

2018 Change from vertical to horizontal polarization

Choice B

2022 Try to find a path that reflects signals to the repeater

2018 Try to find a path that reflects signals to the repeater

Choice C

2022 Try the long path

2018 Try the long path

Choice D

2022 Increase the antenna SWR

2018 Increase the antenna SWR

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T3A06 *NO CHANGES* <-----

Question

2022 What term is commonly used to describe the rapid fluttering sound sometimes heard from mobile stations that are moving while transmitting?

2018 What term is commonly used to describe the rapid fluttering sound sometimes heard from mobile stations that are moving while transmitting?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Flip-flopping

2018 Flip-flopping

Choice B

2022 Picket fencing

2018 Picket fencing

Choice C

2022 Frequency shifting

2018 Frequency shifting

Choice D

2022 Pulsing

2018 Pulsing

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T3A07 *NO CHANGES* <-----

Question

2022 What type of wave carries radio signals between transmitting and receiving stations?

2018 What type of wave carries radio signals between transmitting and receiving stations?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Electromagnetic

2018 Electromagnetic

Choice B

2022 Electrostatic

2018 Electrostatic

Choice C

2022 Surface acoustic

2018 Surface acoustic

Choice D

2022 Magnetostrictive

2018 Magnetostrictive

Rules

2022

2018

-----> *NO CHANGES* T3A08 *NO CHANGES* <-----

Question

2022 Which of the following is a likely cause of irregular fading of signals received by ionospheric reflection?

2018 Which of the following is a likely cause of

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

irregular fading of signals received by ionospheric reflection?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Frequency shift due to Faraday rotation

2018 Frequency shift due to Faraday rotation

Choice B

2022 Interference from thunderstorms

2018 Interference from thunderstorms

Choice C

2022 Random combining of signals arriving via different paths

2018 Random combining of signals arriving via different paths

Choice D

2022 Intermodulation distortion

2018 Intermodulation distortion

Rules

2022

2018

-----> *NO CHANGES* T3A09 *NO CHANGES* <-----

Question

2022 Which of the following results from the fact that skip signals refracted from the ionosphere are elliptically polarized?

2018 Which of the following results from the fact that skip signals refracted from the ionosphere are elliptically polarized?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Digital modes are unusable

2018 Digital modes are unusable

Choice B

2022 Either vertically or horizontally polarized antennas may be used for transmission or reception

2018 Either vertically or horizontally polarized antennas may be used for transmission or reception

Choice C

2022 FM voice is unusable

2018 FM voice is unusable

Choice D

2022 Both the transmitting and receiving antennas must be of the same polarization

2018 Both the transmitting and receiving antennas must be of the same polarization

Rules

2022

2018

-----> *CHANGES* T3A10 *CHANGES* <-----

Question

2022 What may occur if data signals arrive via multiple paths?

2018 What may occur if data signals propagate over multiple paths?

Answer

2022 D

2018 D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Transmission rates can be increased by a factor equal to the number of separate paths observed

2018 Transmission rates can be increased by a factor equal to the number of separate paths observed

Choice B

2022 Transmission rates must be decreased by a factor equal to the number of separate paths observed

2018 Transmission rates must be decreased by a factor equal to the number of separate paths observed

Choice C

2022 No significant changes will occur if the signals are transmitted using FM

2018 No significant changes will occur if the signals are transmitting using FM

Choice D

2022 Error rates are likely to increase

2018 Error rates are likely to increase

Rules

2022

2018

-----> *NO CHANGES* T3A11 *NO CHANGES* <-----

Question

2022 Which part of the atmosphere enables the propagation of radio signals around the world?

2018 Which part of the atmosphere enables the propagation of radio signals around the world?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 The stratosphere

2018 The stratosphere

Choice B

2022 The troposphere

2018 The troposphere

Choice C

2022 The ionosphere

2018 The ionosphere

Choice D

2022 The magnetosphere

2018 The magnetosphere

Rules

2022

2018

-----> *NEW* T3A12 *NEW* <-----

Question

2022 How might fog and light rain affect radio range on 10 meters and 6 meters?

Answer

2022 B

Figure

2022

Choice A

2022 Fog and rain absorb these wavelength bands

Choice B

2022 Fog and light rain will have little effect on these bands

Choice C

2022 Fog and rain will deflect these signals

Choice D

2022 For and rain will increase radio range

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

-----> *NEW* T3A13 *NEW* <-----

Question

2022 What weather condition would decrease range at microwave frequencies?

Answer

2022 C

Figure

2022

Choice A

2022 High winds

Choice B

2022 Low barometric pressure

Choice C

2022 Precipitation

Choice D

2022 Colder temperatures

Rules

2022

-----> *NO CHANGES* T3B01 *NO CHANGES* <-----

Question

2022 What is the name for the distance a radio wave travels during one complete cycle?

2018 What is the name for the distance a radio wave travels during one complete cycle?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Wave speed

2018 Wave speed

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Waveform

2018 Waveform

Choice C

2022 Wavelength

2018 Wavelength

Choice D

2022 Wave spread

2018 Wave spread

Rules

2022

2018

-----> *NO CHANGES* T3B02 *NO CHANGES* <-----

Question

2022 What property of a radio wave is used to describe its polarization?

2018 What property of a radio wave is used to describe its polarization?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The orientation of the electric field

2018 The orientation of the electric field

Choice B

2022 The orientation of the magnetic field

2018 The orientation of the magnetic field

Choice C

2022 The ratio of the energy in the magnetic field to the energy in the electric field

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The ratio of the energy in the magnetic field to the energy in the electric field

Choice D

2022 The ratio of the velocity to the wavelength

2018 The ratio of the velocity to the wavelength

Rules

2022

2018

-----> *NO CHANGES* T3B03 *NO CHANGES* <-----

Question

2022 What are the two components of a radio wave?

2018 What are the two components of a radio wave?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 AC and DC

2018 AC and DC

Choice B

2022 Voltage and current

2018 Voltage and current

Choice C

2022 Electric and magnetic fields

2018 Electric and magnetic fields

Choice D

2022 Ionizing and non-ionizing radiation

2018 Ionizing and non-ionizing radiation

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Rules

2022

2018

-----> *NO CHANGES* T3B04 *NO CHANGES* <-----

Question

2022 How fast does a radio wave travel through free space?

2018 How fast does a radio wave travel through free space?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 At the speed of light

2018 At the speed of light

Choice B

2022 At the speed of sound

2018 At the speed of sound

Choice C

2022 Its speed is inversely proportional to its wavelength

2018 Its speed is inversely proportional to its wavelength

Choice D

2022 Its speed increases as the frequency increases

2018 Its speed increases as the frequency increases

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T3B05 *NO CHANGES* <-----

Question

2022 How does the wavelength of a radio wave relate to its frequency?

2018 How does the wavelength of a radio wave relate to its frequency?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The wavelength gets longer as the frequency increases

2018 The wavelength gets longer as the frequency increases

Choice B

2022 The wavelength gets shorter as the frequency increases

2018 The wavelength gets shorter as the frequency increases

Choice C

2022 There is no relationship between wavelength and frequency

2018 There is no relationship between wavelength and frequency

Choice D

2022 The wavelength depends on the bandwidth of the signal

2018 The wavelength depends on the bandwidth of the signal

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T3B06 *NO CHANGES* <-----

Question

2022 What is the formula for converting frequency to approximate wavelength in meters?

2018 What is the formula for converting frequency to approximate wavelength in meters?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Wavelength in meters equals frequency in hertz multiplied by 300

2018 Wavelength in meters equals frequency in hertz multiplied by 300

Choice B

2022 Wavelength in meters equals frequency in hertz divided by 300

2018 Wavelength in meters equals frequency in hertz divided by 300

Choice C

2022 Wavelength in meters equals frequency in megahertz divided by 300

2018 Wavelength in meters equals frequency in megahertz divided by 300

Choice D

2022 Wavelength in meters equals 300 divided by frequency in megahertz

2018 Wavelength in meters equals 300 divided by frequency in megahertz

Rules

2022

2018

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

-----> *NO CHANGES* T3B07 *NO CHANGES* <-----

Question

2022 What property of radio waves is often used to identify the different frequency bands?

2018 What property of radio waves is often used to identify the different frequency bands?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The approximate wavelength

2018 The approximate wavelength

Choice B

2022 The magnetic intensity of waves

2018 The magnetic intensity of waves

Choice C

2022 The time it takes for waves to travel one mile

2018 The time it takes for waves to travel one mile

Choice D

2022 The voltage standing wave ratio of waves

2018 The voltage standing wave ratio of waves

Rules

2022

2018

-----> *NO CHANGES* T3B08 *NO CHANGES* <-----

Question

2022 What are the frequency limits of the VHF spectrum?

2018 What are the frequency limits of the VHF spectrum?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 30 to 300 kHz

2018 30 to 300 kHz

Choice B

2022 30 to 300 MHz

2018 30 to 300 MHz

Choice C

2022 300 to 3000 kHz

2018 300 to 3000 kHz

Choice D

2022 300 to 3000 MHz

2018 300 to 3000 MHz

Rules

2022

2018

-----> *NO CHANGES* T3B09 *NO CHANGES* <-----

Question

2022 What are the frequency limits of the UHF spectrum?

2018 What are the frequency limits of the UHF spectrum?

Answer

2022 D

2018 D

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 30 to 300 kHz

2018 30 to 300 kHz

Choice B

2022 30 to 300 MHz

2018 30 to 300 MHz

Choice C

2022 300 to 3000 kHz

2018 300 to 3000 kHz

Choice D

2022 300 to 3000 MHz

2018 300 to 3000 MHz

Rules

2022

2018

-----> ***NO CHANGES* T3B10 *NO CHANGES*** <-----

Question

2022 What frequency range is referred to as HF?

2018 What frequency range is referred to as HF?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 300 to 3000 MHz

2018 300 to 3000 MHz

Choice B

2022 30 to 300 MHz

2018 30 to 300 MHz

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 3 to 30 MHz

2018 3 to 30 MHz

Choice D

2022 300 to 3000 kHz

2018 300 to 3000 kHz

Rules

2022

2018

-----> *CHANGES* T3B11 *CHANGES* <-----

Question

2022 What is the approximate velocity of a radio wave as it travels through free space?

2018 What is the approximate velocity of a radio wave as it travels through free space?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 150,000 kilometers per second

2018 3000 kilometers per second

Choice B

2022 300,000,000 meters per second

2018 300,000,000 meters per second

Choice C

2022 300,000,000 miles per hour

2018 300,000 miles per hour

Choice D

2022 150,000 miles per hour

2018 186,000 miles per hour

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T3C01 *CHANGES* <-----

Question

2022 Why are direct (not via a repeater) UHF signals rarely heard from stations outside your local coverage area?

2018 Why are direct (not via a repeater) UHF signals rarely heard from stations outside your local coverage area?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 They are too weak to go very far

2018 They are too weak to go very far

Choice B

2022 FCC regulations prohibit them from going more than 50 miles

2018 FCC regulations prohibit them from going more than 50 miles

Choice C

2022 UHF signals are usually not reflected by the ionosphere

2018 UHF signals are usually not reflected by the ionosphere

Choice D

2022 UHF signals are absorbed by the ionospheric D layer

2018 They collide with trees and shrubbery and fade out

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T3C02 *CHANGES* <-----

Question

2022 Which of the following is an advantage of HF vs VHF and higher frequencies?

2018 Which of the following might be happening when VHF signals are being received from long distances?

Answer

2022 C

2018 D

Figure

2022

2018

Choice A

2022 HF antennas are generally smaller

2018 Signals are being reflected from outer space

Choice B

2022 HF accommodates wider bandwidth signals

2018 Signals are arriving by sub-surface ducting

Choice C

2022 Long distance ionospheric propagation is far more common on HF

2018 Signals are being reflected by lightning storms in your area

Choice D

2022 There is less atmospheric interference (static) on HF

2018 Signals are being refracted from a sporadic E layer

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T3C03 *NO CHANGES* <-----

Question

2022 What is a characteristic of VHF signals received via auroral reflection?

2018 What is a characteristic of VHF signals received via auroral reflection?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Signals from distances of 10,000 or more miles are common

2018 Signals from distances of 10,000 or more miles are common

Choice B

2022 The signals exhibit rapid fluctuations of strength and often sound distorted

2018 The signals exhibit rapid fluctuations of strength and often sound distorted

Choice C

2022 These types of signals occur only during winter nighttime hours

2018 These types of signals occur only during winter nighttime hours

Choice D

2022 These types of signals are generally strongest when your antenna is aimed west

2018 These types of signals are generally strongest when your antenna is aimed west

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T3C04 *NO CHANGES* <-----

Question

2022 Which of the following propagation types is most commonly associated with occasional strong over-the-horizon signals on the 10, 6, and 2 meter bands?

2018 Which of the following propagation types is most commonly associated with occasional strong over-the-horizon signals on the 10, 6, and 2 meter bands?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Backscatter

2018 Backscatter

Choice B

2022 Sporadic E

2018 Sporadic E

Choice C

2022 D layer absorption

2018 D layer absorption

Choice D

2022 Gray-line propagation

2018 Gray-line propagation

Rules

2022

2018

-----> *NO CHANGES* T3C05 *NO CHANGES* <-----

Question

2022 Which of the following effects might cause radio signals to be heard despite obstructions between the transmitting and receiving stations?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Which of the following effects might cause radio signals to be heard despite obstructions between the transmitting and receiving stations?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Knife-edge diffraction

2018 Knife-edge diffraction

Choice B

2022 Faraday rotation

2018 Faraday rotation

Choice C

2022 Quantum tunneling

2018 Quantum tunneling

Choice D

2022 Doppler shift

2018 Doppler shift

Rules

2022

2018

-----> *CHANGES* T3C06 *CHANGES* <-----

Question

2022 What mode is responsible for allowing over-the-horizon VHF and UHF communications to ranges of approximately 300 miles on a regular basis?

2018 What mode is responsible for allowing over-the-horizon VHF and UHF communications to ranges of approximately 300 miles on a regular basis?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Tropospheric scatter

2018 Tropospheric scatter

Choice B

2022 D-layer refraction

2018 D layer refraction

Choice C

2022 F2-layer refraction

2018 F2 layer refraction

Choice D

2022 Faraday rotation

2018 Faraday rotation

Rules

2022

2018

-----> *CHANGES* T3C07 *CHANGES* <-----

Question

2022 What band is best suited for communicating via meteor scatter?

2018 What band is best suited for communicating via meteor scatter?

Answer

2022 B

2018 B

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 10 meters

2018 10 meters

Choice B

2022 6 meters

2018 6 meters

Choice C

2022 2 meters

2018 2 meters

Choice D

2022 70 centimeters

2018 70 cm

Rules

2022

2018

-----> *NO CHANGES* T3C08 *NO CHANGES* <-----

Question

2022 What causes tropospheric ducting?

2018 What causes tropospheric ducting?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Discharges of lightning during electrical storms

2018 Discharges of lightning during electrical storms

Choice B

2022 Sunspots and solar flares

2018 Sunspots and solar flares

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Updrafts from hurricanes and tornadoes

2018 Updrafts from hurricanes and tornadoes

Choice D

2022 Temperature inversions in the atmosphere

2018 Temperature inversions in the atmosphere

Rules

2022

2018

-----> *NO CHANGES* T3C09 *NO CHANGES* <-----

Question

2022 What is generally the best time for long-distance 10 meter band propagation via the F layer?

2018 What is generally the best time for long-distance 10 meter band propagation via the F layer?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 From dawn to shortly after sunset during periods of high sunspot activity

2018 From dawn to shortly after sunset during periods of high sunspot activity

Choice B

2022 From shortly after sunset to dawn during periods of high sunspot activity

2018 From shortly after sunset to dawn during periods of high sunspot activity

Choice C

2022 From dawn to shortly after sunset during periods of low sunspot activity

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 From dawn to shortly after sunset during periods of low sunspot activity

Choice D

2022 From shortly after sunset to dawn during periods of low sunspot activity

2018 From shortly after sunset to dawn during periods of low sunspot activity

Rules

2022

2018

-----> *CHANGES* T3C10 *CHANGES* <-----

Question

2022 Which of the following bands may provide long distance communications during the peak of the sunspot cycle?

2018 What is the radio horizon?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Six or ten meters

2018 The distance over which two stations can communicate by direct path

Choice B

2022 23 centimeters

2018 The distance from the ground to a horizontally mounted antenna

Choice C

2022 70 centimeters or 1.25 meters

2018 The farthest point you can see when standing at the base of your antenna tower

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of these choices are correct

2018 The shortest distance between two points on the Earth's surface

Rules

2022

2018

-----> *NO CHANGES* T3C11 *NO CHANGES* <-----

Question

2022 Why do VHF and UHF radio signals usually travel somewhat farther than the visual line of sight distance between two stations?

2018 Why do VHF and UHF radio signals usually travel somewhat farther than the visual line of sight distance between two stations?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Radio signals move somewhat faster than the speed of light

2018 Radio signals move somewhat faster than the speed of light

Choice B

2022 Radio waves are not blocked by dust particles

2018 Radio waves are not blocked by dust particles

Choice C

2022 The Earth seems less curved to radio waves than to light

2018 The Earth seems less curved to radio waves than to light

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Radio waves are blocked by dust particles

2018 Radio waves are blocked by dust particles

Rules

2022

2018

-----> *CHANGES* T4A01 *CHANGES* <-----

Question

2022 What must be considered to determine the minimum current capacity needed for a transceiver's power supply?

2018 Which of the following is true concerning the microphone connectors on amateur transceivers?

Answer

2022 D

2018 B

Figure

2022

2018

Choice A

2022 Efficiency of the transmitter at full power output

2018 All transceivers use the same microphone connector type

Choice B

2022 Receiver and control circuit power

2018 Some connectors include push-to-talk and voltages for powering the microphone

Choice C

2022 Power supply regulation and heat dissipation

2018 All transceivers using the same connector type are wired identically

Choice D

2022 All of these are correct

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Un-keyed connectors allow any microphone to be connected

Rules

2022

2018

-----> *NO CHANGES* T4A02 *NO CHANGES* <-----

Question

2022 How might a computer be used as part of an amateur radio station?

2018 How might a computer be used as part of an amateur radio station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 For logging contacts and contact information

2018 For logging contacts and contact information

Choice B

2022 For sending and/or receiving CW

2018 For sending and/or receiving CW

Choice C

2022 For generating and decoding digital signals

2018 For generating and decoding digital signals

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T4A03 *CHANGES* <-----

Question

2022 Why should wiring between the power source and radio be heavy-gauge wire and kept as short as possible?

2018 Which is a good reason to use a regulated power supply for communications equipment?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 To avoid voltage falling below that needed for proper operation

2018 It prevents voltage fluctuations from reaching sensitive circuits

Choice B

2022 To provide a good counterpoise for the antenna

2018 A regulated power supply has FCC approval

Choice C

2022 To avoid RF interference

2018 A fuse or circuit breaker regulates the power

Choice D

2022 All of these choices are correct

2018 Power consumption is independent of load

Rules

2022

2018

-----> *CHANGES* T4A04 *CHANGES* <-----

Question

2022 Which computer sound card port is connected to a transceiver's headphone or speaker output for

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

operating digital modes?

2018 Where must a filter be installed to reduce harmonic emissions from your station?

Answer

2022 C

2018 A

Figure

2022

2018

Choice A

2022 Headphone output

2018 Between the transmitter and the antenna

Choice B

2022 Mute

2018 Between the receiver and the transmitter

Choice C

2022 Microphone or line input

2018 At the station power supply

Choice D

2022 PCI or SDI

2018 At the microphone

Rules

2022

2018

-----> *CHANGES* T4A05 *CHANGES* <-----

Question

2022 What is the proper location for an external SWR meter?

2018 Where should an in-line SWR meter be connected to monitor the standing wave ratio of the station antenna system?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 In series with the feed line, between the transmitter and antenna

2018 In series with the feed line, between the transmitter and antenna

Choice B

2022 In series with the station's ground

2018 In series with the station's ground

Choice C

2022 In parallel with the push-to-talk line and the antenna

2018 In parallel with the push-to-talk line and the antenna

Choice D

2022 In series with the power supply cable, as close as possible to the radio

2018 In series with the power supply cable, as close as possible to the radio

Rules

2022

2018

-----> *CHANGES* T4A06 *CHANGES* <-----

Question

2022 Which of the following connections might be used between a voice transceiver and a computer for digital operation?

2018 Which of the following would be connected between a transceiver and computer in a packet radio station?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Receive and transmit mode, status, and location

2018 Transmatch

Choice B

2022 Antenna and RF power

2018 Mixer

Choice C

2022 Receive audio, transmit audio, and push-to-talk
(PTT)

2018 Terminal node controller

Choice D

2022 NMEA GPS location and dc power

2018 Antenna

Rules

2022

2018

-----> *CHANGES* T4A07 *CHANGES* <-----

Question

2022 How is a computer's sound card used when
conducting digital communications?

2018 How is a computer's sound card used when
conducting digital communications using a computer?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 The sound card communicates between the computer CPU and the video display

2018 The sound card communicates between the computer CPU and the video display

Choice B

2022 The sound card records the audio frequency for video display

2018 The sound card records the audio frequency for video display

Choice C

2022 The sound card provides audio to the radio's microphone input and converts received audio to digital form

2018 The sound card provides audio to the microphone input and converts received audio to digital form

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T4A08 *CHANGES* <-----

Question

2022 Which of the following conductors provides the lowest impedance to RF signals?

2018 Which type of conductor is best to use for RF grounding?

Answer

2022 D

2018 D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Round stranded wire

2018 Round stranded wire

Choice B

2022 Round copper-clad steel wire

2018 Round copper-clad steel wire

Choice C

2022 Twisted-pair cable

2018 Twisted-pair cable

Choice D

2022 Flat strap

2018 Flat strap

Rules

2022

2018

-----> *CHANGES* T4A09 *CHANGES* <-----

Question

2022 Which of the following could you use to cure distorted audio caused by RF current on the shield of a microphone cable?

2018 Which of the following could you use to cure distorted audio caused by RF current flowing on the shield of a microphone cable?

Answer

2022 D

2018 D

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Band-pass filter

2018 Band-pass filter

Choice B

2022 Low-pass filter

2018 Low-pass filter

Choice C

2022 Preamplifier

2018 Preamplifier

Choice D

2022 Ferrite choke

2018 Ferrite choke

Rules

2022

2018

-----> *NO CHANGES* T4A10 *NO CHANGES* <-----

Question

2022 What is the source of a high-pitched whine that varies with engine speed in a mobile transceiver's receive audio?

2018 What is the source of a high-pitched whine that varies with engine speed in a mobile transceiver's receive audio?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The ignition system

2018 The ignition system

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 The alternator

2018 The alternator

Choice C

2022 The electric fuel pump

2018 The electric fuel pump

Choice D

2022 Anti-lock braking system controllers

2018 Anti-lock braking system controllers

Rules

2022

2018

-----> *NO CHANGES* T4A11 *NO CHANGES* <-----

Question

2022 Where should the negative return connection of a mobile transceiver's power cable be connected?

2018 Where should the negative return connection of a mobile transceiver's power cable be connected?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 At the battery or engine block ground strap

2018 At the battery or engine block ground strap

Choice B

2022 At the antenna mount

2018 At the antenna mount

Choice C

2022 To any metal part of the vehicle

2018 To any metal part of the vehicle

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Through the transceiver's mounting bracket

2018 Through the transceiver's mounting bracket

Rules

2022

2018

-----> *NO CHANGES* T4B01 *NO CHANGES* <-----

Question

2022 What may happen if a transmitter is operated with the microphone gain set too high?

2018 What may happen if a transmitter is operated with the microphone gain set too high?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The output power might be too high

2018 The output power might be too high

Choice B

2022 The output signal might become distorted

2018 The output signal might become distorted

Choice C

2022 The frequency might vary

2018 The frequency might vary

Choice D

2022 The SWR might increase

2018 The SWR might increase

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T4B02 *NO CHANGES* <-----

Question

2022 Which of the following can be used to enter the operating frequency on a modern transceiver?

2018 Which of the following can be used to enter the operating frequency on a modern transceiver?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The keypad or VFO knob

2018 The keypad or VFO knob

Choice B

2022 The CTCSS or DTMF encoder

2018 The CTCSS or DTMF encoder

Choice C

2022 The Automatic Frequency Control

2018 The Automatic Frequency Control

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T4B03 *NO CHANGES* <-----

Question

2022 What is the purpose of the squelch control on a transceiver?

2018 What is the purpose of the squelch control on a transceiver?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 To set the highest level of volume desired

2018 To set the highest level of volume desired

Choice B

2022 To set the transmitter power level

2018 To set the transmitter power level

Choice C

2022 To adjust the automatic gain control

2018 To adjust the automatic gain control

Choice D

2022 To mute receiver output noise when no signal is being received

2018 To mute receiver output noise when no signal is being received

Rules

2022

2018

-----> ***NO CHANGES* T4B04 *NO CHANGES*** <-----

Question

2022 What is a way to enable quick access to a favorite frequency on your transceiver?

2018 What is a way to enable quick access to a favorite frequency on your transceiver?

Answer

2022 B

2018 B

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Enable the CTCSS tones

2018 Enable the CTCSS tones

Choice B

2022 Store the frequency in a memory channel

2018 Store the frequency in a memory channel

Choice C

2022 Disable the CTCSS tones

2018 Disable the CTCSS tones

Choice D

2022 Use the scan mode to select the desired frequency

2018 Use the scan mode to select the desired frequency

Rules

2022

2018

-----> ***NO CHANGES* T4B05 *NO CHANGES*** <-----

Question

2022 Which of the following would reduce ignition interference to a receiver?

2018 Which of the following would reduce ignition interference to a receiver?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Change frequency slightly

2018 Change frequency slightly

Choice B

2022 Decrease the squelch setting

2018 Decrease the squelch setting

Choice C

2022 Turn on the noise blanker

2018 Turn on the noise blanker

Choice D

2022 Use the RIT control

2018 Use the RIT control

Rules

2022

2018

-----> *NO CHANGES* T4B06 *NO CHANGES* <-----

Question

2022 Which of the following controls could be used if the voice pitch of a single-sideband signal seems too high or low?

2018 Which of the following controls could be used if the voice pitch of a single-sideband signal seems too high or low?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The AGC or limiter

2018 The AGC or limiter

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 The bandwidth selection

2018 The bandwidth selection

Choice C

2022 The tone squelch

2018 The tone squelch

Choice D

2022 The receiver RIT or clarifier

2018 The receiver RIT or clarifier

Rules

2022

2018

-----> *NO CHANGES* T4B07 *NO CHANGES* <-----

Question

2022 What does the term "RIT" mean?

2018 What does the term "RIT" mean?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Receiver Input Tone

2018 Receiver Input Tone

Choice B

2022 Receiver Incremental Tuning

2018 Receiver Incremental Tuning

Choice C

2022 Rectifier Inverter Test

2018 Rectifier Inverter Test

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Remote Input Transmitter

2018 Remote Input Transmitter

Rules

2022

2018

-----> *NO CHANGES* T4B08 *NO CHANGES* <-----

Question

2022 What is the advantage of having multiple receive bandwidth choices on a multimode transceiver?

2018 What is the advantage of having multiple receive bandwidth choices on a multimode transceiver?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Permits monitoring several modes at once

2018 Permits monitoring several modes at once

Choice B

2022 Permits noise or interference reduction by selecting a bandwidth matching the mode

2018 Permits noise or interference reduction by selecting a bandwidth matching the mode

Choice C

2022 Increases the number of frequencies that can be stored in memory

2018 Increases the number of frequencies that can be stored in memory

Choice D

2022 Increases the amount of offset between receive and transmit frequencies

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Increases the amount of offset between receive and transmit frequencies

Rules

2022

2018

-----> *CHANGES* T4B09 *CHANGES* <-----

Question

2022 Which of the following is an appropriate receive filter bandwidth for minimizing noise and interference for SSB reception?

2018 Which of the following is an appropriate receive filter bandwidth to select in order to minimize noise and interference for SSB reception?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 500 Hz

2018 500 Hz

Choice B

2022 1000 Hz

2018 1000 Hz

Choice C

2022 2400 Hz

2018 2400 Hz

Choice D

2022 5000 Hz

2018 5000 Hz

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T4B10 *CHANGES* <-----

Question

2022 Which of the following is an appropriate receive filter bandwidth for minimizing noise and interference for CW reception?

2018 Which of the following is an appropriate receive filter bandwidth to select in order to minimize noise and interference for CW reception?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 500 Hz

2018 500 Hz

Choice B

2022 1000 Hz

2018 1000 Hz

Choice C

2022 2400 Hz

2018 2400 Hz

Choice D

2022 5000 Hz

2018 5000 Hz

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T4B11 *CHANGES* <-----

Question

2022 What is the common meaning of the term "repeater offset"?

2018 Which of the following describes the common meaning of the term "repeater offset"?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The distance between the repeater's transmit and receive antennas

2018 The distance between the repeater's transmit and receive antennas

Choice B

2022 The time delay before the repeater timer resets

2018 The time delay before the repeater timer resets

Choice C

2022 The difference between the repeater's transmit and receive frequencies

2018 The difference between the repeater's transmit and receive frequencies

Choice D

2022 Matching the antenna impedance to the feed line impedance

2018 Matching the antenna impedance to the feed line impedance

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T4B12 *CHANGES* <-----

Question

2022 What is the function of automatic gain control,
or AGC?

2018 What is the function of automatic gain control
or AGC?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 To keep received audio relatively constant

2018 To keep received audio relatively constant

Choice B

2022 To protect an antenna from lightning

2018 To protect an antenna from lightning

Choice C

2022 To eliminate RF on the station cabling

2018 To eliminate RF on the station cabling

Choice D

2022 An asymmetric goniometer control used for
antenna matching

2018 An asymmetric goniometer control used for
antenna matching

Rules

2022

2018

-----> *NEW* T4B13 *NEW* <-----

Question

2022 Which of the following could be used to remove
power line noise or ignition noise?

Answer

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

2022 B

Figure

2022

Choice A

2022 Squelch

Choice B

2022 Noise blanker

Choice C

2022 Notch filter

Choice D

2022 All of these choices are correct

Rules

2022

-----> *NEW* T4B14 *NEW* <-----

Question

2022 Which of the following is a use for the scanning function of an FM transceiver?

Answer

2022 C

Figure

2022

Choice A

2022 To check incoming signal deviation

Choice B

2022 To prevent interference to nearby repeaters

Choice C

2022 To scan through a range of frequencies to check for activity

Choice D

2022 To check for messages left on a digital bulletin board

Rules

2022

-----> *NO CHANGES* T5A01 *NO CHANGES* <-----

Question

2022 Electrical current is measured in which of the following units?

2018 Electrical current is measured in which of the following units?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Volts

2018 Volts

Choice B

2022 Watts

2018 Watts

Choice C

2022 Ohms

2018 Ohms

Choice D

2022 Amperes

2018 Amperes

Rules

2022

2018

-----> *NO CHANGES* T5A02 *NO CHANGES* <-----

Question

2022 Electrical power is measured in which of the following units?

2018 Electrical power is measured in which of the following units?

Answer

2022 B

2018 B

Figure

2022

2018

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice A

2022 Volts

2018 Volts

Choice B

2022 Watts

2018 Watts

Choice C

2022 Ohms

2018 Ohms

Choice D

2022 Amperes

2018 Amperes

Rules

2022

2018

-----> ***NO CHANGES* T5A03 *NO CHANGES*** <-----

Question

2022 What is the name for the flow of electrons in an electric circuit?

2018 What is the name for the flow of electrons in an electric circuit?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Voltage

2018 Voltage

Choice B

2022 Resistance

2018 Resistance

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice C

2022 Capacitance

2018 Capacitance

Choice D

2022 Current

2018 Current

Rules

2022

2018

-----> ***NO CHANGES* T5A04 *NO CHANGES*** <-----

Question

2022 What is the name for a current that flows only
in one direction?

2018 What is the name for a current that flows only
in one direction?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Alternating current

2018 Alternating current

Choice B

2022 Direct current

2018 Direct current

Choice C

2022 Normal current

2018 Normal current

Choice D

2022 Smooth current

2018 Smooth current

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T5A05 *NO CHANGES* <-----

Question

2022 What is the electrical term for the electromotive force (EMF) that causes electron flow?

2018 What is the electrical term for the electromotive force (EMF) that causes electron flow?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Voltage

2018 Voltage

Choice B

2022 Ampere-hours

2018 Ampere-hours

Choice C

2022 Capacitance

2018 Capacitance

Choice D

2022 Inductance

2018 Inductance

Rules

2022

2018

-----> *CHANGES* T5A06 *CHANGES* <-----

Question

2022 How much voltage does a mobile transceiver

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

typically require?

2018 How much voltage does a mobile transceiver usually require?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 About 12 volts

2018 About 12 volts

Choice B

2022 About 30 volts

2018 About 30 volts

Choice C

2022 About 120 volts

2018 About 120 volts

Choice D

2022 About 240 volts

2018 About 240 volts

Rules

2022

2018

-----> *NO CHANGES* T5A07 *NO CHANGES* <-----

Question

2022 Which of the following is a good electrical conductor?

2018 Which of the following is a good electrical conductor?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Glass

2018 Glass

Choice B

2022 Wood

2018 Wood

Choice C

2022 Copper

2018 Copper

Choice D

2022 Rubber

2018 Rubber

Rules

2022

2018

-----> *NO CHANGES* T5A08 *NO CHANGES* <-----

Question

2022 Which of the following is a good electrical insulator?

2018 Which of the following is a good electrical insulator?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Copper

2018 Copper

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Glass

2018 Glass

Choice C

2022 Aluminum

2018 Aluminum

Choice D

2022 Mercury

2018 Mercury

Rules

2022

2018

-----> *NO CHANGES* T5A09 *NO CHANGES* <-----

Question

2022 What is the name for a current that reverses direction on a regular basis?

2018 What is the name for a current that reverses direction on a regular basis?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Alternating current

2018 Alternating current

Choice B

2022 Direct current

2018 Direct current

Choice C

2022 Circular current

2018 Circular current

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice D

2022 Vertical current

2018 Vertical current

Rules

2022

2018

-----> ***NO CHANGES* T5A10 *NO CHANGES*** <-----

Question

2022 Which term describes the rate at which
electrical energy is used?

2018 Which term describes the rate at which
electrical energy is used?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Resistance

2018 Resistance

Choice B

2022 Current

2018 Current

Choice C

2022 Power

2018 Power

Choice D

2022 Voltage

2018 Voltage

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T5A11 *CHANGES* <-----

Question

2022 What is the unit of electromotive force?

2018 What is the basic unit of electromotive force?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The volt

2018 The volt

Choice B

2022 The watt

2018 The watt

Choice C

2022 The ampere

2018 The ampere

Choice D

2022 The ohm

2018 The ohm

Rules

2022

2018

-----> *CHANGES* T5A12 *CHANGES* <-----

Question

2022 What describes the number of times per second that an alternating current makes a complete cycle?

2018 What term describes the number of times per second that an alternating current reverses direction?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Pulse rate

2018 Pulse rate

Choice B

2022 Speed

2018 Speed

Choice C

2022 Wavelength

2018 Wavelength

Choice D

2022 Frequency

2018 Frequency

Rules

2022

2018

-----> *NEW* T5A13 *NEW* <-----

Question

2022 In which type of circuit is current the same through all components?

Answer

2022 A

Figure

2022

Choice A

2022 Series

Choice B

2022 Parallel

Choice C

2022 Resonant

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Branch

Rules

2022

-----> *NEW* T5A14 *NEW* <-----

Question

2022 In which type of circuit is voltage the same across all components?

Answer

2022 B

Figure

2022

Choice A

2022 Series

Choice B

2022 Parallel

Choice C

2022 Resonant

Choice D

2022 Branch

Rules

2022

-----> *CHANGES* T5B01 *CHANGES* <-----

Question

2022 How many milliamperes is 1.5 amperes?

2018 How many milliamperes is 1.5 amperes?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 15 milliamperes

2018 15 milliamperes

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 150 milliamperes

2018 150 milliamperes

Choice C

2022 1500 milliamperes

2018 1,500 milliamperes

Choice D

2022 15,000 milliamperes

2018 15,000 milliamperes

Rules

2022

2018

-----> *NO CHANGES* T5B02 *NO CHANGES* <-----

Question

2022 What is another way to specify a radio signal frequency of 1,500,000 hertz?

2018 What is another way to specify a radio signal frequency of 1,500,000 hertz?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 1500 kHz

2018 1500 kHz

Choice B

2022 1500 MHz

2018 1500 MHz

Choice C

2022 15 GHz

2018 15 GHz

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 150 kHz

2018 150 kHz

Rules

2022

2018

-----> *NO CHANGES* T5B03 *NO CHANGES* <-----

Question

2022 How many volts are equal to one kilovolt?

2018 How many volts are equal to one kilovolt?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 One one-thousandth of a volt

2018 One one-thousandth of a volt

Choice B

2022 One hundred volts

2018 One hundred volts

Choice C

2022 One thousand volts

2018 One thousand volts

Choice D

2022 One million volts

2018 One million volts

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T5B04 *NO CHANGES* <-----

Question

2022 How many volts are equal to one microvolt?

2018 How many volts are equal to one microvolt?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 One one-millionth of a volt

2018 One one-millionth of a volt

Choice B

2022 One million volts

2018 One million volts

Choice C

2022 One thousand kilovolts

2018 One thousand kilovolts

Choice D

2022 One one-thousandth of a volt

2018 One one-thousandth of a volt

Rules

2022

2018

-----> *CHANGES* T5B05 *CHANGES* <-----

Question

2022 Which of the following is equal to 500 milliwatts?

2018 Which of the following is equivalent to 500 milliwatts?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 0.02 watts

2018 0.02 watts

Choice B

2022 0.5 watts

2018 0.5 watts

Choice C

2022 5 watts

2018 5 watts

Choice D

2022 50 watts

2018 50 watts

Rules

2022

2018

-----> *NO CHANGES* T5B06 *NO CHANGES* <-----

Question

2022 If an ammeter calibrated in amperes is used to measure a 3000-milliampere current, what reading would it show?

2018 If an ammeter calibrated in amperes is used to measure a 3000-milliampere current, what reading would it show?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 0.003 amperes

2018 0.003 amperes

Choice B

2022 0.3 amperes

2018 0.3 amperes

Choice C

2022 3 amperes

2018 3 amperes

Choice D

2022 3,000,000 amperes

2018 3,000,000 amperes

Rules

2022

2018

-----> *CHANGES* T5B07 *CHANGES* <-----

Question

2022 If a frequency **display** calibrated in megahertz shows a reading of 3.525 MHz, what would it show if it were calibrated in kilohertz?

2018 If a frequency **readout** calibrated in megahertz shows a reading of 3.525 MHz, what would it show if it were calibrated in kilohertz?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 0.003525 kHz

2018 0.003525 kHz

Choice B

2022 35.25 kHz

2018 35.25 kHz

Choice C

2022 3525 kHz

2018 3525 kHz

Choice D

2022 3,525,000 kHz

2018 3,525,000 kHz

Rules

2022

2018

-----> *CHANGES* T5B08 *CHANGES* <-----

Question

2022 How many microfarads are equal to 1,000,000 picofarads?

2018 How many microfarads are 1,000,000 picofarads?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 0.001 microfarads

2018 0.001 microfarads

Choice B

2022 1 microfarad

2018 1 microfarad

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice C

2022 1000 microfarads

2018 1000 microfarads

Choice D

2022 1,000,000,000 microfarads

2018 1,000,000,000 microfarads

Rules

2022

2018

-----> ***NO CHANGES* T5B09 *NO CHANGES*** <-----

Question

2022 What is the approximate amount of change, measured in decibels (dB), of a power increase from 5 watts to 10 watts?

2018 What is the approximate amount of change, measured in decibels (dB), of a power increase from 5 watts to 10 watts?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 2 dB

2018 2 dB

Choice B

2022 3 dB

2018 3 dB

Choice C

2022 5 dB

2018 5 dB

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 10 dB

2018 10 dB

Rules

2022

2018

-----> *NO CHANGES* T5B10 *NO CHANGES* <-----

Question

2022 What is the approximate amount of change, measured in decibels (dB), of a power decrease from 12 watts to 3 watts?

2018 What is the approximate amount of change, measured in decibels (dB), of a power decrease from 12 watts to 3 watts?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 -1 dB

2018 -1 dB

Choice B

2022 -3 dB

2018 -3 dB

Choice C

2022 -6 dB

2018 -6 dB

Choice D

2022 -9 dB

2018 -9 dB

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T5B11 *CHANGES* <-----

Question

2022 What is the amount of change, measured in decibels (dB), of a power increase from 20 watts to 200 watts?

2018 What is the approximate amount of change, measured in decibels (dB), of a power increase from 20 watts to 200 watts?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 10 dB

2018 10 dB

Choice B

2022 12 dB

2018 12 dB

Choice C

2022 18 dB

2018 18 dB

Choice D

2022 28 dB

2018 28 dB

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T5B12 *NO CHANGES* <-----

Question

2022 Which of the following frequencies is equal to 28,400 kHz?

2018 Which of the following frequencies is equal to 28,400 kHz?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 28.400 MHz

2018 28.400 MHz

Choice B

2022 2.800 MHz

2018 2.800 MHz

Choice C

2022 284.00 MHz

2018 284.00 MHz

Choice D

2022 28.400 kHz

2018 28.400 kHz

Rules

2022

2018

-----> *CHANGES* T5B13 *CHANGES* <-----

Question

2022 If a frequency **display** shows a reading of 2425 MHz, what frequency is that in GHz?

2018 If a frequency **readout** shows a reading of 2425 MHz, what frequency is that in GHz?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 0.002425 GHz

2018 0.002425 GHZ

Choice B

2022 24.25 GHz

2018 24.25 GHz

Choice C

2022 2.425 GHz

2018 2.425 GHz

Choice D

2022 2425 GHz

2018 2425 GHz

Rules

2022

2018

-----> *NO CHANGES* T5C01 *NO CHANGES* <-----

Question

2022 What is the ability to store energy in an electric field called?

2018 What is the ability to store energy in an electric field called?

Answer

2022 D

2018 D

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Inductance

2018 Inductance

Choice B

2022 Resistance

2018 Resistance

Choice C

2022 Tolerance

2018 Tolerance

Choice D

2022 Capacitance

2018 Capacitance

Rules

2022

2018

-----> *NO CHANGES* T5C02 *NO CHANGES* <-----

Question

2022 What is the basic unit of capacitance?

2018 What is the basic unit of capacitance?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The farad

2018 The farad

Choice B

2022 The ohm

2018 The ohm

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice C

2022 The volt

2018 The volt

Choice D

2022 The henry

2018 The henry

Rules

2022

2018

-----> ***NO CHANGES* T5C03 *NO CHANGES*** <-----

Question

2022 What is the ability to store energy in a magnetic field called?

2018 What is the ability to store energy in a magnetic field called?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Admittance

2018 Admittance

Choice B

2022 Capacitance

2018 Capacitance

Choice C

2022 Resistance

2018 Resistance

Choice D

2022 Inductance

2018 Inductance

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Rules

2022

2018

-----> *NO CHANGES* T5C04 *NO CHANGES* <-----

Question

2022 What is the basic unit of inductance?

2018 What is the basic unit of inductance?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The coulomb

2018 The coulomb

Choice B

2022 The farad

2018 The farad

Choice C

2022 The henry

2018 The henry

Choice D

2022 The ohm

2018 The ohm

Rules

2022

2018

-----> *NO CHANGES* T5C05 *NO CHANGES* <-----

Question

2022 What is the unit of frequency?

2018 What is the unit of frequency?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Hertz

2018 Hertz

Choice B

2022 Henry

2018 Henry

Choice C

2022 Farad

2018 Farad

Choice D

2022 Tesla

2018 Tesla

Rules

2022

2018

-----> *NO CHANGES* T5C06 *NO CHANGES* <-----

Question

2022 What does the abbreviation "RF" refer to?

2018 What does the abbreviation "RF" refer to?

Answer

2022 A

2018 A

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Radio frequency signals of all types

2018 Radio frequency signals of all types

Choice B

2022 The resonant frequency of a tuned circuit

2018 The resonant frequency of a tuned circuit

Choice C

2022 The real frequency transmitted as opposed to the apparent frequency

2018 The real frequency transmitted as opposed to the apparent frequency

Choice D

2022 Reflective force in antenna transmission lines

2018 Reflective force in antenna transmission lines

Rules

2022

2018

-----> *CHANGES* T5C07 *CHANGES* <-----

Question

2022 A radio wave is made up of what type of energy?

2018 What is a usual name for electromagnetic waves that travel through space?

Answer

2022 B

2018 C

Figure

2022

2018

Choice A

2022 Pressure

2018 Gravity waves

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Electromagnetic

2018 Sound waves

Choice C

2022 Gravity

2018 Radio waves

Choice D

2022 Thermal

2018 Pressure waves

Rules

2022

2018

-----> *NO CHANGES* T5C08 *NO CHANGES* <-----

Question

2022 What is the formula used to calculate electrical power in a DC circuit?

2018 What is the formula used to calculate electrical power in a DC circuit?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Power (P) equals voltage (E) multiplied by current (I)

2018 Power (P) equals voltage (E) multiplied by current (I)

Choice B

2022 Power (P) equals voltage (E) divided by current (I)

2018 Power (P) equals voltage (E) divided by current (I)

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Power (P) equals voltage (E) minus current (I)

2018 Power (P) equals voltage (E) minus current (I)

Choice D

2022 Power (P) equals voltage (E) plus current (I)

2018 Power (P) equals voltage (E) plus current (I)

Rules

2022

2018

-----> *NO CHANGES* T5C09 *NO CHANGES* <-----

Question

2022 How much power is being used in a circuit when the applied voltage is 13.8 volts DC and the current is 10 amperes?

2018 How much power is being used in a circuit when the applied voltage is 13.8 volts DC and the current is 10 amperes?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 138 watts

2018 138 watts

Choice B

2022 0.7 watts

2018 0.7 watts

Choice C

2022 23.8 watts

2018 23.8 watts

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 3.8 watts

2018 3.8 watts

Rules

2022

2018

-----> *NO CHANGES* T5C10 *NO CHANGES* <-----

Question

2022 How much power is being used in a circuit when the applied voltage is 12 volts DC and the current is 2.5 amperes?

2018 How much power is being used in a circuit when the applied voltage is 12 volts DC and the current is 2.5 amperes?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 4.8 watts

2018 4.8 watts

Choice B

2022 30 watts

2018 30 watts

Choice C

2022 14.5 watts

2018 14.5 watts

Choice D

2022 0.208 watts

2018 0.208 watts

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T5C11 *NO CHANGES* <-----

Question

2022 How many amperes are flowing in a circuit when the applied voltage is 12 volts DC and the load is 120 watts?

2018 How many amperes are flowing in a circuit when the applied voltage is 12 volts DC and the load is 120 watts?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 0.1 amperes

2018 0.1 amperes

Choice B

2022 10 amperes

2018 10 amperes

Choice C

2022 12 amperes

2018 12 amperes

Choice D

2022 132 amperes

2018 132 amperes

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T5C12 *CHANGES* <-----

Question

2022 What is impedance?

2018 What is meant by the term impedance?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 A measure of the opposition to AC current flow in a circuit

2018 It is a measure of the opposition to AC current flow in a circuit

Choice B

2022 The inverse of resistance

2018 It is the inverse of resistance

Choice C

2022 The Q or Quality Factor of a component

2018 It is a measure of the Q or Quality Factor of a component

Choice D

2022 The power handling capability of a component

2018 It is a measure of the power handling capability of a component

Rules

2022

2018

-----> *NO CHANGES* T5C13 *NO CHANGES* <-----

Question

2022 What are the units of impedance?

2018 What are the units of impedance?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Volts

2018 Volts

Choice B

2022 Amperes

2018 Amperes

Choice C

2022 Coulombs

2018 Coulombs

Choice D

2022 Ohms

2018 Ohms

Rules

2022

2018

-----> *NEW* T5C14 *NEW* <-----

Question

2022 What is the proper abbreviation for megahertz?

Answer

2022 D

Figure

2022

Choice A

2022 mHz

Choice B

2022 mhZ

Choice C

2022 Mhz

Choice D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2022 MHz

Rules

2022

-----> *NO CHANGES* T5D01 *NO CHANGES* <-----

Question

2022 What formula is used to calculate current in a circuit?

2018 What formula is used to calculate current in a circuit?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Current (I) equals voltage (E) multiplied by resistance (R)

2018 Current (I) equals voltage (E) multiplied by resistance (R)

Choice B

2022 Current (I) equals voltage (E) divided by resistance (R)

2018 Current (I) equals voltage (E) divided by resistance (R)

Choice C

2022 Current (I) equals voltage (E) added to resistance (R)

2018 Current (I) equals voltage (E) added to resistance (R)

Choice D

2022 Current (I) equals voltage (E) minus resistance (R)

2018 Current (I) equals voltage (E) minus resistance (R)

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T5D02 *NO CHANGES* <-----

Question

2022 What formula is used to calculate voltage in a circuit?

2018 What formula is used to calculate voltage in a circuit?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Voltage (E) equals current (I) multiplied by resistance (R)

2018 Voltage (E) equals current (I) multiplied by resistance (R)

Choice B

2022 Voltage (E) equals current (I) divided by resistance (R)

2018 Voltage (E) equals current (I) divided by resistance (R)

Choice C

2022 Voltage (E) equals current (I) added to resistance (R)

2018 Voltage (E) equals current (I) added to resistance (R)

Choice D

2022 Voltage (E) equals current (I) minus resistance (R)

2018 Voltage (E) equals current (I) minus resistance (R)

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T5D03 *NO CHANGES* <-----

Question

2022 What formula is used to calculate resistance in a circuit?

2018 What formula is used to calculate resistance in a circuit?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Resistance (R) equals voltage (E) multiplied by current (I)

2018 Resistance (R) equals voltage (E) multiplied by current (I)

Choice B

2022 Resistance (R) equals voltage (E) divided by current (I)

2018 Resistance (R) equals voltage (E) divided by current (I)

Choice C

2022 Resistance (R) equals voltage (E) added to current (I)

2018 Resistance (R) equals voltage (E) added to current (I)

Choice D

2022 Resistance (R) equals voltage (E) minus current (I)

2018 Resistance (R) equals voltage (E) minus current (I)

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T5D04 *NO CHANGES* <-----

Question

2022 What is the resistance of a circuit in which a current of 3 amperes flows through a resistor connected to 90 volts?

2018 What is the resistance of a circuit in which a current of 3 amperes flows through a resistor connected to 90 volts?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 3 ohms

2018 3 ohms

Choice B

2022 30 ohms

2018 30 ohms

Choice C

2022 93 ohms

2018 93 ohms

Choice D

2022 270 ohms

2018 270 ohms

Rules

2022

2018

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

-----> *NO CHANGES* T5D05 *NO CHANGES* <-----

Question

2022 What is the resistance in a circuit for which the applied voltage is 12 volts and the current flow is 1.5 amperes?

2018 What is the resistance in a circuit for which the applied voltage is 12 volts and the current flow is 1.5 amperes?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 18 ohms

2018 18 ohms

Choice B

2022 0.125 ohms

2018 0.125 ohms

Choice C

2022 8 ohms

2018 8 ohms

Choice D

2022 13.5 ohms

2018 13.5 ohms

Rules

2022

2018

-----> *NO CHANGES* T5D06 *NO CHANGES* <-----

Question

2022 What is the resistance of a circuit that draws 4 amperes from a 12-volt source?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 What is the resistance of a circuit that draws 4 amperes from a 12-volt source?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 3 ohms

2018 3 ohms

Choice B

2022 16 ohms

2018 16 ohms

Choice C

2022 48 ohms

2018 48 ohms

Choice D

2022 8 Ohms

2018 8 Ohms

Rules

2022

2018

-----> *CHANGES* T5D07 *CHANGES* <-----

Question

2022 What is the current in a circuit with an applied voltage of 120 volts and a resistance of 80 ohms?

2018 What is the current flow in a circuit with an applied voltage of 120 volts and a resistance of 80 ohms?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 9600 amperes

2018 9600 amperes

Choice B

2022 200 amperes

2018 200 amperes

Choice C

2022 0.667 amperes

2018 0.667 amperes

Choice D

2022 1.5 amperes

2018 1.5 amperes

Rules

2022

2018

-----> *CHANGES* T5D08 *CHANGES* <-----

Question

2022 What is the current through a 100-ohm resistor connected across 200 volts?

2018 What is the current flowing through a 100-ohm resistor connected across 200 volts?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 20,000 amperes

2018 20,000 amperes

Choice B

2022 0.5 amperes

2018 0.5 amperes

Choice C

2022 2 amperes

2018 2 amperes

Choice D

2022 100 amperes

2018 100 amperes

Rules

2022

2018

-----> *CHANGES* T5D09 *CHANGES* <-----

Question

2022 What is the current through a 24-ohm resistor connected across 240 volts?

2018 What is the current flowing through a 24-ohm resistor connected across 240 volts?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 24,000 amperes

2018 24,000 amperes

Choice B

2022 0.1 amperes

2018 0.1 amperes

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 10 amperes

2018 10 amperes

Choice D

2022 216 amperes

2018 216 amperes

Rules

2022

2018

-----> *NO CHANGES* T5D10 *NO CHANGES* <-----

Question

2022 What is the voltage across a 2-ohm resistor if a current of 0.5 amperes flows through it?

2018 What is the voltage across a 2-ohm resistor if a current of 0.5 amperes flows through it?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 1 volt

2018 1 volt

Choice B

2022 0.25 volts

2018 0.25 volts

Choice C

2022 2.5 volts

2018 2.5 volts

Choice D

2022 1.5 volts

2018 1.5 volts

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T5D11 *NO CHANGES* <-----

Question

2022 What is the voltage across a 10-ohm resistor if a current of 1 ampere flows through it?

2018 What is the voltage across a 10-ohm resistor if a current of 1 ampere flows through it?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 1 volt

2018 1 volt

Choice B

2022 10 volts

2018 10 volts

Choice C

2022 11 volts

2018 11 volts

Choice D

2022 9 volts

2018 9 volts

Rules

2022

2018

-----> *NO CHANGES* T5D12 *NO CHANGES* <-----

Question

2022 What is the voltage across a 10-ohm resistor if

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

a current of 2 amperes flows through it?

2018 What is the voltage across a 10-ohm resistor if
a current of 2 amperes flows through it?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 8 volts

2018 8 volts

Choice B

2022 0.2 volts

2018 0.2 volts

Choice C

2022 12 volts

2018 12 volts

Choice D

2022 20 volts

2018 20 volts

Rules

2022

2018

-----> *NEW* T5D13 *NEW* <-----

Question

2022 What happens to current at the junction of two
components in series?

Answer

2022 B

Figure

2022

Choice A

2022 It divides equally between them

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 It is unchanged

Choice C

2022 It divides based on the on the value of the components

Choice D

2022 The current in the second component is zero

Rules

2022

-----> *NEW* T5D14 *NEW* <-----

Question

2022 What happens to current at the junction of two components in parallel?

Answer

2022 A

Figure

2022

Choice A

2022 It divides between them dependent on the value of the components

Choice B

2022 It is the same in both components

Choice C

2022 Its value doubles

Choice D

2022 Its value is halved

Rules

2022

-----> *NEW* T5D15 *NEW* <-----

Question

2022 What is the voltage across each of two components in series with a voltage source?

Answer

2022 C

Figure

2022

Choice A

2022 The same voltage as the source

Choice B

2022 Half the source voltage

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 It is determined by the type and value of the components

Choice D

2022 Twice the source voltage

Rules

2022

-----> *NEW* T5D16 *NEW* <-----

Question

2022 What is the voltage across each of two components in parallel with a voltage source?

Answer

2022 D

Figure

2022

Choice A

2022 It is determined by the type and value of the components

Choice B

2022 Half the source voltage

Choice C

2022 Twice the source voltage

Choice D

2022 The same voltage as the source

Rules

2022

-----> *CHANGES* T6A01 *CHANGES* <-----

Question

2022 What electrical component opposes the flow of current in a DC circuit?

2018 What electrical component is used to oppose the flow of current in a DC circuit?

Answer

2022 B

2018 B

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Inductor

2018 Inductor

Choice B

2022 Resistor

2018 Resistor

Choice C

2022 Voltmeter

2018 Voltmeter

Choice D

2022 Transformer

2018 Transformer

Rules

2022

2018

-----> *NO CHANGES* T6A02 *NO CHANGES* <-----

Question

2022 What type of component is often used as an adjustable volume control?

2018 What type of component is often used as an adjustable volume control?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Fixed resistor

2018 Fixed resistor

Choice B

2022 Power resistor

2018 Power resistor

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Potentiometer

2018 Potentiometer

Choice D

2022 Transformer

2018 Transformer

Rules

2022

2018

-----> *NO CHANGES* T6A03 *NO CHANGES* <-----

Question

2022 What electrical parameter is controlled by a potentiometer?

2018 What electrical parameter is controlled by a potentiometer?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Inductance

2018 Inductance

Choice B

2022 Resistance

2018 Resistance

Choice C

2022 Capacitance

2018 Capacitance

Choice D

2022 Field strength

2018 Field strength

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T6A04 *NO CHANGES* <-----

Question

2022 What electrical component stores energy in an electric field?

2018 What electrical component stores energy in an electric field?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Capacitor

2018 Capacitor

Choice C

2022 Inductor

2018 Inductor

Choice D

2022 Diode

2018 Diode

Rules

2022

2018

-----> *NO CHANGES* T6A05 *NO CHANGES* <-----

Question

2022 What type of electrical component consists of

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

two or more conductive surfaces separated by an insulator?

2018 What type of electrical component consists of two or more conductive surfaces separated by an insulator?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Potentiometer

2018 Potentiometer

Choice C

2022 Oscillator

2018 Oscillator

Choice D

2022 Capacitor

2018 Capacitor

Rules

2022

2018

-----> *NO CHANGES* T6A06 *NO CHANGES* <-----

Question

2022 What type of electrical component stores energy in a magnetic field?

2018 What type of electrical component stores energy in a magnetic field?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Capacitor

2018 Capacitor

Choice C

2022 Inductor

2018 Inductor

Choice D

2022 Diode

2018 Diode

Rules

2022

2018

-----> *CHANGES* T6A07 *CHANGES* <-----

Question

2022 What electrical component usually is
constructed as a coil of wire?

2018 What electrical component is usually composed
of a coil of wire?

Answer

2022 D

2018 D

Figure

2022

2018

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice A

2022 Switch

2018 Switch

Choice B

2022 Capacitor

2018 Capacitor

Choice C

2022 Diode

2018 Diode

Choice D

2022 Inductor

2018 Inductor

Rules

2022

2018

-----> *NO CHANGES* T6A08 *NO CHANGES* <-----

Question

2022 What electrical component is used to connect or disconnect electrical circuits?

2018 What electrical component is used to connect or disconnect electrical circuits?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Magnetron

2018 Magnetron

Choice B

2022 Switch

2018 Switch

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Thermistor

2018 Thermistor

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T6A09 *NO CHANGES* <-----

Question

2022 What electrical component is used to protect other circuit components from current overloads?

2018 What electrical component is used to protect other circuit components from current overloads?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Fuse

2018 Fuse

Choice B

2022 Capacitor

2018 Capacitor

Choice C

2022 Inductor

2018 Inductor

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Rules

2022

2018

-----> *NO CHANGES* T6A10 *NO CHANGES* <-----

Question

2022 Which of the following battery types is rechargeable?

2018 Which of the following battery types is rechargeable?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Nickel-metal hydride

2018 Nickel-metal hydride

Choice B

2022 Lithium-ion

2018 Lithium-ion

Choice C

2022 Lead-acid gel-cell

2018 Lead-acid gel-cell

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T6A11 *NO CHANGES* <-----

Question

2022 Which of the following battery types is not

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

rechargeable?

2018 Which of the following battery types is not rechargeable?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Nickel-cadmium

2018 Nickel-cadmium

Choice B

2022 Carbon-zinc

2018 Carbon-zinc

Choice C

2022 Lead-acid

2018 Lead-acid

Choice D

2022 Lithium-ion

2018 Lithium-ion

Rules

2022

2018

-----> *CHANGES* T6B01 *CHANGES* <-----

Question

2022 What class of electronic components uses a voltage or current signal to control current flow?

2018 What class of electronic components is capable of using a voltage or current signal to control current flow?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Capacitors

2018 Capacitors

Choice B

2022 Inductors

2018 Inductors

Choice C

2022 Resistors

2018 Resistors

Choice D

2022 Transistors

2018 Transistors

Rules

2022

2018

-----> *CHANGES* T6B02 *CHANGES* <-----

Question

2022 What electronic component allows current to flow in only one direction?

2018 What electronic component allows current to flow in only one direction?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Fuse

2018 Fuse

Choice C

2022 Diode

2018 Diode

Choice D

2022 Driven element

2018 Driven Element

Rules

2022

2018

-----> *NO CHANGES* T6B03 *NO CHANGES* <-----

Question

2022 Which of these components can be used as an electronic switch or amplifier?

2018 Which of these components can be used as an electronic switch or amplifier?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Oscillator

2018 Oscillator

Choice B

2022 Potentiometer

2018 Potentiometer

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Transistor

2018 Transistor

Choice D

2022 Voltmeter

2018 Voltmeter

Rules

2022

2018

-----> *CHANGES* T6B04 *CHANGES* <-----

Question

2022 Which of the following components can consist of three layers of semiconductor material?

2018 Which of the following components can be made of three layers of semiconductor material?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Alternator

2018 Alternator

Choice B

2022 Transistor

2018 Transistor

Choice C

2022 Triode

2018 Triode

Choice D

2022 Pentagrid converter

2018 Pentagrid converter

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T6B05 *NO CHANGES* <-----

Question

2022 Which of the following electronic components can amplify signals?

2018 Which of the following electronic components can amplify signals?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Transistor

2018 Transistor

Choice B

2022 Variable resistor

2018 Variable resistor

Choice C

2022 Electrolytic capacitor

2018 Electrolytic capacitor

Choice D

2022 Multi-cell battery

2018 Multi-cell battery

Rules

2022

2018

-----> *CHANGES* T6B06 *CHANGES* <-----

Question

2022 How is the cathode lead of a semiconductor

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

diode often marked on the package?

2018 How is the cathode lead of a semiconductor diode usually identified?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 With the word "cathode"

2018 With the word cathode

Choice B

2022 With a stripe

2018 With a stripe

Choice C

2022 With the letter C

2018 With the letter C

Choice D

2022 With the letter K

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T6B07 *NO CHANGES* <-----

Question

2022 What does the abbreviation LED stand for?

2018 What does the abbreviation LED stand for?

Answer

2022 B

2018 B

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Low Emission Diode

2018 Low Emission Diode

Choice B

2022 Light Emitting Diode

2018 Light Emitting Diode

Choice C

2022 Liquid Emission Detector

2018 Liquid Emission Detector

Choice D

2022 Long Echo Delay

2018 Long Echo Delay

Rules

2022

2018

-----> *CHANGES* T6B08 *CHANGES* <-----

Question

2022 What does the abbreviation FET stand for?

2018 What does the abbreviation FET stand for?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Field Effect Transistor

2018 Field Effect Transistor

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Fast Electron Transistor

2018 Fast Electron Transistor

Choice C

2022 Free Electron Transmitter

2018 Free Electron Transition

Choice D

2022 Frequency Emission Transmitter

2018 Field Emission Thickness

Rules

2022

2018

-----> *NO CHANGES* T6B09 *NO CHANGES* <-----

Question

2022 What are the names of the two electrodes of a diode?

2018 What are the names of the two electrodes of a diode?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Plus and minus

2018 Plus and minus

Choice B

2022 Source and drain

2018 Source and drain

Choice C

2022 Anode and cathode

2018 Anode and cathode

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Gate and base

2018 Gate and base

Rules

2022

2018

-----> *CHANGES* T6B10 *CHANGES* <-----

Question

2022 Which of the following could be the primary gain-producing component in an RF power amplifier?

2018 What are the three electrodes of a PNP or NPN transistor?

Answer

2022 B

2018 A

Figure

2022

2018

Choice A

2022 Transformer

2018 Emitter, base, and collector

Choice B

2022 Transistor

2018 Source, gate, and drain

Choice C

2022 Reactor

2018 Cathode, grid, and plate

Choice D

2022 Resistor

2018 Cathode, drift cavity, and collector

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T6B11 *CHANGES* <-----

Question

2022 What is the term that describes a device's ability to amplify a signal?

2018 What are the three electrodes of a field effect transistor?

Answer

2022 A

2018 B

Figure

2022

2018

Choice A

2022 Gain

2018 Emitter, base, and collector

Choice B

2022 Forward resistance

2018 Source, gate, and drain

Choice C

2022 Forward voltage drop

2018 Cathode, grid, and plate

Choice D

2022 On resistance

2018 Cathode, gate, and anode

Rules

2022

2018

-----> *CHANGES* T6C01 *CHANGES* <-----

Question

2022 What is the name of an electrical wiring diagram that uses standard component symbols?

2018 What is the name for standardized representations of components in an electrical wiring diagram?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Bill of materials

2018 Electrical depictions

Choice B

2022 Connector pinout

2018 Grey sketch

Choice C

2022 Schematic

2018 Schematic symbols

Choice D

2022 Flow chart

2018 Component callouts

Rules

2022

2018

-----> *NO CHANGES* T6C02 *NO CHANGES* <-----

Question

2022 What is component 1 in figure T1?

2018 What is component 1 in figure T1?

Answer

2022 A

2018 A

Figure

2022 T1

2018 T1

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Transistor

2018 Transistor

Choice C

2022 Battery

2018 Battery

Choice D

2022 Connector

2018 Connector

Rules

2022

2018

-----> *NO CHANGES* T6C03 *NO CHANGES* <-----

Question

2022 What is component 2 in figure T1?

2018 What is component 2 in figure T1?

Answer

2022 B

2018 B

Figure

2022 T1

2018 T1

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Transistor

2018 Transistor

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Indicator lamp

2018 Indicator lamp

Choice D

2022 Connector

2018 Connector

Rules

2022

2018

-----> *NO CHANGES* T6C04 *NO CHANGES* <-----

Question

2022 What is component 3 in figure T1?

2018 What is component 3 in figure T1?

Answer

2022 C

2018 C

Figure

2022 T1

2018 T1

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Transistor

2018 Transistor

Choice C

2022 Lamp

2018 Lamp

Choice D

2022 Ground symbol

2018 Ground symbol

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T6C05 *NO CHANGES* <-----

Question

2022 What is component 4 in figure T1?

2018 What is component 4 in figure T1?

Answer

2022 C

2018 C

Figure

2022 T1

2018 T1

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Transistor

2018 Transistor

Choice C

2022 Battery

2018 Battery

Choice D

2022 Ground symbol

2018 Ground symbol

Rules

2022

2018

-----> *NO CHANGES* T6C06 *NO CHANGES* <-----

Question

2022 What is component 6 in figure T2?

2018 What is component 6 in figure T2?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 B

Figure

2022 T2

2018 T2

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Capacitor

2018 Capacitor

Choice C

2022 Regulator IC

2018 Regulator IC

Choice D

2022 Transistor

2018 Transistor

Rules

2022

2018

-----> *NO CHANGES* T6C07 *NO CHANGES* <-----

Question

2022 What is component 8 in figure T2?

2018 What is component 8 in figure T2?

Answer

2022 D

2018 D

Figure

2022 T2

2018 T2

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Inductor

2018 Inductor

Choice C

2022 Regulator IC

2018 Regulator IC

Choice D

2022 Light emitting diode

2018 Light emitting diode

Rules

2022

2018

-----> ***NO CHANGES* T6C08 *NO CHANGES*** <-----

Question

2022 What is component 9 in figure T2?

2018 What is component 9 in figure T2?

Answer

2022 C

2018 C

Figure

2022 T2

2018 T2

Choice A

2022 Variable capacitor

2018 Variable capacitor

Choice B

2022 Variable inductor

2018 Variable inductor

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Variable resistor

2018 Variable resistor

Choice D

2022 Variable transformer

2018 Variable transformer

Rules

2022

2018

-----> ***NO CHANGES* T6C09 *NO CHANGES*** <-----

Question

2022 What is component 4 in figure T2?

2018 What is component 4 in figure T2?

Answer

2022 D

2018 D

Figure

2022 T2

2018 T2

Choice A

2022 Variable inductor

2018 Variable inductor

Choice B

2022 Double-pole switch

2018 Double-pole switch

Choice C

2022 Potentiometer

2018 Potentiometer

Choice D

2022 Transformer

2018 Transformer

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T6C10 *NO CHANGES* <-----

Question

2022 What is component 3 in figure T3?

2018 What is component 3 in figure T3?

Answer

2022 D

2018 D

Figure

2022 T3

2018 T3

Choice A

2022 Connector

2018 Connector

Choice B

2022 Meter

2018 Meter

Choice C

2022 Variable capacitor

2018 Variable capacitor

Choice D

2022 Variable inductor

2018 Variable inductor

Rules

2022

2018

-----> *NO CHANGES* T6C11 *NO CHANGES* <-----

Question

2022 What is component 4 in figure T3?

2018 What is component 4 in figure T3?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022 T3

2018 T3

Choice A

2022 Antenna

2018 Antenna

Choice B

2022 Transmitter

2018 Transmitter

Choice C

2022 Dummy load

2018 Dummy load

Choice D

2022 Ground

2018 Ground

Rules

2022

2018

-----> *CHANGES* T6C12 *CHANGES* <-----

Question

2022 What do the symbols on an electrical schematic represent?

2018 What do the symbols on an electrical circuit schematic diagram represent?

Answer

2022 A

2018 A

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Electrical components

2018 Electrical components

Choice B

2022 Logic states

2018 Logic states

Choice C

2022 Digital codes

2018 Digital codes

Choice D

2022 Traffic nodes

2018 Traffic nodes

Rules

2022

2018

-----> *CHANGES* T6C13 *CHANGES* <-----

Question

2022 Which of the following is accurately represented in electrical **schematics?**

2018 Which of the following is accurately represented in electrical **circuit schematic diagrams?**

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Wire lengths

2018 Wire lengths

Choice B

2022 Physical appearance of components

2018 Physical appearance of components

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 The way components are interconnected

2018 The way components are interconnected

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T6D01 *NO CHANGES* <-----

Question

2022 Which of the following devices or circuits changes an alternating current into a varying direct current signal?

2018 Which of the following devices or circuits changes an alternating current into a varying direct current signal?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Transformer

2018 Transformer

Choice B

2022 Rectifier

2018 Rectifier

Choice C

2022 Amplifier

2018 Amplifier

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Reflector

2018 Reflector

Rules

2022

2018

-----> *CHANGES* T6D02 *CHANGES* <-----

Question

2022 What is a relay?

2018 What best describes a relay?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 An electrically-controlled switch

2018 A switch controlled by an electromagnet

Choice B

2022 A current controlled amplifier

2018 A current controlled amplifier

Choice C

2022 An optical sensor

2018 An optical sensor

Choice D

2022 A pass transistor

2018 A pass transistor

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T6D03 *NO CHANGES* <-----

Question

2022 What type of switch is represented by component 3 in figure T2?

2018 What type of switch is represented by component 3 in figure T2?

Answer

2022 A

2018 A

Figure

2022 T2

2018 T2

Choice A

2022 Single-pole single-throw

2018 Single-pole single-throw

Choice B

2022 Single-pole double-throw

2018 Single-pole double-throw

Choice C

2022 Double-pole single-throw

2018 Double-pole single-throw

Choice D

2022 Double-pole double-throw

2018 Double-pole double-throw

Rules

2022

2018

-----> *CHANGES* T6D04 *CHANGES* <-----

Question

2022 Which of the following displays an electrical quantity as a numeric value?

2018 Which of the following can be used to display signal strength on a numeric scale?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Potentiometer

2018 Potentiometer

Choice B

2022 Transistor

2018 Transistor

Choice C

2022 Meter

2018 Meter

Choice D

2022 Relay

2018 Relay

Rules

2022

2018

-----> *NO CHANGES* T6D05 *NO CHANGES* <-----

Question

2022 What type of circuit controls the amount of voltage from a power supply?

2018 What type of circuit controls the amount of voltage from a power supply?

Answer

2022 A

2018 A

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Regulator

2018 Regulator

Choice B

2022 Oscillator

2018 Oscillator

Choice C

2022 Filter

2018 Filter

Choice D

2022 Phase inverter

2018 Phase inverter

Rules

2022

2018

-----> *NO CHANGES* T6D06 *NO CHANGES* <-----

Question

2022 What component is commonly used to change 120V AC house current to a lower AC voltage for other uses?

2018 What component is commonly used to change 120V AC house current to a lower AC voltage for other uses?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Variable capacitor

2018 Variable capacitor

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Transformer

2018 Transformer

Choice C

2022 Transistor

2018 Transistor

Choice D

2022 Diode

2018 Diode

Rules

2022

2018

-----> *NO CHANGES* T6D07 *NO CHANGES* <-----

Question

2022 Which of the following is commonly used as a visual indicator?

2018 Which of the following is commonly used as a visual indicator?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 LED

2018 LED

Choice B

2022 FET

2018 FET

Choice C

2022 Zener diode

2018 Zener diode

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Bipolar transistor

2018 Bipolar transistor

Rules

2022

2018

-----> *CHANGES* T6D08 *CHANGES* <-----

Question

2022 Which of the following is combined with an inductor to make a tuned circuit?

2018 Which of the following is used together with an inductor to make a tuned circuit?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Resistor

2018 Resistor

Choice B

2022 Zener diode

2018 Zener diode

Choice C

2022 Potentiometer

2018 Potentiometer

Choice D

2022 Capacitor

2018 Capacitor

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T6D09 *NO CHANGES* <-----

Question

2022 What is the name of a device that combines several semiconductors and other components into one package?

2018 What is the name of a device that combines several semiconductors and other components into one package?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Transducer

2018 Transducer

Choice B

2022 Multi-pole relay

2018 Multi-pole relay

Choice C

2022 Integrated circuit

2018 Integrated circuit

Choice D

2022 Transformer

2018 Transformer

Rules

2022

2018

-----> *NO CHANGES* T6D10 *NO CHANGES* <-----

Question

2022 What is the function of component 2 in Figure T1?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 What is the function of component 2 in Figure T1?

Answer

2022 C

2018 C

Figure

2022 T1

2018 T1

Choice A

2022 Give off light when current flows through it

2018 Give off light when current flows through it

Choice B

2022 Supply electrical energy

2018 Supply electrical energy

Choice C

2022 Control the flow of current

2018 Control the flow of current

Choice D

2022 Convert electrical energy into radio waves

2018 Convert electrical energy into radio waves

Rules

2022

2018

-----> *CHANGES* T6D11 *CHANGES* <-----

Question

2022 Which of the following is a resonant or tuned circuit?

2018 What is a simple resonant or tuned circuit?

Answer

2022 A

2018 A

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 An inductor and a capacitor connected in series or parallel to form a filter

2018 An inductor and a capacitor connected in series or parallel to form a filter

Choice B

2022 A type of voltage regulator

2018 A type of voltage regulator

Choice C

2022 A resistor circuit used for reducing standing wave ratio

2018 A resistor circuit used for reducing standing wave ratio

Choice D

2022 A circuit designed to provide high-fidelity audio

2018 A circuit designed to provide high fidelity audio

Rules

2022

2018

-----> *NO CHANGES* T6D12 *NO CHANGES* <-----

Question

2022 Which of the following is a common reason to use shielded wire?

2018 Which of the following is a common reason to use shielded wire?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 To decrease the resistance of DC power connections

2018 To decrease the resistance of DC power connections

Choice B

2022 To increase the current carrying capability of the wire

2018 To increase the current carrying capability of the wire

Choice C

2022 To prevent coupling of unwanted signals to or from the wire

2018 To prevent coupling of unwanted signals to or from the wire

Choice D

2022 To couple the wire to other signals

2018 To couple the wire to other signals

Rules

2022

2018

-----> *NO CHANGES* T7A01 *NO CHANGES* <-----

Question

2022 Which term describes the ability of a receiver to detect the presence of a signal?

2018 Which term describes the ability of a receiver to detect the presence of a signal?

Answer

2022 B

2018 B

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Linearity

2018 Linearity

Choice B

2022 Sensitivity

2018 Sensitivity

Choice C

2022 Selectivity

2018 Selectivity

Choice D

2022 Total Harmonic Distortion

2018 Total Harmonic Distortion

Rules

2022

2018

-----> *CHANGES* T7A02 *CHANGES* <-----

Question

2022 What is a transceiver?

2018 What is a transceiver?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 A type of antenna switch

2018 A type of antenna switch

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 A unit combining the functions of a transmitter and a receiver

2018 A unit combining the functions of a transmitter and a receiver

Choice C

2022 A component in a repeater that filters out unwanted interference

2018 A component in a repeater which filters out unwanted interference

Choice D

2022 A type of antenna matching network

2018 A type of antenna matching network

Rules

2022

2018

-----> *NO CHANGES* T7A03 *NO CHANGES* <-----

Question

2022 Which of the following is used to convert a radio signal from one frequency to another?

2018 Which of the following is used to convert a radio signal from one frequency to another?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Phase splitter

2018 Phase splitter

Choice B

2022 Mixer

2018 Mixer

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Inverter

2018 Inverter

Choice D

2022 Amplifier

2018 Amplifier

Rules

2022

2018

-----> *CHANGES* T7A04 *CHANGES* <-----

Question

2022 Which term describes the ability of a receiver to discriminate between multiple signals?

2018 Which term describes the ability of a receiver to discriminate between multiple signals?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Discrimination ratio

2018 Discrimination ratio

Choice B

2022 Sensitivity

2018 Sensitivity

Choice C

2022 Selectivity

2018 Selectivity

Choice D

2022 Harmonic distortion

2018 Harmonic Distortion

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T7A05 *CHANGES* <-----

Question

2022 What is the name of a circuit that generates a signal at a specific frequency?

2018 What is the name of a circuit that generates a signal of a desired frequency?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Reactance modulator

2018 Reactance modulator

Choice B

2022 Product detector

2018 Product detector

Choice C

2022 Low-pass filter

2018 Low-pass filter

Choice D

2022 Oscillator

2018 Oscillator

Rules

2022

2018

-----> *CHANGES* T7A06 *CHANGES* <-----

Question

2022 What device converts the RF input and output of

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

a transceiver to another band?

2018 What device takes the output of a low-powered 28 MHz SSB exciter and produces a 222 MHz output signal?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 High-pass filter

2018 High-pass filter

Choice B

2022 Low-pass filter

2018 Low-pass filter

Choice C

2022 Transverter

2018 Transverter

Choice D

2022 Phase converter

2018 Phase converter

Rules

2022

2018

-----> *CHANGES* T7A07 *CHANGES* <-----

Question

2022 What is meant by "PTT"?

2018 What is meant by term "PTT"?

Answer

2022 D

2018 D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Pre-transmission tuning to reduce transmitter harmonic emission

2018 Pre-transmission tuning to reduce transmitter harmonic emission

Choice B

2022 Precise tone transmissions used to limit repeater access to only certain signals

2018 Precise tone transmissions used to limit repeater access to only certain signals

Choice C

2022 A primary transformer tuner use to match antennas

2018 A primary transformer tuner use to match antennas

Choice D

2022 The push-to-talk function that switches between receive and transmit

2018 The push to talk function which switches between receive and transmit

Rules

2022

2018

-----> *CHANGES* T7A08 *CHANGES* <-----

Question

2022 Which of the following describes combining speech with an RF carrier signal?

2018 Which of the following describes combining speech with an RF carrier signal?-

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Impedance matching

2018 Impedance matching

Choice B

2022 Oscillation

2018 Oscillation

Choice C

2022 Modulation

2018 Modulation

Choice D

2022 Low-pass filtering

2018 Low-pass filtering

Rules

2022

2018

-----> *CHANGES* T7A09 *CHANGES* <-----

Question

2022 What is the function of the SSB/CW-FM switch on a VHF power amplifier?

2018 Which of the following devices is most useful for VHF weak-signal communication?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Change the mode of the transmitted signal

2018 A quarter-wave vertical antenna

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Set the amplifier for proper operation in the selected mode

2018 A multi-mode VHF transceiver

Choice C

2022 Change the frequency range of the amplifier to operate in the proper portion of the band

2018 An omni-directional antenna

Choice D

2022 Reduce the received signal noise

2018 A mobile VHF FM transceiver

Rules

2022

2018

-----> *NO CHANGES* T7A10 *NO CHANGES* <-----

Question

2022 What device increases the low-power output from a handheld transceiver?

2018 What device increases the low-power output from a handheld transceiver?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 A voltage divider

2018 A voltage divider

Choice B

2022 An RF power amplifier

2018 An RF power amplifier

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 An impedance network

2018 An impedance network

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> ***NO CHANGES* T7A11 *NO CHANGES*** <-----

Question

2022 Where is an RF preamplifier installed?

2018 Where is an RF preamplifier installed?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Between the antenna and receiver

2018 Between the antenna and receiver

Choice B

2022 At the output of the transmitter's power amplifier

2018 At the output of the transmitter's power amplifier

Choice C

2022 Between a transmitter and antenna tuner

2018 Between a transmitter and antenna tuner

Choice D

2022 At the receiver's audio output

2018 At the receiver's audio output

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T7B01 *NO CHANGES* <-----

Question

2022 What can you do if you are told your FM handheld or mobile transceiver is over-deviating?

2018 What can you do if you are told your FM handheld or mobile transceiver is over-deviating?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Talk louder into the microphone

2018 Talk louder into the microphone

Choice B

2022 Let the transceiver cool off

2018 Let the transceiver cool off

Choice C

2022 Change to a higher power level

2018 Change to a higher power level

Choice D

2022 Talk farther away from the microphone

2018 Talk farther away from the microphone

Rules

2022

2018

-----> *NO CHANGES* T7B02 *NO CHANGES* <-----

Question

2022 What would cause a broadcast AM or FM radio to

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

receive an amateur radio transmission
unintentionally?

2018 What would cause a broadcast AM or FM radio to
receive an amateur radio transmission
unintentionally?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The receiver is unable to reject strong signals
outside the AM or FM band

2018 The receiver is unable to reject strong signals
outside the AM or FM band

Choice B

2022 The microphone gain of the transmitter is turned
up too high

2018 The microphone gain of the transmitter is turned
up too high

Choice C

2022 The audio amplifier of the transmitter is
overloaded

2018 The audio amplifier of the transmitter is
overloaded

Choice D

2022 The deviation of an FM transmitter is set too
low

2018 The deviation of an FM transmitter is set too
low

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T7B03 *CHANGES* <-----

Question

2022 Which of the following can cause radio frequency interference?

2018 Which of the following may be a cause of radio frequency interference?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Fundamental overload

2018 Fundamental overload

Choice B

2022 Harmonics

2018 Harmonics

Choice C

2022 Spurious emissions

2018 Spurious emissions

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T7B04 *CHANGES* <-----

Question

2022 Which of the following is a way to reduce or eliminate interference from an amateur transmitter to a nearby telephone?

2018 Which of the following is a way to reduce or

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

eliminate interference by an amateur transmitter to a nearby telephone?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Put a filter on the amateur transmitter

2018 Put a filter on the amateur transmitter

Choice B

2022 Reduce the microphone gain

2018 Reduce the microphone gain

Choice C

2022 Reduce the SWR on the transmitter transmission line

2018 Reduce the SWR on the transmitter transmission line

Choice D

2022 Put an RF filter on the telephone

2018 Put a RF filter on the telephone

Rules

2022

2018

-----> *NO CHANGES* T7B05 *NO CHANGES* <-----

Question

2022 How can overload of a non-amateur radio or TV receiver by an amateur signal be reduced or eliminated?

2018 How can overload of a non-amateur radio or TV receiver by an amateur signal be reduced or eliminated?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Block the amateur signal with a filter at the antenna input of the affected receiver

2018 Block the amateur signal with a filter at the antenna input of the affected receiver

Choice B

2022 Block the interfering signal with a filter on the amateur transmitter

2018 Block the interfering signal with a filter on the amateur transmitter

Choice C

2022 Switch the transmitter from FM to SSB

2018 Switch the transmitter from FM to SSB

Choice D

2022 Switch the transmitter to a narrow-band mode

2018 Switch the transmitter to a narrow-band mode

Rules

2022

2018

-----> *NO CHANGES* T7B06 *NO CHANGES* <-----

Question

2022 Which of the following actions should you take if a neighbor tells you that your station's transmissions are interfering with their radio or TV reception?

2018 Which of the following actions should you take if a neighbor tells you that your station's transmissions are interfering with their radio or TV reception?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Make sure that your station is functioning properly and that it does not cause interference to your own radio or television when it is tuned to the same channel

2018 Make sure that your station is functioning properly and that it does not cause interference to your own radio or television when it is tuned to the same channel

Choice B

2022 Immediately turn off your transmitter and contact the nearest FCC office for assistance

2018 Immediately turn off your transmitter and contact the nearest FCC office for assistance

Choice C

2022 Tell them that your license gives you the right to transmit and nothing can be done to reduce the interference

2018 Tell them that your license gives you the right to transmit and nothing can be done to reduce the interference

Choice D

2022 Install a harmonic doubler on the output of your transmitter and tune it until the interference is eliminated

2018 Install a harmonic doubler on the output of your transmitter and tune it until the interference is eliminated

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T7B07 *CHANGES* <-----

Question

2022 Which of the following can reduce overload to a VHF transceiver from a nearby FM broadcast station?

2018 Which of the following may be useful in correcting a radio frequency interference problem?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 RF preamplifier

2018 Snap-on ferrite chokes

Choice B

2022 Double-shielded coaxial cable

2018 Low-pass and high-pass filters

Choice C

2022 Using headphones instead of the speaker

2018 Band-reject and band-pass filters

Choice D

2022 Band-reject filter

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T7B08 *CHANGES* <-----

Question

2022 What should you do if something in a neighbor's

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

home is causing harmful interference to your amateur station?

2018 What should you do if something in a neighbor's home is causing harmful interference to your amateur station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Work with your neighbor to identify the offending device

2018 Work with your neighbor to identify the offending device

Choice B

2022 Politely inform your neighbor about the rules that prohibit the use of devices that cause interference

2018 Politely inform your neighbor about the rules that prohibit the use of devices which cause interference

Choice C

2022 Check your station and make sure it meets the standards of good amateur practice

2018 Check your station and make sure it meets the standards of good amateur practice

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T7B09 *CHANGES* <-----

Question

2022 What is a Part 15 device?

2018 What is a Part 15 device?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 An unlicensed device that may emit low-powered radio signals on frequencies used by a licensed service

2018 An unlicensed device that may emit low powered radio signals on frequencies used by a licensed service

Choice B

2022 An amplifier that has been type-certified for amateur radio

2018 A type of amateur radio that can legally be used in the citizen's band

Choice C

2022 A device for long-distance communications using special codes sanctioned by the International Amateur Radio Union

2018 A device for long distance communications using special codes sanctioned by the International Amateur Radio Union

Choice D

2022 A type of test set used to determine whether a transmitter complies with FCC regulation 91.15

2018 A type of test set used to determine whether a transmitter is in compliance with FCC regulation 91.15

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T7B10 *CHANGES* <-----

Question

2022 What might be a problem if you receive a report that your audio signal through the repeater is distorted or unintelligible?

2018 What might be the problem if you receive a report that your audio signal through the repeater is distorted or unintelligible?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Your transmitter is slightly off frequency

2018 Your transmitter may be slightly off frequency

Choice B

2022 Your batteries are running low

2018 Your batteries may be running low

Choice C

2022 You are in a bad location

2018 You could be in a bad location

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T7B11 *CHANGES* <-----

Question

2022 What is a symptom of RF feedback in a transmitter or transceiver?

2018 What is a symptom of RF feedback in a transmitter or transceiver?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Excessive SWR at the antenna connection

2018 Excessive SWR at the antenna connection

Choice B

2022 The transmitter will not stay on the desired frequency

2018 The transmitter will not stay on the desired frequency

Choice C

2022 Reports of garbled, distorted, or unintelligible voice transmissions

2018 Reports of garbled, distorted, or unintelligible transmissions

Choice D

2022 Frequent blowing of power supply fuses

2018 Frequent blowing of power supply fuses

Rules

2022

2018

-----> *CHANGES* T7B12 *CHANGES* <-----

Question

2022 What should be the first step to resolve cable

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

TV interference from your ham radio transmission?
2018 What might be the first step to resolve cable
TV interference from your ham radio transmission?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Add a low-pass filter to the TV antenna input

2018 Add a low pass filter to the TV antenna input

Choice B

2022 Add a high-pass filter to the TV antenna input

2018 Add a high pass filter to the TV antenna input

Choice C

2022 Add a preamplifier to the TV antenna input

2018 Add a preamplifier to the TV antenna input

Choice D

2022 Be sure all TV coaxial connectors are installed
properly

2018 Be sure all TV coaxial connectors are installed
properly

Rules

2022

2018

-----> *CHANGES* T7C01 *CHANGES* <-----

Question

2022 What is the primary purpose of a dummy load?

2018 What is the primary purpose of a dummy load?

Answer

2022 A

2018 A

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 To prevent transmitting signals over the air when making tests

2018 To prevent the radiation of signals when making tests

Choice B

2022 To prevent over-modulation of a transmitter

2018 To prevent over-modulation of your transmitter

Choice C

2022 To improve the efficiency of an antenna

2018 To improve the radiation from your antenna

Choice D

2022 To improve the signal-to-noise ratio of a receiver

2018 To improve the signal to noise ratio of your receiver

Rules

2022

2018

-----> *NO CHANGES* T7C02 *NO CHANGES* <-----

Question

2022 Which of the following instruments can be used to determine if an antenna is resonant at the desired operating frequency?

2018 Which of the following instruments can be used to determine if an antenna is resonant at the desired operating frequency?

Answer

2022 B

2018 B

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 A VTVM

2018 A VTVM

Choice B

2022 An antenna analyzer

2018 An antenna analyzer

Choice C

2022 A Q meter

2018 A Q meter

Choice D

2022 A frequency counter

2018 A frequency counter

Rules

2022

2018

-----> *NO CHANGES* T7C03 *NO CHANGES* <-----

Question

2022 What, in general terms, is standing wave ratio (SWR)?

2018 What, in general terms, is standing wave ratio (SWR)?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 A measure of how well a load is matched to a transmission line

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 A measure of how well a load is matched to a transmission line

Choice B

2022 The ratio of high to low impedance in a feed line

2018 The ratio of high to low impedance in a feed line

Choice C

2022 The transmitter efficiency ratio

2018 The transmitter efficiency ratio

Choice D

2022 An indication of the quality of your station's ground connection

2018 An indication of the quality of your station's ground connection

Rules

2022

2018

-----> *NO CHANGES* T7C04 *NO CHANGES* <-----

Question

2022 What reading on an SWR meter indicates a perfect impedance match between the antenna and the feed line?

2018 What reading on an SWR meter indicates a perfect impedance match between the antenna and the feed line?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 2 to 1

2018 2 to 1

Choice B

2022 1 to 3

2018 1 to 3

Choice C

2022 1 to 1

2018 1 to 1

Choice D

2022 10 to 1

2018 10 to 1

Rules

2022

2018

-----> *CHANGES* T7C05 *CHANGES* <-----

Question

2022 Why do most solid-state amateur radio transmitters reduce output power as SWR increases?

2018 What is the approximate SWR value above which the protection circuits in most solid-state transmitters begin to reduce transmitter power?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 To protect the output amplifier transistors

2018 2 to 1

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 To comply with FCC rules on spectral purity
2018 1 to 2

Choice C

2022 Because power supplies cannot supply enough
current at high SWR
2018 6 to 1

Choice D

2022 To improve the impedance match to the feed line
2018 10 to 1

Rules

2022
2018

-----> *CHANGES* T7C06 *CHANGES* <-----

Question

2022 What does an SWR reading of 4:1 indicate?
2018 What does an SWR reading of 4:1 indicate?

Answer

2022 D
2018 D

Figure

2022
2018

Choice A

2022 Loss of -4 dB
2018 Loss of -4dB

Choice B

2022 Good impedance match
2018 Good impedance match

Choice C

2022 Gain of +4 dB
2018 Gain of +4dB

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Impedance mismatch

2018 Impedance mismatch

Rules

2022

2018

-----> *NO CHANGES* T7C07 *NO CHANGES* <-----

Question

2022 What happens to power lost in a feed line?

2018 What happens to power lost in a feed line?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 It increases the SWR

2018 It increases the SWR

Choice B

2022 It comes back into your transmitter and could cause damage

2018 It comes back into your transmitter and could cause damage

Choice C

2022 It is converted into heat

2018 It is converted into heat

Choice D

2022 It can cause distortion of your signal

2018 It can cause distortion of your signal

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T7C08 *NO CHANGES* <-----

Question

2022 What instrument other than an SWR meter could you use to determine if a feed line and antenna are properly matched?

2018 What instrument other than an SWR meter could you use to determine if a feed line and antenna are properly matched?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Voltmeter

2018 Voltmeter

Choice B

2022 Ohmmeter

2018 Ohmmeter

Choice C

2022 Iambic pentameter

2018 Iambic pentameter

Choice D

2022 Directional wattmeter

2018 Directional wattmeter

Rules

2022

2018

-----> *NO CHANGES* T7C09 *NO CHANGES* <-----

Question

2022 Which of the following is the most common cause for failure of coaxial cables?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Which of the following is the most common cause for failure of coaxial cables?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Moisture contamination

2018 Moisture contamination

Choice B

2022 Gamma rays

2018 Gamma rays

Choice C

2022 The velocity factor exceeds 1.0

2018 The velocity factor exceeds 1.0

Choice D

2022 Overloading

2018 Overloading

Rules

2022

2018

-----> *CHANGES* T7C10 *CHANGES* <-----

Question

2022 Why should the outer jacket of coaxial cable be resistant to ultraviolet light?

2018 Why should the outer jacket of coaxial cable be resistant to ultraviolet light?

Answer

2022 D

2018 D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Ultraviolet resistant jackets prevent harmonic radiation

2018 Ultraviolet resistant jackets prevent harmonic radiation

Choice B

2022 Ultraviolet light can increase losses in the cable's jacket

2018 Ultraviolet light can increase losses in the cable's jacket

Choice C

2022 Ultraviolet and RF signals can mix, causing interference

2018 Ultraviolet and RF signals can mix together, causing interference

Choice D

2022 Ultraviolet light can damage the jacket and allow water to enter the cable

2018 Ultraviolet light can damage the jacket and allow water to enter the cable

Rules

2022

2018

-----> *NO CHANGES* T7C11 *NO CHANGES* <-----

Question

2022 What is a disadvantage of air core coaxial cable when compared to foam or solid dielectric types?

2018 What is a disadvantage of air core coaxial cable when compared to foam or solid dielectric types?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 It has more loss per foot

2018 It has more loss per foot

Choice B

2022 It cannot be used for VHF or UHF antennas

2018 It cannot be used for VHF or UHF antennas

Choice C

2022 It requires special techniques to prevent water absorption

2018 It requires special techniques to prevent water absorption

Choice D

2022 It cannot be used at below freezing temperatures

2018 It cannot be used at below freezing temperatures

Rules

2022

2018

-----> *CHANGES* T7C12 *CHANGES* <-----

Question

2022 What does a dummy load consist of?

2018 Which of the following is a common use of coaxial cable?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 A high-gain amplifier and a TR switch

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Carrying dc power from a vehicle battery to a mobile radio

Choice B

2022 A non-inductive resistor and a heat sink

2018 Carrying RF signals between a radio and antenna

Choice C

2022 A low-voltage power supply and a DC relay

2018 Securing masts, tubing, and other cylindrical objects on towers

Choice D

2022 A 50 ohm reactance used to terminate a transmission line

2018 Connecting data signals from a TNC to a computer

Rules

2022

2018

-----> *NO CHANGES* T7D01 *NO CHANGES* <-----

Question

2022 Which instrument would you use to measure electric potential or electromotive force?

2018 Which instrument would you use to measure electric potential or electromotive force?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 An ammeter

2018 An ammeter

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 A voltmeter

2018 A voltmeter

Choice C

2022 A wavemeter

2018 A wavemeter

Choice D

2022 An ohmmeter

2018 An ohmmeter

Rules

2022

2018

-----> *NO CHANGES* T7D02 *NO CHANGES* <-----

Question

2022 What is the correct way to connect a voltmeter to a circuit?

2018 What is the correct way to connect a voltmeter to a circuit?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 In series with the circuit

2018 In series with the circuit

Choice B

2022 In parallel with the circuit

2018 In parallel with the circuit

Choice C

2022 In quadrature with the circuit

2018 In quadrature with the circuit

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 In phase with the circuit

2018 In phase with the circuit

Rules

2022

2018

-----> *CHANGES* T7D03 *CHANGES* <-----

Question

2022 How is a simple ammeter connected to a circuit?

2018 How is an ammeter usually connected to a circuit?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 In series with the circuit

2018 In series with the circuit

Choice B

2022 In parallel with the circuit

2018 In parallel with the circuit

Choice C

2022 In quadrature with the circuit

2018 In quadrature with the circuit

Choice D

2022 In phase with the circuit

2018 In phase with the circuit

Rules

2022

2018

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

-----> *NO CHANGES* T7D04 *NO CHANGES* <-----

Question

2022 Which instrument is used to measure electric current?

2018 Which instrument is used to measure electric current?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 An ohmmeter

2018 An ohmmeter

Choice B

2022 A wavemeter

2018 A wavemeter

Choice C

2022 A voltmeter

2018 A voltmeter

Choice D

2022 An ammeter

2018 An ammeter

Rules

2022

2018

-----> *NO CHANGES* T7D05 *NO CHANGES* <-----

Question

2022 What instrument is used to measure resistance?

2018 What instrument is used to measure resistance?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 An oscilloscope

2018 An oscilloscope

Choice B

2022 A spectrum analyzer

2018 A spectrum analyzer

Choice C

2022 A noise bridge

2018 A noise bridge

Choice D

2022 An ohmmeter

2018 An ohmmeter

Rules

2022

2018

-----> *NO CHANGES* T7D06 *NO CHANGES* <-----

Question

2022 Which of the following might damage a multimeter?

2018 Which of the following might damage a multimeter?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 Measuring a voltage too small for the chosen scale

2018 Measuring a voltage too small for the chosen scale

Choice B

2022 Leaving the meter in the milliamps position overnight

2018 Leaving the meter in the milliamps position overnight

Choice C

2022 Attempting to measure voltage when using the resistance setting

2018 Attempting to measure voltage when using the resistance setting

Choice D

2022 Not allowing it to warm up properly

2018 Not allowing it to warm up properly

Rules

2022

2018

-----> ***NO CHANGES* T7D07 *NO CHANGES*** <-----

Question

2022 Which of the following measurements are commonly made using a multimeter?

2018 Which of the following measurements are commonly made using a multimeter?

Answer

2022 D

2018 D

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 SWR and RF power

2018 SWR and RF power

Choice B

2022 Signal strength and noise

2018 Signal strength and noise

Choice C

2022 Impedance and reactance

2018 Impedance and reactance

Choice D

2022 Voltage and resistance

2018 Voltage and resistance

Rules

2022

2018

-----> *NO CHANGES* T7D08 *NO CHANGES* <-----

Question

2022 Which of the following types of solder is best for radio and electronic use?

2018 Which of the following types of solder is best for radio and electronic use?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Acid-core solder

2018 Acid-core solder

Choice B

2022 Silver solder

2018 Silver solder

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Rosin-core solder

2018 Rosin-core solder

Choice D

2022 Aluminum solder

2018 Aluminum solder

Rules

2022

2018

-----> *NO CHANGES* T7D09 *NO CHANGES* <-----

Question

2022 What is the characteristic appearance of a cold solder joint?

2018 What is the characteristic appearance of a cold solder joint?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Dark black spots

2018 Dark black spots

Choice B

2022 A bright or shiny surface

2018 A bright or shiny surface

Choice C

2022 A grainy or dull surface

2018 A grainy or dull surface

Choice D

2022 A greenish tint

2018 A greenish tint

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T7D10 *NO CHANGES* <-----

Question

2022 What is probably happening when an ohmmeter, connected across an unpowered circuit, initially indicates a low resistance and then shows increasing resistance with time?

2018 What is probably happening when an ohmmeter, connected across an unpowered circuit, initially indicates a low resistance and then shows increasing resistance with time?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The ohmmeter is defective

2018 The ohmmeter is defective

Choice B

2022 The circuit contains a large capacitor

2018 The circuit contains a large capacitor

Choice C

2022 The circuit contains a large inductor

2018 The circuit contains a large inductor

Choice D

2022 The circuit is a relaxation oscillator

2018 The circuit is a relaxation oscillator

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T7D11 *NO CHANGES* <-----

Question

2022 Which of the following precautions should be taken when measuring circuit resistance with an ohmmeter?

2018 Which of the following precautions should be taken when measuring circuit resistance with an ohmmeter?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Ensure that the applied voltages are correct

2018 Ensure that the applied voltages are correct

Choice B

2022 Ensure that the circuit is not powered

2018 Ensure that the circuit is not powered

Choice C

2022 Ensure that the circuit is grounded

2018 Ensure that the circuit is grounded

Choice D

2022 Ensure that the circuit is operating at the correct frequency

2018 Ensure that the circuit is operating at the correct frequency

Rules

2022

2018

-----> *NO CHANGES* T7D12 *NO CHANGES* <-----

Question

2022 Which of the following precautions should be

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

taken when measuring high voltages with a voltmeter?
2018 Which of the following precautions should be
taken when measuring high voltages with a voltmeter?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Ensure that the voltmeter has very low impedance

2018 Ensure that the voltmeter has very low impedance

Choice B

2022 Ensure that the voltmeter and leads are rated
for use at the voltages to be measured

2018 Ensure that the voltmeter and leads are rated
for use at the voltages to be measured

Choice C

2022 Ensure that the circuit is grounded through the
voltmeter

2018 Ensure that the circuit is grounded through the
voltmeter

Choice D

2022 Ensure that the voltmeter is set to the correct
frequency

2018 Ensure that the voltmeter is set to the correct
frequency

Rules

2022

2018

-----> *CHANGES* T8A01 *CHANGES* <-----

Question

2022 Which of the following is a form of amplitude
modulation?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Which of the following is a form of amplitude modulation?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Spread spectrum

2018 Spread-spectrum

Choice B

2022 Packet radio

2018 Packet radio

Choice C

2022 Single sideband

2018 Single sideband

Choice D

2022 Phase shift keying (PSK)

2018 Phase shift keying

Rules

2022

2018

-----> *CHANGES* T8A02 *CHANGES* <-----

Question

2022 What type of modulation is most commonly used for VHF packet radio transmissions?

2018 What type of modulation is most commonly used for VHF packet radio transmissions?

Answer

2022 A

2018 A

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 FM

2018 FM

Choice B

2022 SSB

2018 SSB

Choice C

2022 AM

2018 AM

Choice D

2022 PSK

2018 Spread Spectrum

Rules

2022

2018

-----> *NO CHANGES* T8A03 *NO CHANGES* <-----

Question

2022 Which type of voice mode is most often used for long-distance (weak signal) contacts on the VHF and UHF bands?

2018 Which type of voice mode is most often used for long-distance (weak signal) contacts on the VHF and UHF bands?

Answer

2022 C

2018 C

Figure

2022

2018

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

Choice A

2022 FM

2018 FM

Choice B

2022 DRM

2018 DRM

Choice C

2022 SSB

2018 SSB

Choice D

2022 PM

2018 PM

Rules

2022

2018

-----> ***NO CHANGES* T8A04 *NO CHANGES*** <-----

Question

2022 Which type of modulation is most commonly used for VHF and UHF voice repeaters?

2018 Which type of modulation is most commonly used for VHF and UHF voice repeaters?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 AM

2018 AM

Choice B

2022 SSB

2018 SSB

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 PSK

2018 PSK

Choice D

2022 FM

2018 FM

Rules

2022

2018

-----> *NO CHANGES* T8A05 *NO CHANGES* <-----

Question

2022 Which of the following types of emission has the narrowest bandwidth?

2018 Which of the following types of emission has the narrowest bandwidth?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 FM voice

2018 FM voice

Choice B

2022 SSB voice

2018 SSB voice

Choice C

2022 CW

2018 CW

Choice D

2022 Slow-scan TV

2018 Slow-scan TV

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T8A06 *CHANGES* <-----

Question

2022 Which sideband is normally used for 10 meter HF, VHF, and UHF single-sideband communications?

2018 Which sideband is normally used for 10 meter HF, VHF and UHF single-sideband communications?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Upper sideband

2018 Upper sideband

Choice B

2022 Lower sideband

2018 Lower sideband

Choice C

2022 Suppressed sideband

2018 Suppressed sideband

Choice D

2022 Inverted sideband

2018 Inverted sideband

Rules

2022

2018

-----> *CHANGES* T8A07 *CHANGES* <-----

Question

2022 What is an advantage of single sideband (SSB)

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

over FM for voice transmissions?

2018 What is the primary advantage of single sideband over FM for voice transmissions?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 SSB signals are easier to tune

2018 SSB signals are easier to tune

Choice B

2022 SSB signals are less susceptible to interference

2018 SSB signals are less susceptible to interference

Choice C

2022 SSB signals have narrower bandwidth

2018 SSB signals have narrower bandwidth

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T8A08 *CHANGES* <-----

Question

2022 What is the approximate bandwidth of a single sideband (SSB) voice signal?

2018 What is the approximate bandwidth of a single sideband voice signal?

Answer

2022 B

2018 B

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 1 kHz

2018 1 kHz

Choice B

2022 3 kHz

2018 3 kHz

Choice C

2022 6 kHz

2018 6 kHz

Choice D

2022 15 kHz

2018 15 kHz

Rules

2022

2018

-----> *NO CHANGES* T8A09 *NO CHANGES* <-----

Question

2022 What is the approximate bandwidth of a VHF
repeater FM phone signal?

2018 What is the approximate bandwidth of a VHF
repeater FM phone signal?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Less than 500 Hz

2018 Less than 500 Hz

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 About 150 kHz

2018 About 150 kHz

Choice C

2022 Between 10 and 15 kHz

2018 Between 10 and 15 kHz

Choice D

2022 Between 50 and 125 kHz

2018 Between 50 and 125 kHz

Rules

2022

2018

-----> *CHANGES* T8A10 *CHANGES* <-----

Question

2022 What is the typical bandwidth of analog fast-scan TV transmissions on the 70 centimeter band?

2018 What is the typical bandwidth of analog fast-scan TV transmissions on the 70 cm band?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 More than 10 MHz

2018 More than 10 MHz

Choice B

2022 About 6 MHz

2018 About 6 MHz

Choice C

2022 About 3 MHz

2018 About 3 MHz

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 About 1 MHz

2018 About 1 MHz

Rules

2022

2018

-----> *NO CHANGES* T8A11 *NO CHANGES* <-----

Question

2022 What is the approximate maximum bandwidth required to transmit a CW signal?

2018 What is the approximate maximum bandwidth required to transmit a CW signal?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 2.4 kHz

2018 2.4 kHz

Choice B

2022 150 Hz

2018 150 Hz

Choice C

2022 1000 Hz

2018 1000 Hz

Choice D

2022 15 kHz

2018 15 kHz

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T8B01 *CHANGES* <-----

Question

2022 What telemetry information is typically transmitted by satellite beacons?

2018 Who may be the control operator of a station communicating through an amateur satellite or space station?

Answer

2022 C

2018 D

Figure

2022

2018

Choice A

2022 The signal strength of received signals

2018 Only an Amateur Extra Class operator

Choice B

2022 Time of day accurate to plus or minus 1/10 second

2018 A General Class licensee or higher licensee who has a satellite operator certification

Choice C

2022 Health and status of the satellite

2018 Only an Amateur Extra Class operator who is also an AMSAT member

Choice D

2022 All of these choices are correct

2018 Any amateur whose license privileges allow them to transmit on the satellite uplink frequency

Rules

2022

2018 [97.301, 97.207(c)]

-----> *CHANGES* T8B02 *CHANGES* <-----

Question

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2022 What is the impact of using too much effective radiated power on a satellite uplink?

2018 How much transmitter power should be used on the uplink frequency of an amateur satellite or space station?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Possibility of commanding the satellite to an improper mode

2018 The maximum power of your transmitter

Choice B

2022 Blocking access by other users

2018 The minimum amount of power needed to complete the contact

Choice C

2022 Overloading the satellite batteries

2018 No more than half the rating of your linear amplifier

Choice D

2022 Possibility of rebooting the satellite control computer

2018 Never more than 1 watt

Rules

2022

2018 [97.313]

-----> *CHANGES* T8B03 *CHANGES* <-----

Question

2022 Which of the following are provided by satellite tracking programs?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Which of the following are provided by satellite tracking programs?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Maps showing the real-time position of the satellite track over the earth

2018 Maps showing the real-time position of the satellite track over the earth

Choice B

2022 The time, azimuth, and elevation of the start, maximum altitude, and end of a pass

2018 The time, azimuth, and elevation of the start, maximum altitude, and end of a pass

Choice C

2022 The apparent frequency of the satellite transmission, including effects of Doppler shift

2018 The apparent frequency of the satellite transmission, including effects of Doppler shift

Choice D

2022 All of these choices are correct

2018 All of these answers are correct

Rules

2022

2018

-----> *CHANGES* T8B04 *CHANGES* <-----

Question

2022 What mode of transmission is used for satellite beacons?

2018 Which amateur stations may make contact with an

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

amateur station on the International Space Station
using 2 meter and 70 cm band amateur radio
frequencies?

Answer

2022 D

2018 B

Figure

2022

2018

Choice A

2022 RTTY

2018 Only members of amateur radio clubs at NASA
facilities

Choice B

2022 CW

2018 Any amateur holding a Technician or higher
class license

Choice C

2022 Packet

2018 Only the astronaut's family members who are
hams

Choice D

2022 All of these choices are correct

2018 You cannot talk to the ISS on amateur radio
frequencies

Rules

2022

2018 [97.301, 97.207(c)]

-----> *CHANGES* T8B05 *CHANGES* <-----

Question

2022 What is a satellite beacon?

2018 What is a satellite beacon?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The primary transmit antenna on the satellite

2018 The primary transmit antenna on the satellite

Choice B

2022 An indicator light that shows where to point your antenna

2018 An indicator light that that shows where to point your antenna

Choice C

2022 A reflective surface on the satellite

2018 A reflective surface on the satellite

Choice D

2022 A transmission from a satellite that contains status information

2018 A transmission from a space station that contains information about a satellite

Rules

2022

2018

-----> *CHANGES* T8B06 *CHANGES* <-----

Question

2022 Which of the following are inputs to a satellite tracking program?

2018 Which of the following are inputs to a satellite tracking program?

Answer

2022 B

2018 B

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 The weight of the satellite

2018 The weight of the satellite

Choice B

2022 The Keplerian elements

2018 The Keplerian elements

Choice C

2022 The last observed time of zero Doppler shift

2018 The last observed time of zero Doppler shift

Choice D

2022 All of these choices are correct

2018 All of these answers are correct

Rules

2022

2018

-----> *NO CHANGES* T8B07 *NO CHANGES* <-----

Question

2022 With regard to satellite communications, what is Doppler shift?

2018 With regard to satellite communications, what is Doppler shift?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 A change in the satellite orbit

2018 A change in the satellite orbit

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 A mode where the satellite receives signals on one band and transmits on another

2018 A mode where the satellite receives signals on one band and transmits on another

Choice C

2022 An observed change in signal frequency caused by relative motion between the satellite and the earth station

2018 An observed change in signal frequency caused by relative motion between the satellite and the earth station

Choice D

2022 A special digital communications mode for some satellites

2018 A special digital communications mode for some satellites

Rules

2022

2018

-----> *CHANGES* T8B08 *CHANGES* <-----

Question

2022 What is meant by the statement that a satellite is operating in mode U/V?

2018 What is meant by the statement that a satellite is operating in mode U/V?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The satellite uplink is in the 15 meter band and the downlink is in the 10 meter band

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The satellite uplink is in the 15 meter band and the downlink is in the 10 meter band

Choice B

2022 The satellite uplink is in the 70 centimeter band and the downlink is in the 2 meter band

2018 The satellite uplink is in the 70 cm band and the downlink is in the 2 meter band

Choice C

2022 The satellite operates using ultraviolet frequencies

2018 The satellite operates using ultraviolet frequencies

Choice D

2022 The satellite frequencies are usually variable

2018 The satellite frequencies are usually variable

Rules

2022

2018

-----> *CHANGES* T8B09 *CHANGES* <-----

Question

2022 What causes spin fading of satellite signals?

2018 What causes spin fading when referring to satellite signals?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Circular polarized noise interference radiated from the sun

2018 Circular polarized noise interference radiated from the sun

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Rotation of the satellite and its antennas

2018 Rotation of the satellite and its antennas

Choice C

2022 Doppler shift of the received signal

2018 Doppler shift of the received signal

Choice D

2022 Interfering signals within the satellite uplink band

2018 Interfering signals within the satellite uplink band

Rules

2022

2018

-----> ***NO CHANGES* T8B10 *NO CHANGES*** <-----

Question

2022 What do the initials LEO tell you about an amateur satellite?

2018 What do the initials LEO tell you about an amateur satellite?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The satellite battery is in Low Energy Operation mode

2018 The satellite battery is in Low Energy Operation mode

Choice B

2022 The satellite is performing a Lunar Ejection Orbit maneuver

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The satellite is performing a Lunar Ejection Orbit maneuver

Choice C

2022 The satellite is in a Low Earth Orbit

2018 The satellite is in a Low Earth Orbit

Choice D

2022 The satellite uses Light Emitting Optics

2018 The satellite uses Light Emitting Optics

Rules

2022

2018

-----> *CHANGES* T8B11 *CHANGES* <-----

Question

2022 Who may receive telemetry from a space station?

2018 What is a commonly used method of sending signals to and from a digital satellite?

Answer

2022 A

2018 C

Figure

2022

2018

Choice A

2022 Anyone who can receive the telemetry signal

2018 USB AFSK

Choice B

2022 A licensed radio amateur with a transmitter equipped for interrogating the satellite

2018 PSK31

Choice C

2022 A licensed radio amateur who has been certified by the protocol developer

2018 FM Packet

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 A licensed radio amateur who has registered for an access code from AMSAT

2018 WSJT

Rules

2022

2018

-----> *NEW* T8B12 *NEW* <-----

Question

2022 Which of the following is a good way to judge whether your uplink power is neither too low nor too high?

Answer

2022 C

Figure

2022

Choice A

2022 Check your signal strength report in the telemetry data

Choice B

2022 Listen for distortion on your downlink signal

Choice C

2022 Your signal strength on the downlink should be about the same as the beacon

Choice D

2022 All of these choices are correct

Rules

2022

-----> *NO CHANGES* T8C01 *NO CHANGES* <-----

Question

2022 Which of the following methods is used to locate sources of noise interference or jamming?

2018 Which of the following methods is used to locate sources of noise interference or jamming?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Echolocation

2018 Echolocation

Choice B

2022 Doppler radar

2018 Doppler radar

Choice C

2022 Radio direction finding

2018 Radio direction finding

Choice D

2022 Phase locking

2018 Phase locking

Rules

2022

2018

-----> *NO CHANGES* T8C02 *NO CHANGES* <-----

Question

2022 Which of these items would be useful for a hidden transmitter hunt?

2018 Which of these items would be useful for a hidden transmitter hunt?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Calibrated SWR meter

2018 Calibrated SWR meter

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 A directional antenna

2018 A directional antenna

Choice C

2022 A calibrated noise bridge

2018 A calibrated noise bridge

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T8C03 *CHANGES* <-----

Question

2022 What operating activity involves contacting as many stations as possible during a specified period?

2018 What popular operating activity involves contacting as many stations as possible during a specified period of time?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Contesting

2018 Contesting

Choice B

2022 Net operations

2018 Net operations

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Public service events

2018 Public service events

Choice D

2022 Simulated emergency exercises

2018 Simulated emergency exercises

Rules

2022

2018

-----> *CHANGES* T8C04 *CHANGES* <-----

Question

2022 Which of the following is good procedure when contacting another station in a radio contest?

2018 Which of the following is good procedure when contacting another station in a radio contest?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Sign only the last two letters of your call if there are many other stations calling

2018 Be sure to sign only the last two letters of your call if there is a pileup calling the station

Choice B

2022 Contact the station twice to be sure that you are in his log

2018 Work the station twice to be sure that you are in his log

Choice C

2022 Send only the minimum information needed for proper identification and the contest exchange

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Send only the minimum information needed for proper identification and the contest exchange

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T8C05 *NO CHANGES* <-----

Question

2022 What is a grid locator?

2018 What is a grid locator?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 A letter-number designator assigned to a geographic location

2018 A letter-number designator assigned to a geographic location

Choice B

2022 A letter-number designator assigned to an azimuth and elevation

2018 A letter-number designator assigned to an azimuth and elevation

Choice C

2022 An instrument for neutralizing a final amplifier

2018 An instrument for neutralizing a final amplifier

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 An instrument for radio direction finding

2018 An instrument for radio direction finding

Rules

2022

2018

-----> *CHANGES* T8C06 *CHANGES* <-----

Question

2022 How is access to some IRLP nodes accomplished?

2018 How is access to an IRLP node accomplished?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 By obtaining a password that is sent via voice to the node

2018 By obtaining a password which is sent via voice to the node

Choice B

2022 By using DTMF signals

2018 By using DTMF signals

Choice C

2022 By entering the proper internet password

2018 By entering the proper Internet password

Choice D

2022 By using CTCSS tone codes

2018 By using CTCSS tone codes

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T8C07 *CHANGES* <-----

Question

2022 What is meant by Voice Over Internet Protocol (VoIP) as used in amateur radio?

2018 What is the maximum power allowed when transmitting telecommand signals to radio controlled models?

Answer

2022 D

2018 B

Figure

2022

2018

Choice A

2022 A set of rules specifying how to identify your station when linked over the internet to another station

2018 500 milliwatts

Choice B

2022 A set of guidelines for contacting DX stations during contests using internet access

2018 1 watt

Choice C

2022 A technique for measuring the modulation quality of a transmitter using remote sites monitored via the internet

2018 25 watts

Choice D

2022 A method of delivering voice communications over the internet using digital techniques

2018 1500 watts

Rules

2022

2018 [97.215 (c)]

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T8C08 *CHANGES* <-----

Question

2022 What is the Internet Radio Linking Project (IRLP)?

2018 What is required in place of on-air station identification when sending signals to a radio control model using amateur frequencies?

Answer

2022 A

2018 C

Figure

2022

2018

Choice A

2022 A technique to connect amateur radio systems, such as repeaters, via the internet using Voice Over Internet Protocol (VoIP)

2018 Voice identification must be transmitted every 10 minutes

Choice B

2022 A system for providing access to websites via amateur radio

2018 Morse code ID must be sent once per hour

Choice C

2022 A system for informing amateurs in real time of the frequency of active DX stations

2018 A label indicating the licensee's name, call sign and address must be affixed to the transmitter

Choice D

2022 A technique for measuring signal strength of an amateur transmitter via the internet

2018 A flag must be affixed to the transmitter antenna with the station call sign in 1 inch high letters or larger

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018 [97.215(a)]

-----> *CHANGES* T8C09 *CHANGES* <-----

Question

2022 How might you obtain a list of active nodes that use VoIP?

2018 How might you obtain a list of active nodes that use VoIP?

Answer

2022 D

2018 C

Figure

2022

2018

Choice A

2022 By subscribing to an on line service

2018 From the FCC Rulebook

Choice B

2022 From on line repeater lists maintained by the local repeater frequency coordinator

2018 From your local emergency coordinator

Choice C

2022 From a repeater directory

2018 From a repeater directory

Choice D

2022 All of these choices are correct

2018 From the local repeater frequency coordinator

Rules

2022

2018

-----> *CHANGES* T8C10 *CHANGES* <-----

Question

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2022 What must be done before you may use the Echolink system to communicate using a repeater?

2018 How do you select a specific IRLP node when using a portable transceiver?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 You must complete the required Echolink training

2018 Choose a specific CTCSS tone

Choice B

2022 You must have purchased a license to use the Echolink software

2018 Choose the correct DSC tone

Choice C

2022 You must be sponsored by a current Echolink user

2018 Access the repeater autopatch

Choice D

2022 You must register your call sign and provide proof of license

2018 Use the keypad to transmit the IRLP node ID

Rules

2022

2018

-----> *CHANGES* T8C11 *CHANGES* <-----

Question

2022 What name is given to an amateur radio station that is used to connect other amateur stations to the internet?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 What name is given to an amateur radio station that is used to connect other amateur stations to the Internet?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 A gateway

2018 A gateway

Choice B

2022 A repeater

2018 A repeater

Choice C

2022 A digipeater

2018 A digipeater

Choice D

2022 A beacon

2018 A beacon

Rules

2022

2018

-----> *CHANGES* T8D01 *CHANGES* <-----

Question

2022 Which of the following is a digital communications mode?

2018 Which of the following is an example of a digital communications method?

Answer

2022 D

2018 D

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Packet radio

2018 Packet

Choice B

2022 IEEE 802.11

2018 PSK31

Choice C

2022 JT65

2018 MFSK

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T8D02 *NO CHANGES* <-----

Question

2022 What does the term "APRS" mean?

2018 What does the term "APRS" mean?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Automatic Packet Reporting System

2018 Automatic Packet Reporting System

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Associated Public Radio Station

2018 Associated Public Radio Station

Choice C

2022 Auto Planning Radio Set-up

2018 Auto Planning Radio Set-up

Choice D

2022 Advanced Polar Radio System

2018 Advanced Polar Radio System

Rules

2022

2018

-----> *CHANGES* T8D03 *CHANGES* <-----

Question

2022 Which of the following devices is used to provide data to the transmitter when sending automatic position reports from a mobile amateur radio station?

2018 Which of the following devices provides data to the transmitter when sending automatic position reports from a mobile amateur radio station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The vehicle speedometer

2018 The vehicle speedometer

Choice B

2022 A WWV receiver

2018 A WWV receiver

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 A connection to a broadcast FM sub-carrier receiver

2018 A connection to a broadcast FM sub-carrier receiver

Choice D

2022 A Global Positioning System receiver

2018 A Global Positioning System receiver

Rules

2022

2018

-----> *CHANGES* T8D04 *CHANGES* <-----

Question

2022 What type of transmission is indicated by the term "NTSC?"

2018 What type of transmission is indicated by the term NTSC?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 A Normal Transmission mode in Static Circuit

2018 A Normal Transmission mode in Static Circuit

Choice B

2022 A special mode for earth satellite uplink

2018 A special mode for earth satellite uplink

Choice C

2022 An analog fast scan color TV signal

2018 An analog fast scan color TV signal

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 A frame compression scheme for TV signals

2018 A frame compression scheme for TV signals

Rules

2022

2018

-----> *CHANGES* T8D05 *CHANGES* <-----

Question

2022 Which of the following is an application of APRS (Automatic Packet Reporting System)?

2018 Which of the following is an application of APRS (Automatic Packet Reporting System)?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Providing real-time tactical digital communications in conjunction with a map showing the locations of stations

2018 Providing real time tactical digital communications in conjunction with a map showing the locations of stations

Choice B

2022 Showing automatically the number of packets transmitted via PACTOR during a specific time interval

2018 Showing automatically the number of packets transmitted via PACTOR during a specific time interval

Choice C

2022 Providing voice over internet connection between repeaters

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Providing voice over Internet connection
between repeaters

Choice D

2022 Providing information on the number of stations
signed into a repeater

2018 Providing information on the number of stations
signed into a repeater

Rules

2022

2018

-----> *CHANGES* T8D06 *CHANGES* <-----

Question

2022 What does the abbreviation "PSK" mean?

2018 What does the abbreviation PSK mean?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Pulse Shift Keying

2018 Pulse Shift Keying

Choice B

2022 Phase Shift Keying

2018 Phase Shift Keying

Choice C

2022 Packet Short Keying

2018 Packet Short Keying

Choice D

2022 Phased Slide Keying

2018 Phased Slide Keying

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T8D07 *CHANGES* <-----

Question

2022 Which of the following best describes DMR (Digital Mobile Radio or Digital Migration Radio)?

2018 What is PSK31?

Answer

2022 A

2018 D

Figure

2022

2018

Choice A

2022 A technique for time-multiplexing two digital voice signals on a single 12.5 kHz repeater channel

2018 A high-rate data transmission mode

Choice B

2022 An automatic position tracking mode for FM mobiles communicating through repeaters

2018 A method of reducing noise interference to FM signals

Choice C

2022 An automatic computer logging technique for hands-off logging when communicating while operating a vehicle

2018 A method of compressing digital television signals

Choice D

2022 A digital technique for transmitting on two repeater inputs simultaneously for automatic error correction

2018 A low-rate data transmission mode

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T8D08 *CHANGES* <-----

Question

2022 Which of the following may be included in packet transmissions?

2018 Which of the following may be included in packet transmissions?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 A check sum **that** permits error detection

2018 A check sum **which** permits error detection

Choice B

2022 A header **that** contains the call sign of the station to which the information is being sent

2018 A header **which** contains the call sign of the station to which the information is being sent

Choice C

2022 Automatic repeat request in case of error

2018 Automatic repeat request in case of error

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T8D09 *CHANGES* <-----

Question

2022 What code is used when sending CW in the amateur bands?

2018 What code is used when sending CW in the amateur bands?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Baudot

2018 Baudot

Choice B

2022 Hamming

2018 Hamming

Choice C

2022 International Morse

2018 International Morse

Choice D

2022 All of these choices are correct

2018 Gray

Rules

2022

2018

-----> *CHANGES* T8D10 *CHANGES* <-----

Question

2022 Which of the following operating activities is supported by digital mode software in the WSJT suite?

2018 Which of the following can be used to transmit CW in the amateur bands?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Moonbounce or Earth-Moon-Earth

2018 Straight Key

Choice B

2022 Weak-signal propagation beacons

2018 Electronic Keyer

Choice C

2022 Meteor scatter

2018 Computer Keyboard

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T8D11 *NO CHANGES* <-----

Question

2022 What is an ARQ transmission system?

2018 What is an ARQ transmission system?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 A special transmission format limited to video signals

2018 A special transmission format limited to video signals

Choice B

2022 A system used to encrypt command signals to an amateur radio satellite

2018 A system used to encrypt command signals to an amateur radio satellite

Choice C

2022 A digital scheme whereby the receiving station detects errors and sends a request to the sending station to retransmit the information

2018 A digital scheme whereby the receiving station detects errors and sends a request to the sending station to retransmit the information

Choice D

2022 A method of compressing the data in a message so more information can be sent in a shorter time

2018 A method of compressing the data in a message so more information can be sent in a shorter time

Rules

2022

2018

-----> *NEW* T8D12 *NEW* <-----

Question

2022 Which of the following best describes Broadband-Hamnet(TM), also referred to as a high-speed multi-media network?

Answer

2022 A

Figure

2022

Choice A

2022 An amateur-radio-based data network using commercial Wi-Fi gear with modified firmware

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 A wide-bandwidth digital voice mode employing DRM protocols

Choice C

2022 A satellite communications network using modified commercial satellite TV hardware

Choice D

2022 An internet linking protocol used to network repeaters

Rules

2022

-----> *NEW* T8D13 *NEW* <-----

Question

2022 What is FT8?

Answer

2022 B

Figure

2022

Choice A

2022 A wideband FM voice mode

Choice B

2022 A digital mode capable of operating in low signal-to-noise conditions that transmits on 15-second intervals

Choice C

2022 An eight channel multiplex mode for FM repeaters

Choice D

2022 A digital slow scan TV mode with forward error correction and automatic color compensation

Rules

2022

-----> *NEW* T8D14 *NEW* <-----

Question

2022 What is an electronic keyer?

Answer

2022 C

Figure

2022

Choice A

2022 A device for switching antennas from transmit to

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

receive

Choice B

2022 A device for voice activated switching from receive to transmit

Choice C

2022 A device that assists in manual sending of Morse code

Choice D

2022 An interlock to prevent unauthorized use of a radio

Rules

2022

-----> *NO CHANGES* T9A01 *NO CHANGES* <-----

Question

2022 What is a beam antenna?

2018 What is a beam antenna?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 An antenna built from aluminum I-beams

2018 An antenna built from aluminum I-beams

Choice B

2022 An omnidirectional antenna invented by Clarence Beam

2018 An omnidirectional antenna invented by Clarence Beam

Choice C

2022 An antenna that concentrates signals in one direction

2018 An antenna that concentrates signals in one direction

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 An antenna that reverses the phase of received signals

2018 An antenna that reverses the phase of received signals

Rules

2022

2018

-----> *CHANGES* T9A02 *CHANGES* <-----

Question

2022 Which of the following describes a type of antenna loading?

2018 Which of the following is true regarding vertical antennas?

Answer

2022 A

2018 B

Figure

2022

2018

Choice A

2022 Inserting an inductor in the radiating portion of the antenna to make it electrically longer

2018 The magnetic field is perpendicular to the Earth

Choice B

2022 Inserting a resistor in the radiating portion of the antenna to make it resonant

2018 The electric field is perpendicular to the Earth

Choice C

2022 Installing a spring in the base of a mobile vertical antenna to make it more flexible

2018 The phase is inverted

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 Strengthening the radiating elements of a beam antenna to better resist wind damage

2018 The phase is reversed

Rules

2022

2018

-----> *CHANGES* T9A03 *CHANGES* <-----

Question

2022 Which of the following describes a simple dipole oriented parallel to the Earth's surface?

2018 Which of the following describes a simple dipole mounted so the conductor is parallel to the Earth's surface?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 A ground-wave antenna

2018 A ground wave antenna

Choice B

2022 A horizontally polarized antenna

2018 A horizontally polarized antenna

Choice C

2022 A rhombic antenna

2018 A rhombic antenna

Choice D

2022 A vertically polarized antenna

2018 A vertically polarized antenna

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T9A04 *CHANGES* <-----

Question

2022 What is a disadvantage of the "rubber duck" antenna supplied with most handheld radio transceivers when compared to a full-sized quarter-wave antenna?

2018 What is a disadvantage of the "rubber duck" antenna supplied with most handheld radio transceivers?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 It does not transmit or receive as effectively

2018 It does not transmit or receive as effectively as a full-sized antenna

Choice B

2022 It transmits only circularly polarized signals

2018 It transmits a circularly polarized signal

Choice C

2022 If the rubber end cap is lost, it will unravel very easily

2018 If the rubber end cap is lost it will unravel very quickly

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T9A05 *NO CHANGES* <-----

Question

2022 How would you change a dipole antenna to make it resonant on a higher frequency?

2018 How would you change a dipole antenna to make it resonant on a higher frequency?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Lengthen it

2018 Lengthen it

Choice B

2022 Insert coils in series with radiating wires

2018 Insert coils in series with radiating wires

Choice C

2022 Shorten it

2018 Shorten it

Choice D

2022 Add capacitive loading to the ends of the radiating wires

2018 Add capacitive loading to the ends of the radiating wires

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *CHANGES* T9A06 *CHANGES* <-----

Question

2022 What type of antennas are the quad, Yagi, and dish?

2018 What type of antennas are the quad, Yagi, and dish?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Non-resonant antennas

2018 Non-resonant antennas

Choice B

2022 Log periodic antennas

2018 Loop antennas

Choice C

2022 Directional antennas

2018 Directional antennas

Choice D

2022 Isotropic antennas

2018 Isotropic antennas

Rules

2022

2018

-----> *CHANGES* T9A07 *CHANGES* <-----

Question

2022 What is a disadvantage of using a handheld VHF transceiver, with its integral antenna, inside a vehicle?

2018 What is a good reason not to use a "rubber duck" antenna inside your car?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Signals might not propagate well due to the shielding effect of the vehicle

2018 Signals can be significantly weaker than when it is outside of the vehicle

Choice B

2022 It might cause the transceiver to overheat

2018 It might cause your radio to overheat

Choice C

2022 The SWR might decrease, decreasing the signal strength

2018 The SWR might decrease, decreasing the signal strength

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T9A08 *NO CHANGES* <-----

Question

2022 What is the approximate length, in inches, of a quarter-wavelength vertical antenna for 146 MHz?

2018 What is the approximate length, in inches, of a quarter-wavelength vertical antenna for 146 MHz?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 112

2018 112

Choice B

2022 50

2018 50

Choice C

2022 19

2018 19

Choice D

2022 12

2018 12

Rules

2022

2018

-----> *CHANGES* T9A09 *CHANGES* <-----

Question

2022 What is the approximate length, in inches, of a half-wavelength 6 meter dipole antenna?

2018 What is the approximate length, in inches, of a 6 meter 1/2-wavelength wire dipole antenna?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 6

2018 6

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 50

2018 50

Choice C

2022 112

2018 112

Choice D

2022 236

2018 236

Rules

2022

2018

-----> *CHANGES* T9A10 *CHANGES* <-----

Question

2022 In which direction does a half-wave dipole antenna radiate the strongest signal?

2018 In which direction is the radiation strongest from a half-wave dipole antenna in free space?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Equally in all directions

2018 Equally in all directions

Choice B

2022 Off the ends of the antenna

2018 Off the ends of the antenna

Choice C

2022 Broadside to the antenna

2018 Broadside to the antenna

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 In the direction of the feed line

2018 In the direction of the feed line

Rules

2022

2018

-----> *CHANGES* T9A11 *CHANGES* <-----

Question

2022 What is the gain of an antenna?

2018 What is meant by the gain of an antenna?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The additional power that is added to the transmitter power

2018 The additional power that is added to the transmitter power

Choice B

2022 The additional power that is lost in the antenna when transmitting on a higher frequency

2018 The additional power that is lost in the antenna when transmitting on a higher frequency

Choice C

2022 The increase in signal strength in a specified direction compared to a reference antenna

2018 The increase in signal strength in a specified direction when compared to a reference antenna

Choice D

2022 The increase in impedance on receive or transmit compared to a reference antenna

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 The increase in impedance on receive or transmit compared to a reference antenna

Rules

2022

2018

-----> *CHANGES* T9A12 *CHANGES* <-----

Question

2022 What is an advantage of using a properly mounted 5/8 wavelength antenna for VHF or UHF mobile service?

2018 What is a reason to use a properly mounted 5/8 wavelength antenna for VHF or UHF mobile service?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 It has a lower radiation angle and more gain than a 1/4 wavelength antenna

2018 It offers a lower angle of radiation and more gain than a 1/4 wavelength antenna and usually provides improved coverage

Choice B

2022 It has very high angle radiation for better communicating through a repeater

2018 It features a very high angle of radiation and is better for communicating via a repeater

Choice C

2022 It eliminates distortion caused by reflected signals

2018 The 5/8 wavelength antenna completely eliminates distortion caused by reflected signals

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 It has 10 times the power gain of a 1/4 wavelength design

2018 The 5/8 wavelength antenna offers a 10-times power gain over a 1/4 wavelength design

Rules

2022

2018

-----> *CHANGES* T9B01 *CHANGES* <-----

Question

2022 Why is it important to have low SWR when using coaxial cable feed line?

2018 Why is it important to have a low SWR in an antenna system that uses coaxial cable feed line?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 To reduce television interference

2018 To reduce television interference

Choice B

2022 To reduce signal loss

2018 To allow the efficient transfer of power and reduce losses

Choice C

2022 To prolong antenna life

2018 To prolong antenna life

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *CHANGES* T9B02 *CHANGES* <-----

Question

2022 What is the impedance of most coaxial cables used in amateur radio installations?

2018 What is the impedance of the most commonly used coaxial cable in typical amateur radio installations?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 8 ohms

2018 8 ohms

Choice B

2022 50 ohms

2018 50 ohms

Choice C

2022 600 ohms

2018 600 ohms

Choice D

2022 12 ohms

2018 12 ohms

Rules

2022

2018

-----> *CHANGES* T9B03 *CHANGES* <-----

Question

2022 Why is coaxial cable the most common feed line

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

selected for amateur radio antenna systems?

2018 Why is coaxial cable used more often than any other feed line for amateur radio antenna systems?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 It is easy to use and requires few special installation considerations

2018 It is easy to use and requires few special installation considerations

Choice B

2022 It has less loss than any other type of feed line

2018 It has less loss than any other type of feed line

Choice C

2022 It can handle more power than any other type of feed line

2018 It can handle more power than any other type of feed line

Choice D

2022 It is less expensive than any other type of feed line

2018 It is less expensive than any other types of feed line

Rules

2022

2018

-----> *CHANGES* T9B04 *CHANGES* <-----

Question

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2022 What is the major function of an antenna tuner (antenna coupler)?

2018 What does an antenna tuner do?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 It matches the antenna system impedance to the transceiver's output impedance

2018 It matches the antenna system impedance to the transceiver's output impedance

Choice B

2022 It helps a receiver automatically tune in weak stations

2018 It helps a receiver automatically tune in weak stations

Choice C

2022 It allows an antenna to be used on both transmit and receive

2018 It allows an antenna to be used on both transmit and receive

Choice D

2022 It automatically selects the proper antenna for the frequency band being used

2018 It automatically selects the proper antenna for the frequency band being used

Rules

2022

2018

-----> *CHANGES* T9B05 *CHANGES* <-----

Question

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2022 In general, what happens as the frequency of a signal passing through coaxial cable is increased?

2018 What generally happens as the frequency of a signal passing through coaxial cable is increased?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 The characteristic impedance decreases

2018 The apparent SWR increases

Choice B

2022 The loss decreases

2018 The reflected power increases

Choice C

2022 The characteristic impedance increases

2018 The characteristic impedance increases

Choice D

2022 The loss increases

2018 The loss increases

Rules

2022

2018

-----> *NO CHANGES* T9B06 *NO CHANGES* <-----

Question

2022 Which of the following connectors is most suitable for frequencies above 400 MHz?

2018 Which of the following connectors is most suitable for frequencies above 400 MHz?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 A UHF (PL-259/SO-239) connector

2018 A UHF (PL-259/SO-239) connector

Choice B

2022 A Type N connector

2018 A Type N connector

Choice C

2022 An RS-213 connector

2018 An RS-213 connector

Choice D

2022 A DB-25 connector

2018 A DB-25 connector

Rules

2022

2018

-----> *CHANGES* T9B07 *CHANGES* <-----

Question

2022 Which of the following is true of PL-259 type coax connectors?

2018 Which of the following is true of PL-259 type coax connectors?

Answer

2022 C

2018 C

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 They are preferred for microwave operation

2018 They are preferred for microwave operation

Choice B

2022 They are watertight

2018 They are water tight

Choice C

2022 They are commonly used at HF frequencies

2018 They are commonly used at HF frequencies

Choice D

2022 They are a bayonet type connector

2018 They are a bayonet type connector

Rules

2022

2018

-----> *NO CHANGES* T9B08 *NO CHANGES* <-----

Question

2022 Why should coax connectors exposed to the weather be sealed against water intrusion?

2018 Why should coax connectors exposed to the weather be sealed against water intrusion?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 To prevent an increase in feed line loss

2018 To prevent an increase in feed line loss

Choice B

2022 To prevent interference to telephones

2018 To prevent interference to telephones

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 To keep the jacket from becoming loose

2018 To keep the jacket from becoming loose

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T9B09 *CHANGES* <-----

Question

2022 What **can** cause erratic changes in SWR readings?

2018 What **might** cause erratic changes in SWR readings?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 The transmitter is being modulated

2018 The transmitter is being modulated

Choice B

2022 A loose connection in an antenna or a feed line

2018 A loose connection in an antenna or a feed line

Choice C

2022 The transmitter is being over-modulated

2018 The transmitter is being over-modulated

Choice D

2022 Interference from other stations is distorting your signal

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Interference from other stations is distorting
your signal

Rules

2022

2018

-----> *CHANGES* T9B10 *CHANGES* <-----

Question

2022 What is the electrical difference between RG-58
and RG-8 coaxial cable?

2018 What electrical difference exists between the
smaller RG-58 and larger RG-8 coaxial cables?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 There is no significant difference between the
two types

2018 There is no significant difference between the
two types

Choice B

2022 RG-58 cable has two shields

2018 RG-58 cable has less loss at a given frequency

Choice C

2022 RG-8 cable has less loss at a given frequency

2018 RG-8 cable has less loss at a given frequency

Choice D

2022 RG-58 cable can handle higher power levels

2018 RG-58 cable can handle higher power levels

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T9B11 *NO CHANGES* <-----

Question

2022 Which of the following types of feed line has the lowest loss at VHF and UHF?

2018 Which of the following types of feed line has the lowest loss at VHF and UHF?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 50-ohm flexible coax

2018 50-ohm flexible coax

Choice B

2022 Multi-conductor unbalanced cable

2018 Multi-conductor unbalanced cable

Choice C

2022 Air-insulated hard line

2018 Air-insulated hard line

Choice D

2022 75-ohm flexible coax

2018 75-ohm flexible coax

Rules

2022

2018

-----> *NO CHANGES* T0A01 *NO CHANGES* <-----

Question

2022 Which of the following is a safety hazard of a

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

12-volt storage battery?

2018 Which of the following is a safety hazard of a 12-volt storage battery?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Touching both terminals with the hands can cause electrical shock

2018 Touching both terminals with the hands can cause electrical shock

Choice B

2022 Shorting the terminals can cause burns, fire, or an explosion

2018 Shorting the terminals can cause burns, fire, or an explosion

Choice C

2022 RF emissions from the battery

2018 RF emissions from the battery

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T0A02 *CHANGES* <-----

Question

2022 What health hazard is presented by electrical current flowing through the body?

2018 How does current flowing through the body cause a health hazard?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 It may cause injury by heating tissue

2018 By heating tissue

Choice B

2022 It may disrupt the electrical functions of cells

2018 It disrupts the electrical functions of cells

Choice C

2022 It may cause involuntary muscle contractions

2018 It causes involuntary muscle contractions

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T0A03 *CHANGES* <-----

Question

2022 In the United States, what is connected to the green wire in a three-wire electrical AC plug?

2018 What is connected to the green wire in a three-wire electrical AC plug?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Neutral

2018 Neutral

Choice B

2022 Hot

2018 Hot

Choice C

2022 Equipment ground

2018 Safety ground

Choice D

2022 The white wire

2018 The white wire

Rules

2022

2018

-----> *NO CHANGES* T0A04 *NO CHANGES* <-----

Question

2022 What is the purpose of a fuse in an electrical circuit?

2018 What is the purpose of a fuse in an electrical circuit?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 To prevent power supply ripple from damaging a circuit

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 To prevent power supply ripple from damaging a circuit

Choice B

2022 To interrupt power in case of overload

2018 To interrupt power in case of overload

Choice C

2022 To limit current to prevent shocks

2018 To limit current to prevent shocks

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T0A05 *NO CHANGES* <-----

Question

2022 Why is it unwise to install a 20-ampere fuse in the place of a 5-ampere fuse?

2018 Why is it unwise to install a 20-ampere fuse in the place of a 5-ampere fuse?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The larger fuse would be likely to blow because it is rated for higher current

2018 The larger fuse would be likely to blow because it is rated for higher current

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 The power supply ripple would greatly increase

2018 The power supply ripple would greatly increase

Choice C

2022 Excessive current could cause a fire

2018 Excessive current could cause a fire

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T0A06 *NO CHANGES* <-----

Question

2022 What is a good way to guard against electrical shock at your station?

2018 What is a good way to guard against electrical shock at your station?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Use three-wire cords and plugs for all AC powered equipment

2018 Use three-wire cords and plugs for all AC powered equipment

Choice B

2022 Connect all AC powered station equipment to a common safety ground

2018 Connect all AC powered station equipment to a common safety ground

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Use a circuit protected by a ground-fault interrupter

2018 Use a circuit protected by a ground-fault interrupter

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* T0A07 *CHANGES* <-----

Question

2022 Which of these precautions should be taken when installing devices for lightning protection in a coaxial cable feed line?

2018 Which of these precautions should be taken when installing devices for lightning protection in a coaxial cable feed line?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Include a parallel bypass switch for each protector so that it can be switched out of the circuit when running high power

2018 Include a parallel bypass switch for each protector so that it can be switched out of the circuit when running high power

Choice B

2022 Include a series switch in the ground line of each protector to prevent RF overload from

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

inadvertently damaging the protector

2018 Include a series switch in the ground line of each protector to prevent RF overload from inadvertently damaging the protector

Choice C

2022 Keep the ground wires from each protector separate and connected to station ground

2018 Keep the ground wires from each protector separate and connected to station ground

Choice D

2022 Mount all of the protectors on a metal plate that is in turn connected to an external ground rod

2018 Ground all of the protectors to a common plate which is in turn connected to an external ground

Rules

2022

2018

-----> *CHANGES* T0A08 *CHANGES* <-----

Question

2022 What safety equipment should always be included in home-built equipment that is powered from 120V AC power circuits?

2018 What safety equipment should always be included in home-built equipment that is powered from 120V AC power circuits?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 A fuse or circuit breaker in series with the AC hot conductor

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 A fuse or circuit breaker in series with the AC hot conductor

Choice B

2022 An AC voltmeter across the incoming power source

2018 An AC voltmeter across the incoming power source

Choice C

2022 An inductor in parallel with the AC power source

2018 An inductor in series with the AC power source

Choice D

2022 A capacitor in series with the AC power source

2018 A capacitor across the AC power source

Rules

2022

2018

-----> *CHANGES* T0A09 *CHANGES* <-----

Question

2022 What should be done to all external ground rods or earth connections?

2018 What kind of hazard is presented by a conventional 12-volt storage battery?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Waterproof them with silicone caulk or electrical tape

2018 It emits ozone which can be harmful to the atmosphere

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Keep them as far apart as possible

2018 Shock hazard due to high voltage

Choice C

2022 Bond them together with heavy wire or
conductive strap

2018 Explosive gas can collect if not properly
vented

Choice D

2022 Tune them for resonance on the lowest frequency
of operation

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* TOA10 *CHANGES* <-----

Question

2022 What can happen if a lead-acid storage battery
is charged or discharged too quickly?

2018 What can happen if a lead-acid storage battery
is charged or discharged too quickly?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 The battery could overheat, give off flammable
gas, or explode

2018 The battery could overheat and give off
flammable gas or explode

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 The voltage can become reversed

2018 The voltage can become reversed

Choice C

2022 The memory effect will reduce the capacity of the battery

2018 The memory effect will reduce the capacity of the battery

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> ***NO CHANGES* T0A11 *NO CHANGES*** <-----

Question

2022 What kind of hazard might exist in a power supply when it is turned off and disconnected?

2018 What kind of hazard might exist in a power supply when it is turned off and disconnected?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Static electricity could damage the grounding system

2018 Static electricity could damage the grounding system

Choice B

2022 Circulating currents inside the transformer might cause damage

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Circulating currents inside the transformer
might cause damage

Choice C

2022 The fuse might blow if you remove the cover

2018 The fuse might blow if you remove the cover

Choice D

2022 You might receive an electric shock from the
charge stored in large capacitors

2018 You might receive an electric shock from the
charge stored in large capacitors

Rules

2022

2018

-----> *NO CHANGES* TOB01 *NO CHANGES* <-----

Question

2022 When should members of a tower work team wear a
hard hat and safety glasses?

2018 When should members of a tower work team wear a
hard hat and safety glasses?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 At all times except when climbing the tower

2018 At all times except when climbing the tower

Choice B

2022 At all times except when belted firmly to the
tower

2018 At all times except when belted firmly to the
tower

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 At all times when any work is being done on the tower

2018 At all times when any work is being done on the tower

Choice D

2022 Only when the tower exceeds 30 feet in height

2018 Only when the tower exceeds 30 feet in height

Rules

2022

2018

-----> *CHANGES* TOB02 *CHANGES* <-----

Question

2022 What is a good precaution to observe before climbing an antenna tower?

2018 What is a good precaution to observe before climbing an antenna tower?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Make sure that you wear a grounded wrist strap

2018 Make sure that you wear a grounded wrist strap

Choice B

2022 Remove all tower grounding connections

2018 Remove all tower grounding connections

Choice C

2022 Put on a carefully inspected climbing harness (fall arrester) and safety glasses

2018 Put on a climbing harness and safety glasses

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of the these choices are correct

2018 All of the these choices are correct

Rules

2022

2018

-----> ***NO CHANGES* T0B03 *NO CHANGES*** <-----

Question

2022 Under what circumstances is it safe to climb a tower without a helper or observer?

2018 Under what circumstances is it safe to climb a tower without a helper or observer?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 When no electrical work is being performed

2018 When no electrical work is being performed

Choice B

2022 When no mechanical work is being performed

2018 When no mechanical work is being performed

Choice C

2022 When the work being done is not more than 20 feet above the ground

2018 When the work being done is not more than 20 feet above the ground

Choice D

2022 Never

2018 Never

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T0B04 *NO CHANGES* <-----

Question

2022 Which of the following is an important safety precaution to observe when putting up an antenna tower?

2018 Which of the following is an important safety precaution to observe when putting up an antenna tower?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Wear a ground strap connected to your wrist at all times

2018 Wear a ground strap connected to your wrist at all times

Choice B

2022 Insulate the base of the tower to avoid lightning strikes

2018 Insulate the base of the tower to avoid lightning strikes

Choice C

2022 Look for and stay clear of any overhead electrical wires

2018 Look for and stay clear of any overhead electrical wires

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T0B05 *NO CHANGES* <-----

Question

2022 What is the purpose of a gin pole?

2018 What is the purpose of a gin pole?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 To temporarily replace guy wires

2018 To temporarily replace guy wires

Choice B

2022 To be used in place of a safety harness

2018 To be used in place of a safety harness

Choice C

2022 To lift tower sections or antennas

2018 To lift tower sections or antennas

Choice D

2022 To provide a temporary ground

2018 To provide a temporary ground

Rules

2022

2018

-----> *CHANGES* T0B06 *CHANGES* <-----

Question

2022 What is the minimum safe distance from a power line to allow when installing an antenna?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 What is the minimum safe distance from a power line to allow when installing an antenna?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Half the width of your property

2018 Half the width of your property

Choice B

2022 The height of the power line above ground

2018 The height of the power line above ground

Choice C

2022 1/2 wavelength at the operating frequency

2018 1/2 wavelength at the operating frequency

Choice D

2022 Enough so that if the antenna falls unexpectedly, no part of it can come closer than 10 feet to the power wires

2018 So that if the antenna falls unexpectedly, no part of it can come closer than 10 feet to the power wires

Rules

2022

2018

-----> *CHANGES* TOB07 *CHANGES* <-----

Question

2022 Which of the following is an important safety rule to remember when using a crank-up tower?

2018 Which of the following is an important safety rule to remember when using a crank-up tower?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 This type of tower must never be painted

2018 This type of tower must never be painted

Choice B

2022 This type of tower must never be grounded

2018 This type of tower must never be grounded

Choice C

2022 This type of tower must not be climbed unless retracted or mechanical safety locking devices have been installed

2018 This type of tower must never be climbed unless it is in the fully retracted position

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T0B08 *NO CHANGES* <-----

Question

2022 What is considered to be a proper grounding method for a tower?

2018 What is considered to be a proper grounding method for a tower?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 A single four-foot ground rod, driven into the ground no more than 12 inches from the base

2018 A single four-foot ground rod, driven into the ground no more than 12 inches from the base

Choice B

2022 A ferrite-core RF choke connected between the tower and ground

2018 A ferrite-core RF choke connected between the tower and ground

Choice C

2022 Separate eight-foot long ground rods for each tower leg, bonded to the tower and each other

2018 Separate eight-foot long ground rods for each tower leg, bonded to the tower and each other

Choice D

2022 A connection between the tower base and a cold water pipe

2018 A connection between the tower base and a cold water pipe

Rules

2022

2018

-----> *CHANGES* T0B09 *CHANGES* <-----

Question

2022 Why should you avoid attaching an antenna to a utility pole?

2018 Why should you avoid attaching an antenna to a utility pole?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 The antenna will not work properly because of induced voltages

2018 The antenna will not work properly because of induced voltages

Choice B

2022 The utility company will charge you an extra monthly fee

2018 The utility company will charge you an extra monthly fee

Choice C

2022 The antenna could contact high-voltage power lines

2018 The antenna could contact high-voltage power wires

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *CHANGES* TOB10 *CHANGES* <-----

Question

2022 Which of the following is true when installing grounding conductors used for lightning protection?

2018 Which of the following is true concerning grounding conductors used for lightning protection?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 Only non-insulated wire must be used

2018 Only non-insulated wire must be used

Choice B

2022 Wires must be carefully routed with precise right-angle bends

2018 Wires must be carefully routed with precise right-angle bends

Choice C

2022 Sharp bends must be avoided

2018 Sharp bends must be avoided

Choice D

2022 Common grounds must be avoided

2018 Common grounds must be avoided

Rules

2022

2018

-----> *CHANGES* T0B11 *CHANGES* <-----

Question

2022 Which of the following establishes grounding requirements for an amateur radio tower or antenna?

2018 Which of the following establishes grounding requirements for an amateur radio tower or antenna?

Answer

2022 B

2018 B

Figure

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice A

2022 FCC Part 97 Rules

2018 FCC Part 97 Rules

Choice B

2022 Local electrical codes

2018 Local electrical codes

Choice C

2022 FAA tower lighting regulations

2018 FAA tower lighting regulations

Choice D

2022 UL recommended practices

2018 Underwriters Laboratories' recommended practices

Rules

2022

2018

-----> *CHANGES* T0B12 *CHANGES* <-----

Question

2022 Which of the following is good practice when installing ground wires on a tower for lightning protection?

2018 Which of the following is good practice when installing ground wires on a tower for lightning protection?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 Put a loop in the ground connection to prevent water damage to the ground system

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2018 Put a loop in the ground connection to prevent water damage to the ground system

Choice B

2022 Make sure that all bends in the ground wires are clean, right-angle bends

2018 Make sure that all bends in the ground wires are clean, right angle bends

Choice C

2022 Ensure that connections are short and direct

2018 Ensure that connections are short and direct

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NEW* T0B13 *NEW* <-----

Question

2022 What is the purpose of a safety wire through a turnbuckle used to tension guy lines?

Answer

2022 B

Figure

2022

Choice A

2022 Secure the guy if the turnbuckle breaks

Choice B

2022 Prevent loosening of the guy line from vibration

Choice C

2022 Prevent theft or vandalism

Choice D

2022 Deter unauthorized climbing of the tower

Rules

2022

-----> *NO CHANGES* T0C01 *NO CHANGES* <-----

Question

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

2022 What type of radiation are VHF and UHF radio signals?

2018 What type of radiation are VHF and UHF radio signals?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Gamma radiation

2018 Gamma radiation

Choice B

2022 Ionizing radiation

2018 Ionizing radiation

Choice C

2022 Alpha radiation

2018 Alpha radiation

Choice D

2022 Non-ionizing radiation

2018 Non-ionizing radiation

Rules

2022

2018

-----> *NO CHANGES* TOC02 *NO CHANGES* <-----

Question

2022 Which of the following frequencies has the lowest value for Maximum Permissible Exposure limit?

2018 Which of the following frequencies has the lowest value for Maximum Permissible Exposure limit?

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 3.5 MHz

2018 3.5 MHz

Choice B

2022 50 MHz

2018 50 MHz

Choice C

2022 440 MHz

2018 440 MHz

Choice D

2022 1296 MHz

2018 1296 MHz

Rules

2022

2018

-----> *NO CHANGES* T0C03 *NO CHANGES* <-----

Question

2022 What is the maximum power level that an amateur radio station may use at VHF frequencies before an RF exposure evaluation is required?

2018 What is the maximum power level that an amateur radio station may use at VHF frequencies before an RF exposure evaluation is required?

Answer

2022 C

2018 C

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Figure

2022

2018

Choice A

2022 1500 watts PEP transmitter output

2018 1500 watts PEP transmitter output

Choice B

2022 1 watt forward power

2018 1 watt forward power

Choice C

2022 50 watts PEP at the antenna

2018 50 watts PEP at the antenna

Choice D

2022 50 watts PEP reflected power

2018 50 watts PEP reflected power

Rules

2022

2018

-----> *NO CHANGES* T0C04 *NO CHANGES* <-----

Question

2022 What factors affect the RF exposure of people near an amateur station antenna?

2018 What factors affect the RF exposure of people near an amateur station antenna?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Frequency and power level of the RF field

2018 Frequency and power level of the RF field

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice B

2022 Distance from the antenna to a person

2018 Distance from the antenna to a person

Choice C

2022 Radiation pattern of the antenna

2018 Radiation pattern of the antenna

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> ***NO CHANGES* TOC05 *NO CHANGES*** <-----

Question

2022 Why do exposure limits vary with frequency?

2018 Why do exposure limits vary with frequency?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 Lower frequency RF fields have more energy than higher frequency fields

2018 Lower frequency RF fields have more energy than higher frequency fields

Choice B

2022 Lower frequency RF fields do not penetrate the human body

2018 Lower frequency RF fields do not penetrate the human body

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 Higher frequency RF fields are transient in nature

2018 Higher frequency RF fields are transient in nature

Choice D

2022 The human body absorbs more RF energy at some frequencies than at others

2018 The human body absorbs more RF energy at some frequencies than at others

Rules

2022

2018

-----> *NO CHANGES* TOC06 *NO CHANGES* <-----

Question

2022 Which of the following is an acceptable method to determine that your station complies with FCC RF exposure regulations?

2018 Which of the following is an acceptable method to determine that your station complies with FCC RF exposure regulations?

Answer

2022 D

2018 D

Figure

2022

2018

Choice A

2022 By calculation based on FCC OET Bulletin 65

2018 By calculation based on FCC OET Bulletin 65

Choice B

2022 By calculation based on computer modeling

2018 By calculation based on computer modeling

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice C

2022 By measurement of field strength using calibrated equipment

2018 By measurement of field strength using calibrated equipment

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> ***NO CHANGES* TOC07 *NO CHANGES*** <-----

Question

2022 What could happen if a person accidentally touched your antenna while you were transmitting?

2018 What could happen if a person accidentally touched your antenna while you were transmitting?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 Touching the antenna could cause television interference

2018 Touching the antenna could cause television interference

Choice B

2022 They might receive a painful RF burn

2018 They might receive a painful RF burn

Choice C

2022 They might develop radiation poisoning

2018 They might develop radiation poisoning

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

-----> *NO CHANGES* T0C08 *NO CHANGES* <-----

Question

2022 Which of the following actions might amateur operators take to prevent exposure to RF radiation in excess of FCC-supplied limits?

2018 Which of the following actions might amateur operators take to prevent exposure to RF radiation in excess of FCC-supplied limits?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 Relocate antennas

2018 Relocate antennas

Choice B

2022 Relocate the transmitter

2018 Relocate the transmitter

Choice C

2022 Increase the duty cycle

2018 Increase the duty cycle

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

Rules

2022

2018

-----> *NO CHANGES* T0C09 *NO CHANGES* <-----

Question

2022 How can you make sure your station stays in compliance with RF safety regulations?

2018 How can you make sure your station stays in compliance with RF safety regulations?

Answer

2022 B

2018 B

Figure

2022

2018

Choice A

2022 By informing the FCC of any changes made in your station

2018 By informing the FCC of any changes made in your station

Choice B

2022 By re-evaluating the station whenever an item of equipment is changed

2018 By re-evaluating the station whenever an item of equipment is changed

Choice C

2022 By making sure your antennas have low SWR

2018 By making sure your antennas have low SWR

Choice D

2022 All of these choices are correct

2018 All of these choices are correct

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T0C10 *NO CHANGES* <-----

Question

2022 Why is duty cycle one of the factors used to determine safe RF radiation exposure levels?

2018 Why is duty cycle one of the factors used to determine safe RF radiation exposure levels?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 It affects the average exposure of people to radiation

2018 It affects the average exposure of people to radiation

Choice B

2022 It affects the peak exposure of people to radiation

2018 It affects the peak exposure of people to radiation

Choice C

2022 It takes into account the antenna feed line loss

2018 It takes into account the antenna feed line loss

Choice D

2022 It takes into account the thermal effects of the final amplifier

2018 It takes into account the thermal effects of the final amplifier

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T0C11 *NO CHANGES* <-----

Question

2022 What is the definition of duty cycle during the averaging time for RF exposure?

2018 What is the definition of duty cycle during the averaging time for RF exposure?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 The difference between the lowest power output and the highest power output of a transmitter

2018 The difference between the lowest power output and the highest power output of a transmitter

Choice B

2022 The difference between the PEP and average power output of a transmitter

2018 The difference between the PEP and average power output of a transmitter

Choice C

2022 The percentage of time that a transmitter is transmitting

2018 The percentage of time that a transmitter is transmitting

Choice D

2022 The percentage of time that a transmitter is not transmitting

2018 The percentage of time that a transmitter is not transmitting

Rules

2022

2018

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

-----> *NO CHANGES* T0C12 *NO CHANGES* <-----

Question

2022 How does RF radiation differ from ionizing radiation (radioactivity)?

2018 How does RF radiation differ from ionizing radiation (radioactivity)?

Answer

2022 A

2018 A

Figure

2022

2018

Choice A

2022 RF radiation does not have sufficient energy to cause genetic damage

2018 RF radiation does not have sufficient energy to cause genetic damage

Choice B

2022 RF radiation can only be detected with an RF dosimeter

2018 RF radiation can only be detected with an RF dosimeter

Choice C

2022 RF radiation is limited in range to a few feet

2018 RF radiation is limited in range to a few feet

Choice D

2022 RF radiation is perfectly safe

2018 RF radiation is perfectly safe

Rules

2022

2018

-----> *NO CHANGES* T0C13 *NO CHANGES* <-----

Question

2022 If the averaging time for exposure is 6 minutes,

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

how much power density is permitted if the signal is present for 3 minutes and absent for 3 minutes rather than being present for the entire 6 minutes?

2018 If the averaging time for exposure is 6 minutes, how much power density is permitted if the signal is present for 3 minutes and absent for 3 minutes rather than being present for the entire 6 minutes?

Answer

2022 C

2018 C

Figure

2022

2018

Choice A

2022 3 times as much

2018 3 times as much

Choice B

2022 1/2 as much

2018 1/2 as much

Choice C

2022 2 times as much

2018 2 times as much

Choice D

2022 There is no adjustment allowed for shorter exposure times

2018 There is no adjustment allowed for shorter exposure times

Rules

2022

2018

19 question numbers in the Technician (2014-2018) question pool not in the Technician (2018-2022) question pool.

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

List of question numbers in the Technician (2014-2018) question pool not in the Technician (2018-2022) question pool.

001. T1A12
002. T1A13
003. T1A14
004. T1B13
005. T1C12
006. T1C13
007. T1C14
008. T1D12
009. T1E12
010. T1F12
011. T1F13
012. T3C12
013. T4A12
014. T6B12
015. T7C13
016. T8C12
017. T8C13
018. T9A13
019. T9A14

17 new question numbers in the Technician (2018-2022) question pool.

List of new question numbers.

001. T2B14
002. T3A12
003. T3A13
004. T4B13
005. T4B14
006. T5A13
007. T5A14
008. T5C14
009. T5D13
010. T5D14
011. T5D15

NC4FB Technician License Exam Question Pool Comparison (2018-2022) compared to (2014-2018)

- 012. T5D16
- 013. T8B12
- 014. T8D12
- 015. T8D13
- 016. T8D14
- 017. T0B13

196 question numbers in the Technician (2018-2022) question pool have no differences between **matching** question numbers in the Technician (2014-2018) question pool.

List of matching question numbers with no differences.

- 001. T1A01
- 002. T1B04
- 003. T1B09
- 004. T1C04
- 005. T1C08
- 006. T1C09
- 007. T1D05
- 008. T1D06
- 009. T1E01
- 010. T1E03
- 011. T1E05
- 012. T1E07
- 013. T1F02
- 014. T1F03
- 015. T1F04
- 016. T1F06
- 017. T1F09
- 018. T1F10
- 019. T2A08
- 020. T2A10
- 021. T2B10
- 022. T2B11
- 023. T2C01
- 024. T2C04
- 025. T2C09

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 026. T2C12
- 027. T3A01
- 028. T3A03
- 029. T3A04
- 030. T3A05
- 031. T3A06
- 032. T3A07
- 033. T3A08
- 034. T3A09
- 035. T3A11
- 036. T3B01
- 037. T3B02
- 038. T3B03
- 039. T3B04
- 040. T3B05
- 041. T3B06
- 042. T3B07
- 043. T3B08
- 044. T3B09
- 045. T3B10
- 046. T3C03
- 047. T3C04
- 048. T3C05
- 049. T3C08
- 050. T3C09
- 051. T3C11
- 052. T4A02
- 053. T4A10
- 054. T4A11
- 055. T4B01
- 056. T4B02
- 057. T4B03
- 058. T4B04
- 059. T4B05
- 060. T4B06
- 061. T4B07
- 062. T4B08
- 063. T5A01
- 064. T5A02

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 065. T5A03
- 066. T5A04
- 067. T5A05
- 068. T5A07
- 069. T5A08
- 070. T5A09
- 071. T5A10
- 072. T5B02
- 073. T5B03
- 074. T5B04
- 075. T5B06
- 076. T5B09
- 077. T5B10
- 078. T5B12
- 079. T5C01
- 080. T5C02
- 081. T5C03
- 082. T5C04
- 083. T5C05
- 084. T5C06
- 085. T5C08
- 086. T5C09
- 087. T5C10
- 088. T5C11
- 089. T5C13
- 090. T5D01
- 091. T5D02
- 092. T5D03
- 093. T5D04
- 094. T5D05
- 095. T5D06
- 096. T5D10
- 097. T5D11
- 098. T5D12
- 099. T6A02
- 100. T6A03
- 101. T6A04
- 102. T6A05
- 103. T6A06

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 104. T6A08
- 105. T6A09
- 106. T6A10
- 107. T6A11
- 108. T6B03
- 109. T6B05
- 110. T6B07
- 111. T6B09
- 112. T6C02
- 113. T6C03
- 114. T6C04
- 115. T6C05
- 116. T6C06
- 117. T6C07
- 118. T6C08
- 119. T6C09
- 120. T6C10
- 121. T6C11
- 122. T6D01
- 123. T6D03
- 124. T6D05
- 125. T6D06
- 126. T6D07
- 127. T6D09
- 128. T6D10
- 129. T6D12
- 130. T7A01
- 131. T7A03
- 132. T7A10
- 133. T7A11
- 134. T7B01
- 135. T7B02
- 136. T7B05
- 137. T7B06
- 138. T7C02
- 139. T7C03
- 140. T7C04
- 141. T7C07
- 142. T7C08

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 143. T7C09
- 144. T7C11
- 145. T7D01
- 146. T7D02
- 147. T7D04
- 148. T7D05
- 149. T7D06
- 150. T7D07
- 151. T7D08
- 152. T7D09
- 153. T7D10
- 154. T7D11
- 155. T7D12
- 156. T8A03
- 157. T8A04
- 158. T8A05
- 159. T8A09
- 160. T8A11
- 161. T8B07
- 162. T8B10
- 163. T8C01
- 164. T8C02
- 165. T8C05
- 166. T8D02
- 167. T8D11
- 168. T9A01
- 169. T9A05
- 170. T9A08
- 171. T9B06
- 172. T9B08
- 173. T9B11
- 174. T0A01
- 175. T0A04
- 176. T0A05
- 177. T0A06
- 178. T0A11
- 179. T0B01
- 180. T0B03
- 181. T0B04

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 182. T0B05
- 183. T0B08
- 184. T0C01
- 185. T0C02
- 186. T0C03
- 187. T0C04
- 188. T0C05
- 189. T0C06
- 190. T0C07
- 191. T0C08
- 192. T0C09
- 193. T0C10
- 194. T0C11
- 195. T0C12
- 196. T0C13

211 question numbers in the Technician (2018-2022) question pool have differences between **matching** question numbers in the Technician (2014-2018) question pool.

List of matching question numbers containing differences.

- 001. T1A02
- 002. T1A03
- 003. T1A04
- 004. T1A05
- 005. T1A06
- 006. T1A07
- 007. T1A08
- 008. T1A09
- 009. T1A10
- 010. T1A11
- 011. T1B01
- 012. T1B02
- 013. T1B03
- 014. T1B05
- 015. T1B06
- 016. T1B07

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 017. T1B08
- 018. T1B10
- 019. T1B11
- 020. T1B12
- 021. T1C01
- 022. T1C02
- 023. T1C03
- 024. T1C05
- 025. T1C06
- 026. T1C07
- 027. T1C10
- 028. T1C11
- 029. T1D01
- 030. T1D02
- 031. T1D03
- 032. T1D04
- 033. T1D07
- 034. T1D08
- 035. T1D09
- 036. T1D10
- 037. T1D11
- 038. T1E02
- 039. T1E04
- 040. T1E06
- 041. T1E08
- 042. T1E09
- 043. T1E10
- 044. T1E11
- 045. T1F01
- 046. T1F05
- 047. T1F07
- 048. T1F08
- 049. T1F11
- 050. T2A01
- 051. T2A02
- 052. T2A03
- 053. T2A04
- 054. T2A05
- 055. T2A06

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

056. T2A07
057. T2A09
058. T2A11
059. T2A12
060. T2B01
061. T2B02
062. T2B03
063. T2B04
064. T2B05
065. T2B06
066. T2B07
067. T2B08
068. T2B09
069. T2B12
070. T2B13
071. T2C02
072. T2C03
073. T2C05
074. T2C06
075. T2C07
076. T2C08
077. T2C10
078. T2C11
079. T3A02
080. T3A10
081. T3B11
082. T3C01
083. T3C02
084. T3C06
085. T3C07
086. T3C10
087. T4A01
088. T4A03
089. T4A04
090. T4A05
091. T4A06
092. T4A07
093. T4A08
094. T4A09

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 095. T4B09
- 096. T4B10
- 097. T4B11
- 098. T4B12
- 099. T5A06
- 100. T5A11
- 101. T5A12
- 102. T5B01
- 103. T5B05
- 104. T5B07
- 105. T5B08
- 106. T5B11
- 107. T5B13
- 108. T5C07
- 109. T5C12
- 110. T5D07
- 111. T5D08
- 112. T5D09
- 113. T6A01
- 114. T6A07
- 115. T6B01
- 116. T6B02
- 117. T6B04
- 118. T6B06
- 119. T6B08
- 120. T6B10
- 121. T6B11
- 122. T6C01
- 123. T6C12
- 124. T6C13
- 125. T6D02
- 126. T6D04
- 127. T6D08
- 128. T6D11
- 129. T7A02
- 130. T7A04
- 131. T7A05
- 132. T7A06
- 133. T7A07

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 134. T7A08
- 135. T7A09
- 136. T7B03
- 137. T7B04
- 138. T7B07
- 139. T7B08
- 140. T7B09
- 141. T7B10
- 142. T7B11
- 143. T7B12
- 144. T7C01
- 145. T7C05
- 146. T7C06
- 147. T7C10
- 148. T7C12
- 149. T7D03
- 150. T8A01
- 151. T8A02
- 152. T8A06
- 153. T8A07
- 154. T8A08
- 155. T8A10
- 156. T8B01
- 157. T8B02
- 158. T8B03
- 159. T8B04
- 160. T8B05
- 161. T8B06
- 162. T8B08
- 163. T8B09
- 164. T8B11
- 165. T8C03
- 166. T8C04
- 167. T8C06
- 168. T8C07
- 169. T8C08
- 170. T8C09
- 171. T8C10
- 172. T8C11

**NC4FB Technician License Exam Question Pool Comparison
(2018-2022) compared to (2014-2018)**

- 173. T8D01
- 174. T8D03
- 175. T8D04
- 176. T8D05
- 177. T8D06
- 178. T8D07
- 179. T8D08
- 180. T8D09
- 181. T8D10
- 182. T9A02
- 183. T9A03
- 184. T9A04
- 185. T9A06
- 186. T9A07
- 187. T9A09
- 188. T9A10
- 189. T9A11
- 190. T9A12
- 191. T9B01
- 192. T9B02
- 193. T9B03
- 194. T9B04
- 195. T9B05
- 196. T9B07
- 197. T9B09
- 198. T9B10
- 199. T0A02
- 200. T0A03
- 201. T0A07
- 202. T0A08
- 203. T0A09
- 204. T0A10
- 205. T0B02
- 206. T0B06
- 207. T0B07
- 208. T0B09
- 209. T0B10
- 210. T0B11
- 211. T0B12