ASOC EXAM QUESTION BANK

SECTION A

1. A voltage will influence current only if the circuit is: [d]

a) open b) insulated c) high resistance d) closed

2. Which component stores energy in electric field. [b]

a) resistor b) capacitor c) inductor d) transistor

3. Which element stores energy in magnetic field. [c]

a) resistor b) capacitor c) inductor d) transistor

4. Which battery is non chargeable. [d]

a) Lead acid b) nickel cadmium c) lithium ion d) zinc carbon

5. The color band on the right side of a color coded resistor represents [c]

a) First digit b) Decimal multiplier c) Percentage tolerance d) rating

6. A voltmeter is used: [c]

a) to measure current b) in series with the circuit c) in parallel with the circuit d) to measure coulombs

7. If the current in a circuit equals 0 A, it is likely that the [d]

a) voltage is too high b) resistance is too low c) circuit has a short d) circuit is open

8. One coulomb passing a point in one second is one: [a]

a) ampere b) volt c) ohm d) charge

9. A switch is a device that: [d]

a) short circuits complex circuits b) holds a fuse c) has double poles d) opens or completes a current path

10. The term used to designate electrical pressure is: [a]

a) voltage b) current c) resistance d) conductance

11. _____ are materials in which electric charges do not move easily. [a]

a) Insulators b) Conductors c) Circuits d) Metals

12. Kirchoff_’s current law is applicable only to [b]

a) Electronic circuits b) Junction in a network c) electric circuits d) None of these

13. ____can prevent damage caused to buildings by lightning strikes. [c]

a) Insulating b) Conducting c) Grounding d) Charging

14. The measure of how difficult it is for electrons to flow in an object is called the _____. [b]

a) electric circuit b) electric resistance c) magnetic domain d) electric field

15. When a portable radio is playing, the current in the radio is 0.3 A. If the resistance of the radio is 30.0 Ohm, what is the voltage supplied by the radio battery? [b]

a) 12 V b) 9 V c) 6 V d) 15 V

16. _____ is a measure of the amount of electrical energy transferred by an electric charge as it moves from one point to another in a circuit. [a]

a) Current b) Charge c) Electric circuit d) Voltage

17. A(n) _____ is made of a current-carrying wire wrapped around an iron core. [d]

a) electric current b) insulator c) conductor d) electromagnet

18. What is the unit of charge? [a]

a) Coulomb b) Newton. c) Watt d) Ohm

19. Which of the following does not describe the magnetic force between two magnets? [a]

a) The like poles attract. b) The like poles repel.

c) It decreases as the magnets move apart.

d) The unlike poles attract.

20. The maximum efficiency of a half-wave rectifier is [c]

a) 60% b) 66.7% c) 40.6% d) 84.12%

21. The barrier potential for Silicon [d]

a) 0.01V b) 0.1V c) 0.3V d) 0.7V

22. The barrier potential for germanium [c]

a) 0.01V b) 0.1V c) 0.3V d) 0.7V

23. The main cause why electrons can tunnel through a P-N junction, is due to [c]

a) their higher energy b) low impurity level c) thin layer depletion d) low barrier potential

24. The ripple factor of a full wave rectifier without filter is [b]

a) 1.11 b) 0.482 c) 0.67 d) 0.157

25. The unit of electrical resistance is the [c]

a) Joule. b) Ampere. c) Ohm. d) Watt.

26. In a flashlight two 1.5 volt batteries are connected in series. The result is [b]

a) An equivalent voltage of 1.5 volts, but more current will flow. b) An equivalent voltage of 3 volts. c) That no current will flow.

27. What is an electromagnet? [c]

a) A magnet that makes electricity. b) a magnet made of coiled wire that works when electricity runs through it . c) a permanent magnet that is made using electricity

28. The type of current in a battery powered radio is.. [c]

a) static current b) alternating current c) direct current d) potential current

29. If you increase the voltage across a resistor, what happens to the current [a]

a) As the voltage increases, the current decreases. b) The current will not change if the resistor stays the same. c) As the voltage increases, the current increases.

30. Kirchhoff's voltage law states that: [c]

a) the sum of the voltage drops in a series circuit is equal to the total applied voltage.

b) the algebraic sum of the resistances is equal to the sum of the voltages .

c) the algebraic sum of the individual currents around a closed loop is zero.

d) the voltages developed across each element in a series circuit are identical

31. The voltage drop across a series resistor is proportional to what other value? [a]

a) total resistance b) its own resistance c) wattage rating d) the amount of time the circuit is on

32. One kilowatt hour of electrical energy is the same as [c]

a) 36 x 105.watts.b) 36 x 10s ergs c) 36 x 105 d) 36 x 105 joules B.T.U.

33. An electric current of 5 A is same as [c]

a) 5 J / C b) 5 V / C c) 5 C / sec d) 5 W/ sec.

34. Which of the following quantities can be measured in the unit of kilowatt • hour? [b]

a) Power b) Electrical energy c) Fuse rating d) Power rating

35. Which of the following bulbs will have the least resistance ? [d]

a) 220 V, 60 W b) 220 V, 100 W c) 115 V, 60 W d) 115 V, 100 W.

36. When electromagnetic waves traveling in free space, which of the phenomenon

is associated with it [c]

a) Diffraction b) Refraction c) Attenuation d) Reflection

37. Which is used as a multi-band HF receiving antenna [b]

a) Conical horn b) Long-periodic c) Square—loop d) Folded-dipole

38. The designed output impedance of the antenna socket of most modern transmitters is nominally:[b]

a) 25 ohm b) 50 ohm c) 75 ohm d) 100 ohm

39. The range of audible frequency for humans is [a]

a) 20Hz to 20KHz b) 20Hz to 15MHz c) 20KHz to 15MHz d) 2MHz to 20MHz

40. If the antenna is vertical with respect to earth, then waves are [b]

a) Constant b) Polarized vertical c) Polarized horizontal d) None of these

41. In a capacitor, the electric charge is stored in _ [a]

a) Metal plates b) Dielectric c) Terminals d) both a &c

42. Connecting a lead from the negative to the positive of a battery will produce: [b]

a) A high resistance circuit b) A short circuit c) A low current path d) An open circuit

43. If two resistors are placed in series, is the final resistance: [a]

a) Higher b) Lower c) The same d) Cannot be determined

44. If a small value of capacitance is connected in parallel with a large value, the combined capacitance will be: [b]

a) The same b) Higher c) Lower

45. If the voltage on the base of a transistor increases, does it: [c]

a) Turn on b) Turn off c) Not enough information d) Remain the same

46. A 100n capacitor in parallel with 10n produces: [c]

a) 90n b) 100n c) 110n d) Cannot be determined

47. A resistor with colour bands: red-red-red-gold, has the value: [b]

a) 22k 5% b) 2k2 5% c) 220R 5% d) 22R 5%

48. A resistor and capacitor in series is called a: [b]

a) Pulse Circuit b) Timing Circuit/Delay Circuit c) Oscillator Circuit/Frequency Circuit d) Schmitt Circuit

49. A red-red-red-gold resistor in series with an orange-orange-orange-gold resistor produces: [b]

a) 5k5 b) 35,200 ohms c) 55k d) None of the above

50. To obtain a higher value of resistance, resistors are connected in: [d]

a) Reverse b) Forward c) Parallel d) Series

51. A capacitor and coil in parallel is called: [a]

a) A Tuned Circuit b) A Timing Circuit c) A Delay Circuit d) A Schmitt Circuit

52. The current in a circuit is 45mA. This is: [a]

a) 0.045A b) 0.00045A c) 0.0045A d) 0.45A

53. A 100n capacitor can be expressed as: [a]

a) 0.1µ b) 0.01µ c) 0.001µ d) none of the above

54. 1mA is equal to: [a]

a) 0.001A b) 0.00001A c) 0.01A d) 0.1A

55. If a 10k resistor is placed across a 10v supply, the current will be: [b]

a) 10mA b) 1mA c) 0.01mA d) 0.1mA

56. DC voltage ____ [c]

a) rises and falls b) is a sine wave c) remains constant d) is an audio waveform

57. A CRO is a [b]

a) Cathode Ray Oscillator b) Cathode Ray Oscilloscope

c) Capacitor-Resistor Oscillator d) Capacitor-Resistor Output

58. The tolerance bands: [c]

a) 10%, 5%, 1% b) 5%, 10%, 2% c) 5%, 10%, 1% d) 10%, 5%, 2%

59. A battery is a source of [c]

a) solar energy b) nuclear energy c) chemical energy d) hydro energy

60. Find the equivalent resistance of 2 No's 10K resistor in parallel [a]

a) 5k b) 10K c) 15K d) 20K

61. Find the equivalent capacitance of 3 No's 10pf capacitor in parallel [c]

a) 10pf b) 20pf c) 30pf d) 15pf

62. Which type resistor cannot be used in RF circuits [c]

a) Carbon film b) Metal film c) Wire wound

63. The tendency of AC current flowing through a surface of a solid conductor [b]

a) Proximity effect b) skin effect c) radiation effect

64. The resistance of a 100 W, 200 V lamp is [c]

a) 100 ohm b) 200 ohm c) 400 ohm d) 1600 ohm.

65. The instrument used for measuring electric current is : [a]

a) ammeter b) galvanometer c) voltmeter d) potentiometer

66. In which device is a permanent magnet used? [c]

a) electric bell b) electromagnet c) plotting compass d) relay e) transformer

67. A coil of copper wire wrapped around a core could be used as an electromagnet. Which of the following combinations would produce the strongest electromagnet? Number of turns [d]

a) few b) few soft-iron steel c) many d) many e) many Copper soft-iron steel

68. A transformer which is 80% efficient gives an output of 12V and 4A. What is the input power? [b]

a) 13W b) 38W c) 60W d) 154W

69. Why is electrical energy usually transmitted at high voltage? [c]

a) the resistance of the transmission cables is as small as possible

b) the transmission cables are safer to handle

c) as little energy as possible is wasted in the transmission cables

d) the transmission system does not require transformers e) the current in the transmission cables is as large as possible

70. The potential difference required to pass a current 0.2 A in a wire of resistance 20W is ____. [a]

a) 100 V b) 4 V c) .01 V d) 40 V

71. The work done in moving a unit positive charge across two points in an

electric circuit is a measure of _____. [b]

a) current b) potential difference c) resistance d) power

72. When there is an electric current passing through a wire, the particles moving are __ [a]

a) electrons b) protons c) atoms d) ions

73. When a fuse is rated 8 A, it means _____. [d]

a) it will not work if current is less than 8 A b) it has a resistance of 8 W

c) it will work only if current is 8 A d) it will melt if current exceeds 8 A

74. Which of the following is a conductor [c]

a) Glass b) wood c) Tungsten d) Plastic

75. Which of the following is the best conductor for electricity? [b]

a) Distilled water b) Salt water c) Tap water d) Rain water

76. Filaments of electric bulbs are usually made of [b]

a) Nichrome b) Tungsten c) Copper d) Carbon.

77. What is the color code for a 220ohm 5% resistor? [a]

a) Red, Red, Brown, Gold b) Orange, Orange, Black, Gold

c) Red, Red, Black, Gold d) Red, Red, Brown, Silver

78. In a receiver, which stage rectifies the IF signal? [c]

a) Mixer b) Frequency converter c) Detector d) Loud speaker

79. The quality factor of R-L-C circuit will increase if [a]

a) R increases b) R decreases c) Impedance increases d) voltage increases

80. Which material opposes the movement of free electrons? [b]

a) Conductor b) Insulator c) Semiconductor d) Element

81. A basic electric circuit is made up of what components? [b]

a) A load, a resistor, and a conductive path for current

b) A voltage source, a load, and a conductive path for current

c) A voltage source, a conductive path for current, and a battery

d) A conductive path for current, a battery, and a copper wire

82. An ammeter is used to measure [b]

a) voltage b) current c) resistance d) All the above

83. If an electrical system is compared to a fluid system, the electrical current corresponds to the: [d]

a) pressure b) pump c) water wheel d) water flow

84. Components that connect in parallel form: [a]

a) branches b) open circuits c) short circuits d) a voltage divider

85. Kirchhoff's current law for parallel circuits states that the: [d]

a) sum of all branch voltages equals zero

b) total circuit resistance is less than the smallest branch resistor

c) sum of currents into a junction is equal to the difference of all the branch currents.

d) sum of the total currents flowing out of a junction equals the sum of the total currents flowing into that junction

86. What is the total resistance of four 1 k parallel-connected resistors? [b]

a) 200 ohms b) 250 ohms c) 400 ohms d) 4 kilo ohms

87. What is the total opposition to current in a series RC circuit called? [a]

a) impedance b) inductance c) reactance d) resistance

88. A capacitor is constructed of two parallel: [a]

a) conductors b) semiconductors c) inductors d) dielectrics

89. The material used between the plates of a capacitor is called its: [b]

a) insulation material b) dielectric material c) separation material d) plate-divider material

90. In a power supply diagram, which block indicates a smooth dc output? [b]

a) transformer b) filter c) rectifier d) regulator

91. A filtered full-wave rectifier voltage has a smaller ripple than does a half-wave rectifier voltage for the same load resistance and capacitor values because: [a]

a) there is a shorter time between peaks b) there is a longer time between peaks

c) the larger the ripple, the better the filtering action d) none of the above

92. The voltage where current may start to flow in a reverse-biased pn junction is called the…. [a]

a) breakdown voltage b) barrier potential c) forward voltage d) biasing voltage

93. In a power supply diagram, which block indicates a pulsating dc output? [c]

a) transformer b) filter c) rectifier d) regulator

94. Which of the following circuits would require the least amount of filtering? [d]

a) A half-wave rectifier b) A full-wave rectifier

c) A bridge rectifier d) A full-wave rectifier and a bridge rectifier.

95. The unit for frequency is the [a]

a) hertz b) ampere c) watt d) second

96. What is the kilowatt-hour consumption of a 40 W lamp if it remains on for 1750 h? [b]

a) 43.75 b) 70 c) 43,750 d) 70,000

97. Ohm's law describes the mathematical relationship between [c]

a) ohms, kilohm's, and megohms b) resistor size and resistor value

c) resistance, voltage, and current d) none of the above

98. What formula is used to calculate voltage in a circuit? [a]

a) Voltage (E) equals current (I) multiplied by resistance (R)

b) Voltage (E) equals current (I) divided by resistance (R)

c) Voltage (E) equals current (I) added to resistance (R)

d) Voltage (E) equals current (I) minus resistance (R)

99. What formula is used to calculate resistance in a circuit? [a]

a) Resistance (R) equals voltage (E) multiplied by current (I)

b) Resistance (R) equals voltage (E) divided by current (I)

c) Resistance (R) equals voltage (E) added to current (I)

d) Resistance (R) equals voltage (E) minus current (I)

100. What are the effects of moving a closed wire loop through a magnetic field? [d]

a) A voltage is induced in the wire. b) A current is induced in the wire.

c) The polarity across the wire depends on the direction of motion. d) All the above

101. What do you call the characteristic of a magnetic material whereby a change in magnetization lags the application of a magnetizing force? [a]

a) Hysteresis b) Induction c) Retentivity d) Reluctance

102. Increasing the number of turns of wire on the secondary of a transformer will [b]

a) increase the secondary current b) decrease the secondary current

c) have no effect on the secondary current d) increase the primary current

103.Mutual induction is dependent on [b]

a) winding ratios b) output polarities c) DC voltage levels d) current changes

104.What is the name for the distance a radio wave travels during one complete cycle [c]

a) Wave speed b) Waveform c) Wavelength d) Wave spread

105.What device increases the low-power output from a hand-held transceiver? b]

a) A voltage divider b) An RF power amplifier

c) An impedance network d) A voltage regulator

106.What is the name of a device that combines several semiconductors and other components into one package? [c]

a) Transducer b) Multi-pole relay c) Integrated circuit d) Transformer

107. Which of these components is made of three layers of semiconductor material? [b]

a) Alternator b) Bipolar junction transistor c) Triode d) Pentagrid converter

108.What electrical component is usually composed of a coil of wire? [d]

a) Switch b) Capacitor c) Diode d) Inductor

109.What is the voltage across a 10-ohm resistor if a current of 1 ampere flows through it? [b]

a) 1 volt b) 10 volts c) 11 volts d) 9 volts

110.What is the formula used to calculate electrical power in a DC circuit? [a]

a) Power (P) equals voltage (E) multiplied by current (I)

b) Power (P) equals voltage (E) divided by current (I)

c) Power (P) equals voltage (E) minus current (I)

d) Power (P) equals voltage (E) plus current (I)

111.Electrical current is measured in which of the following units? [d]

a) Volts b) Watts c) Ohms d) Amperes

112.What is the purpose of the squelch control on a transceiver? [d]

a) To set the highest level of volume desired b) To set the transmitter power level

c) To adjust the automatic gain control d) To mute receiver output noise when no signal is being received

113.What is the radio horizon? [a]

a) The distance at which radio signals between two points are effectively blocked by the curvature of the Earth

b) The distance from the ground to a horizontally mounted antenna

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

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

114.What is a good way to guard against electrical shock at your station? [d]

a) Use three-wire cords and plugs for all AC powered equipment b) Connect all AC powered station equipment to a common safety ground c) Use a circuit protected by a ground-fault interrupter d) All of these choices are correct

115.Why must the metal enclosure of every item of station equipment be grounded? [d]

a) It prevents blowing of fuses in case of an internal short circuit b) It prevents signal overload c) It ensures that the neutral wire is grounded d) It ensures that hazardous voltages cannot appear on the chassis

116.Which of the following is an advantage of an oscilloscope versus a digital voltmeter? [d]

a) An oscilloscope uses less power b) Complex impedances can be easily measured
c) Input impedance is much lower d) Complex waveforms can be measured

117.What is reactance? [b]

a) Opposition to the flow of direct current caused by resistance

b) Opposition to the flow of alternating current caused by capacitance or inductance

c) A property of ideal resistors in AC circuits

d) A large spark produced at switch contacts when an inductor is de-energized

118.What is the peak-to-peak voltage of a sine wave that has an RMS voltage of 120 volts? [d]

a) 84.8 volts b) 169.7 volts c) 240.0 volts d) 339.4 volts

119.What is the inductance of a 20 millihenry inductor in series with a 50 millihenry inductor? [c]

a) .07 millihenrys b) 14.3 millihenrys c) 70 millihenrys d) 1000 millihenrys

120.What circuit is used to process signals from the RF amplifier and local oscillator and send the result to the IF filter in a super-heterodyne receiver? [c]

a) Balanced modulator b) IF amplifier c) Mixer d) Detector

121.What type of bias is required for an LED to emit light? [b]

a) Reverse bias b) Forward bias c) Zero bias d) Inductive bias

122.What is the resistance of a circuit in which a current of 3A through a Resistor connected to 90 volts? [b]

a) 3 ohms b) 30 ohms c) 93 ohms d) 270 ohms

123.Which type of modulation is most commonly used for VHF and UHF voice repeaters? [d]

a) AM b) SSB c) PSK d) FM

124.Q factor of a coil is measure of its [b]

a) Sensitivity b) selectivity c) Resistivity d) conductivity

125.How fast does a radio wave travel through free space? [c]

a) at the speed of light b) At the speed of sound

c) Its speed is inversely proportional to its wavelength

d) Its speed increases as the frequency increases

126.How does the wavelength related to frequency? [b]

a) The wavelength gets longer as the frequency increases

b) The wavelength gets shorter as the frequency increases

c) There is no relationship between wavelength and frequency

d) The wavelength depends on the bandwidth of the signal

127.What is the formula for converting frequency to wavelength [d]

a) Wavelength in meters equals frequency in hertz multiplied by 300

b) Wavelength in meters equals frequency in hertz divided by 300

c) Wavelength in meters equals frequency in megahertz divided by 300

d) Wavelength in meters equals 300 divided by frequency in megahertz

128.What are the frequency limits of VHF spectrum? [b]

a) 30 to 300 kHz b) 30 to 300MHz c) 300 to 3000 kHz d) 300 to 3000 MHz.

129.What are the frequency of UHF spectrum? [d]

a) 30 to 300 kHz b) 30 to 300MHz c) 300 to 3000 kHz d) 300 to 3000 MHz.

130.What frequency range is referred to as HF? [a]

a) 3 to 30 MHz b) 30 to 300MHz c) 300 to 3000 kHz d) 300 to 3000 MHz.

131.How many milliamperes is 1.5 amperes? [c]

a) 15 milliamperes b) 150 milliamperes c) 1500 milliamperes d) 15,000 milliamperes

132.Which sideband is normally used for 10meter HF, VHF and UHF single-side band communications? [a]

a) Upper sideband b) Lower sideband c) Suppressed sideband d) Double sideband

133.What is the primary advantage of single sideband over FM [b]

a) SSB signals are easier to tune b) SSB signals are less susceptible to interference

c) SSB signals have narrower bandwidth d) All the above options are correct

134.What term describes the number of times per second that an alternating current reverses direction? [b]

a) Pulse rate b) Speed c) Wavelength d) Frequency

135.What is the name for a current that flows only in one direction? [b]

a) Alternating current b) Direct current c) Normal current d) Smooth current

136.What is the electrical term for the electromotive force (EMF) that causes electron flow? [a]

a) Voltage b) Ampere-hours c) Capacitance d) Inductance

137.How many volts are equal to one kilovolt? [c]

a) One one-thousandth of a volt b) One hundred volts c) One thousand volts d) One million volts

138.How many volts are equal to one microvolt? [a]

a) One one—millionth of a volt b) One million volts

c) One thousand kilovolts d) One one-thousandth of a volt

139.Which of the following is equivalent to 500 milliwatts?[b]

a) 0.02 watts b) 0.5 watts c) 5 watts d) 50 watts

140.A coaxial feed-line is constructed from: [c]

a) a single conductor b) two parallel conductors separated by spacers

c) braid and insulation around a central conductor d) braid and insulation twisted together

141.What electrical component is used to disconnect electrical circuits? [b]

a) Zener Diode b) switch c) inductor d) resistor

142.What electrical component is used to protect other circuit components from current overloads?[a]

a) Fuse b) Capacitor c) Inductor d) switch

143.Which electronics component allows current to flow in only one direction? [c]

a) Resistor b) Fuse c) Diode d) Capacitor

144.Which of these components can be used as an electronic switch or amplifier? [c]

a) Diode b) Potentiometer c) Transistor d) Inductor

145.How many micro-farads are 1,000,000 picofarads? [b]

a) 0.001 micro farads b) one micro farad c) 1000 micro farad d) 10000 micro farads

146. The wavelength for a frequency of 25 MHz is: [d]

a) 15 m b) 32 m c) 4 m d) 12 m

147.What type of modulation is most commonly used for VHF packet radio transmissions? [a]

a) FM b) SSB c) AM d) Spread Spectrum

148.Which type of voice modulation is most often used for long distance or weak signal contacts on the VHF and UHF hands? [c]

a) FM b) AM c) SSB d) PM

149.Which of the following types of emission has the narrowest bandwidth? [c]

a) FM voice b) SSB voice c) CW d) Slow-scan TV

150.One GHz is equal to: [d]

a) 1000 kHz b) 10 MHz c) 100 MHz d) 1000 MHz

151.Which of the following electronic components can amplify signals? [a]

a) Transistor b) Variable resistor c) Electrolytic capacitor d) Diode

152.What does the abbreviation “LED” stand for? [b]

a) Low Emission Diode b) Light Emitting Diode c) Liquid Emission Detector

153.What does the abbreviation “FET" stand for? [a]

a) Field Effect Transistor b) Fast Electron Transistor

c) Free Electron Transistor d) Field Emission Thickness

154.What are the names of the two electrodes of a diode? [c]

a) Plus and minus b) Source and drain c) anode and cathode d) Base and emitter

155.How much power is being applied in a circuit when the applied voltage is 13.8 volts DC and current is 10A [a]

a) 138 Watts b) 0.7 Watts c) 23.8 Watts d) 3.8 Watts

156.What formula is used to calculate current in a circuit? [b]

a) Current (I) equals voltage (E) multiplied by resistance R

b) Current (I) equals voltage (E) divided by resistance R

c) Current (I) equals voltage (E) added to resistance R

d) Current (I) equals voltage (E) minus resistance R

157.What is the resistance of a circuit that draws 4A from a 12-volt source? [a]

a) 3ohms b) 16 ohms c) 43 ohms d) 8 ohms

158.Which instrument would you use to measure electric potential or electromotive force? [b]

a) An ammeter b) A voltmeter c) A wave meter d) An ohmmeter

159. The reactance of an inductor increases as the: [a]

a) frequency increase b) frequency decreases

c) applied voltage increases d) applied voltage decreases

160.How is an ammeter usually connected to a circuit? [a]

a) In series with the circuit b) In parallel with the circuit

c) In quadrature with the circuit d) In phase with the circuit

161.What electrical component is used to oppose the flow of current in a DC circuit? [b]

a) Inductor b) Resistor c) Voltmeter d) Transformer

162.Which of the following does not change in a transformer ? [c]

a) Current b) Voltage c) Frequency d) All the above

163. In a transformer the energy is conveyed from primary to secondary [c]

a) through cooling coil b) through air c) by the flux d) none of the above

164.A transformer core is laminated to [b]

a) reduce hysteresis loss b) reduce eddy current losses

c) reduce copper losses d) reduce all above losses

165. The degree of mechanical vibrations produced by the laminations of a transformer depends on [d]

a) tightness of clamping b) gauge of laminations c) size of laminations d) all the above

166. The purpose of providing an iron core in a transformer is to [c]

a) provide support to windings b) reduce hysteresis loss

c) decrease the reluctance of the magnetic path d) reduce eddy current losses

167.A transformer cannot raise or lower the voltage of a D.C. supply because [c]

a) there is no need to change the D.C. voltage b) a D.C. circuit has more losses

c) Faraday's laws of electromagnetic induction are not valid since the rate of change of flux is zero

d) none of the above

168. Primary winding of a transformer [c]

a) is always a low voltage winding b) is always a high voltage winding

c) could either be a low voltage or high voltage winding d) none of the above

169.An ideal transformer is one which has [a]

a) no losses and magnetic leakage b) interleaved primary and secondary windings

c) a common core for its primary and secondary windings

d) core of stainless steel and winding of pure copper metal e) none of the above

170. The transformer laminations are insulated from each other by [b]

a) mica strip b) thin coat of varnish c) paper d) any of the above

171. The size of a transformer core will depend on [d]

a) frequency b) area of the core c) flux density of the core material d) (a) and (b) both

172.When the turns ratio of a transformer is 20 and the primary ac voltage is 12 V, the secondary voltage is [c]

a) 120v b) 12v c) 240v d) 440v

173. The primary and secondary winding of a transformer are [c]

a) Conductively linked. b) Inductively linked. c) Electrically linked. d) Mechanically linked.

174.What type of component is often used as an adjustable volume control? [c]

a) Fixed resistor b) Power resistor c) Potentiometer d) Transformer

175.What electrical parameter is controlled by a potentiometer? [b]

a) Inductance b) Resistance c) Capacitance d) Field strength

176.What is the term that describes a transistor's ability to amplify a signal? [a]

a) Gain b) Forward resistance c) resistance d) impedance

177.What component is commonly used to change 230V AC house voltage to a lower AC voltage for other uses? [b]

a) Variable capacitor b) transformer c) Transistor d) Diode

178.When frequency of a carrier is varied according to modulation the result is [a]

a) frequency modulation b) amplitude modulation c) product detection d) none of these

179. The quartz Crystal oscillator is known for its [b]

a) linearity b) stability c) high output d) flexibility

180. The Law behind electromagnetism is [b]

a) Newton's law b) Faraday's law c) Kirchhoff's law d) Kepler's law

181. Increasing the number of turns on an inductor will make its inductance: [b]

a) decrease b) increase c) remain unchanged d) become resistive

182.Which of the following is commonly used as a visual indicator? [a]

a) LED b) FET c) Zener diode d) Bipolar transistor

183.Which of the following is used together with an inductor to make a tuned circuit? [d]

a) Resistor b) Zener diode c) Potentiometer d) Capacitor

184.A semiconductor is said to be doped when small quantities of the following are added: [d]

a) electrons b) protons c) ions d) impurities

185. Line of sight propagation is the mode of communication in [d]

a) LF b) HF c) MF d) UHF/VHF

186. Zener Diodes are used for [c]

a) Rectification b) Detection c) Voltage regulation d) Current Regulation

187. In a resonant circuit [a]

a) XL b) XL c) XL = XC >XC <XC d) none of these

188.What is the function of a product detector? [c]

a) Detect phase modulated signals b) Demodulate FM signals

c) Detect CW and SSB signals d) Modulate speech with RF

189.Which of the following circuits demodulates FM signals? [b]

a) Limiter b) Discriminator c) Product detector d) Phase inverter

190.Which term describes the ability of a receiver to discriminate between multiple signals? [c]

a) Tuning rate b) Sensitivity c) Selectivity d) Noise floor

191.Where is an RF pre-amplifier installed? [a]

a) between the antenna and receiver b) At the output of the transmitters power amplifier

c) Between a transmitter and antenna tuner d) At the receiver's audio output

192.Why is UHF signals often more effective from inside buildings than VHF signals? [b]

a) VHF signals lose power faster over distance

b) the shorter wavelength allows them to more easily penetrate the structure of buildings

c) This is incorrect; VHF works better than UHF inside buildings

d) UHF antennas are more efficient than VHF antennas

193.Which part of the atmosphere enables the propagation of radio signals around the world? [c]

a) The stratosphere b) The troposphere c) The ionosphere d) The mesosphere

194.What causes “tropospheric ducting"? [d]

a) Discharges of lightning during electrical storms b) Sunspots and solar flares

c) Updrafts from hurricanes and tornadoes d) Temperature inversions in the atmosphere

195.What are the two components of a radio wave? [c]

a) AC and DC b) Voltage and current

c) Electric and magnetic fields d) Ionizing and non-ionizing radiation

196.What is the function of a mixer in a super-heterodyne receiver? [c]

a) To reject signals outside of the desired passband

b) To combine signals from several stations together

c) To shift the incoming signal with an intermediate frequency

d) To connect the receiver with an auxiliary device

197.Which of the following circuits combines a speech signal and an RF carrier? [c]

a) Beat frequency Oscillator b) Discriminator c) Modulator d) Noise blanker

198.What is meant by the gain of an antenna? [c]

a) The additional power that is added to the transmitter power

b) The additional power that is lost in the antenna when transmitting on a higher frequency

c) the increase in signal strength when compared to a reference antenna

d) The increase in impedance on receive or transmit compared to a reference antenna

199. The impedance of a resonant circuit is [b]

a) Zero b) Equal to resistance c) Unity d) Equal to reactance

200.A Diode can be used as [a]

a) Rectifier b) Amplifier c) Oscillator d) All the above

201.An Oscillator is based on [a]

a) Positive feedback b) Negative feedback c) No feedback d) both a & b

202. The output signal of an CE amplifier will be [c]

a) 45 deg out of phase b) 90 deg out of phase c) 180 deg out of phase

203. "VOX" stands for: [b]

a) volume operated extension speaker b) voice operated transmit

c) variable oscillator transmitter d) voice operated expander

204. The output signal of a detector in a communication receiver is in [a]

a) Audio Frequency range b) Radio frequency range

c) Intermediate Frequency range d) All the above

205. In a Radio receiver, the sensitivity is governed by [a]

a) RF b) Detector c) AF d) None of the above

206. The noise in a Radio receiver can be expressed as [a]

a) S/N ratio b) N/S ratio c) Level of reference signal d) None of above

207. The most suitable antenna for receiving VHF range is [c]

a) Dipole b) Log periodic c) Yagi d) None of the above

208.Which of the following instruments can be used to determine if an antenna is resonant at the designed frequency? [b]

a) A multimeter b) Antenna analyzer c) A "Q" meter d) A frequency counter

209. The 'RMS value' of a sine-wave signal is: [d]

a) half the peak voltage b) 1.414 times the peak voltage

c) the peak-to-peak voltage d) 0.707 times the peak voltage

210.What does the term "RIT" mean? [b]

a) Receiver Input Tone b) Receiver Incremental Tuning

c) Rectifier Inverter Test d) Remote input Transmitter

211. The colour bands of a 4.7KOhm 5% resistor are [b]

a) Yellow, Violet, Orange and Gold b) Yellow, Violet, Red and Gold

c) Yellow, Violet, Orange and Silver d) Yellow, Violet, Red and Silver

212. The layer that reflects higher frequencies in HF range during the day time is [b]

a) F1 layer b) F2 layer c) E layer d) D layer

213. The power conversion efficiency of a Full-wave rectifier is [d]

a) 40.6% b) 51.2% c) 100% d) 81.2%

214. The side-band system adopted for Television transmission [b]

a) Independent Sideband b) vestigial Sideband c) Suppressed Sideband. d) All the above

215. The oscillator that makes a communication receiver capable of receiving morse code is [c]

a) Voltage Controlled Oscillator b) Local Oscillator c) Beat Frequency Oscillator d) Phase Locked Loop

216. The following material is considered to be a semiconductor: [c]

a) copper b) sulphur c) silicon d) tantalum

217. The Transformers are rated in [d]

a) Watts b) Volts c) Amperes d) Volt-Amperes

218.A common use for a permanent magnet is: [a]

a) A computer speaker b) An optical mouse c) A keyboard d) A magnetic loop antenna

219. In an n-type semiconductor, the current carriers are: [b]

a) holes b) electrons c) positive ions d) photons

220. In a p-type semiconductor, the current carriers are: [b]

a) photons b) electrons c) positive ions d) holes

221. Impedance is a combination of: [b]

a) reactance with reluctance b) resistance with conductance

c) resistance with reactance d) reactance with radiation

222.A simple transmitter requires a 50 ohm dummy load. You can fabricate this from: [c]

a) four 300 ohm resistors in parallel b) five 300 ohm resistors in parallel

c) six 300 ohm resistors in parallel d) seven 300 ohm resistors in parallel

223. The time for one cycle of a 100 Hz signal is: [b]

a) 1 second b) 0.01 second c) 0.0001 second d) 10 seconds

224.A component is identified as a capacitor if its value is measured in: [b]

a) Microvolts b) Milli henrys c) Megohms d) Micro farads

225. Two basic types of bipolar transistors are: [b]

a) p-channel and n-channel types b) NPN and PNP types

c) diode and triode types d) Varicap and Zener types

226.A "linear amplifier" is: [b]

a) an amplifier to remove distortion in signals from the transceiver

b) an optional amplifier to be switched in when higher power is required

c) an amplifier with all components arranged in-line

d)a push-pull amplifier to cancel second harmonic distortion

227.A dummy antenna: [d]

a) attenuates a signal generator to a desirable level

b) provides more selectivity when a transmitter is being tuned

c) matches an AF generator to the receiver

d) duplicates the characteristics of an antenna without radiating signals

228. The "S meter" on a receiver: [d]

a) indicates where the squelch control should be set

b) indicates the standing wave ratio

c) indicates the state of the battery voltage

d) indicates relative incoming signal strengths

229. The term "PTT" means: [a]

a) push to talk b) piezoelectric transducer transmitter

c) phase testing terminal d) phased transmission transponder

230. The term "ALC" stands for: [b]

a) audio limiter control b) automatic level control

c) automatic loudness control d) automatic listening control

231. The AGC circuit is to: [c]

a) expand the audio gain b) limit the extent of amplitude generation

c) minimize the adjustments needed to the receiver gain control knobs

d) amplitude limits the crystal oscillator output

232. The frequency stability of a receiver is its ability to: [a]

a) stay tuned to the desired signal b) track the incoming signal as it drifts

c) provide a frequency standard d) provide a digital readout

233.Of two receivers, the one capable of receiving the weakest signal will have: [a]

a) an RF gain control b) the least internally-generated noise

c) the loudest audio output d) the greatest tuning range

234. The figure in a receiver's specifications which indicates its sensitivity is the: [c]

a) bandwidth of the IF in kilohertz b) audio output in watts

c) signal plus noise to noise ratio d) number of RF amplifiers

235. If two receivers are compared, the more sensitive receiver will produce: [c]

a) more than one signal b) less signal and more noise

c) more signal and less noise d) a steady oscillator drift

236. The ability of a receiver to separate signals close in frequency is called its: [d]

a) noise figure b) sensitivity c) bandwidth d) selectivity

237.A receiver with high selectivity has a: [c]

a) wide bandwidth b) wide tuning range

c) narrow bandwidth d) narrow tuning range

238. The BFO in a superhet receiver operates on a frequency nearest to that of its: [d]

a) RF amplifier b) audio amplifier c) local oscillator d) IF amplifier

239.One important application for diodes is recovering information from transmitted signals. This is referred to as: [d]

a) biasing b) rejuvenation c) ionization d) demodulation

240. The AGC circuit in a receiver usually controls the: [b]

a) audio stage b) mixer stage c) power supply d) RF and IF stages

241. The mixer stage of a superhet receiver: [b]

a) produces spurious signals b) produces an intermediate frequency signal

c) acts as a buffer stage d) demodulates SSB signals

242. The abbreviation AGC means: [b]

a) attenuating gain capacitor b) automatic gain control

c) anode-grid capacitor d) amplified grid conductance

243.Morse code is usually transmitted by radio as: [a]

a) an interrupted carrier b) a voice modulated carrier

c) a continuous carrier d) a series of clicks

244. The process of modulation allows: [a]

a) information to be impressed on to a carrier b) information to be removed from a carrier

c) voice and Morse code to be combined d) none of these

245. The following unit in a DC power supply performs a smoothing operation: [a]

a) an electrolytic capacitor b) a fuse

c) a crowbar d) a full-wave diode bridge

246.Magnetic and electric fields about an antenna are: [c]

a) parallel to each other b) determined by the type of antenna used

c) perpendicular to each other d) variable with the time of day

247. Radio wave polarisation is defined by the orientation of the radiated: [b]

a) magnetic field b) electric field c) inductive field d) capacitive field

248.A half-wave antenna is often called a: [c]

a) bi-polar b) Yagi c) dipole d) beam

249.All communications frequencies throughout the spectrum are affected in varying degrees by the: [d]

a) atmospheric conditions b) ionosphere c) aurora Borealis d) sun

250. The correct colour coding for the earth wire in a flexible mains lead is: [d]

a) Black b) violet c) Red d) Green

SECTION-B

251. The Amateur Service may be briefly defined as: [c]

a) a private radio service for personal gain and public benefit

b) a public radio service used for public service communications

c) a radio communication service for the purpose of self-training, intercommunication and technical investigation

d) a private radio service intended only for emergency communications

252. The organization responsible for the International Radio Regulations is the: [c]

a) European Radio communications Office b) United Nations

c) International Telecommunication Union d) European Telecommunication Standards Institute

253. The fundamental regulations controlling the Amateur Service is to be found in: [a]

a) the International Radio Regulations from the ITU b) the Radio Amateur's Handbook

c) the Ham Call book d) on the packet radio bulletin-board

254.All amateur stations, regardless of the mode of transmission used, must be equipped with: [a]

a) a reliable means for determining the operating radio frequency b) a dummy antenna

c) an over modulation indicating device d) a DC power meter

255.You identify your amateur station by transmitting your: [b]

a) "handle" b) call sign c) first name and your location d) full name

256. The Morse code signal SOS is sent by a station: [b]

a) with an urgent message b) in grave and imminent danger and requiring immediate assistance

c) making a report about a shipping hazard d) sending important weather information

257. The term "harmful interference" means: [a]

a) interference which obstructs or repeatedly interrupts radio communication services

b) an antenna system which accidentally falls on to a neighbor's property

c) a receiver with the audio volume unacceptably loud

d) interference caused by a station of a secondary service

258. International communications on behalf of third parties may be transmitted by an amateur station only if: [b]

a) prior remuneration has been received

b) such communications have been authorized by the countries concerned

c) the communication is transmitted in secret code

d) English is used to identify the station at the end of each transmission

259. The frequency limits of the “2 metre band” in India are: [b]

a) 144 to 149 MHz b) 144 to 146 MHz c) 146 to 148 MHz d) 144 to 150 MHz

260. The value of bandwidth shown as 3K50 is [a]

a) 3050 Hz b) 3500 Hz c) 3600 KHz d) 3050 KHz

261. The first character in class of Emission signifies about [b]

a) Nature of signal(s) modulating the main carrier b) Type of modulation of the main carrier

c) Type of information to be transmitted d) Details of multiplexing the signal(s)

262. The characters in the RST system stands for [c]

a) Readability, Signal and Test b) Readability,Signal strength and Test Gr

c) Readability, Signal strength and Tone d) Readability, Signal loss and Tone

263. The Phonetic used to represent digit ‘8' is [c]

a) Oceta Eight b) Okta Eight c) Okto Eight d) Oco Eight

264. The Answer or Advice for the Q-code ‘QTH’ is [a]

a) My exact location is..... b) What is your exact location?

c) My correct time is .... .. d) None of the above

265. The suffix that to be sent along with the call sign for a Mobile Amateur Station is [a]

a) MO b) MB c) MX d) None of the above

266. The abbreviation VA means [c]

a) End of transmission b) End of message c) End of working d) End of a schedule

267.Which Call sign holders are allowed to make contact via Ham Satellite. [a]

a) vu2xxx b) vu3xxx c) Both a & b d) None

268. Lady amateurs are known as [d]

a) XL b) XYL c) MYL d) YL

269.Minimum age to become an amateur is [a]

a) 12 yrs b) 14yrs c) 16yrs d) 18yrs

270.All timing in the Log book should be in [c]

a) UTC b) GMT c) Local time

271. Test signal shall not be continued more than ' [a]

a) 30 seconds b) 1 minute c) 2 minutes d) 3 minutes

272. Indian amateurs can communicate with other amateurs [c]

a) All countries b) Countries permitted by ITU

c) Countries permitted by Indian Government d) Countries permitted by IARU

273.What does the Q signal "QSL" mean? [c]

a) Send slower b) We have already confirmed by card

c) I acknowledge receipt d) We have worked before

274. The Q code for increase power is [a]

a) QRO b) QSV c) QST d) QUM

275. The Emission that indicates a FM Broadcast station is [b]

a) F1F b) F3A c) F3E d) F3C

276. The Emission that is used to send Morse codes by on/off keying the un-modulated carrier in CW transmission is [a]

a) A1A b) A2A c) A3A d) A5C

277. The Q. Code for " The signal strength of your signal is good' [a]

a) QSA5 b) QSA4 c) QSA1 d) QSA3

278. The Emission 'F3E' stands for [c]

a) Double side band Transmission b) Single side band transmission

c) FM Speech, Frequency Modulation

279. The time difference between IST and UTC is [a]

a) +5.30 Hrs b) -5.00 Hrs c) -5.30 Hrs d) +5.15 Hrs

280. The Q Code for “Are you troubled by STATIC” is [b]

a) QSL b) QRN c) QRZ d) QSX

281. The Abbreviation used for “All Before” is [b]

a) AA b) AB c) AR d) AS

282. These letters are generally used for the first letters in Indian amateur radio call sign [b]

a) AA b) VU c) VK d) VX

283. The transmission of messages in a secret code by the operator of an amateur station is: [d]

a) permitted when communications are transmitted on behalf of a government agency

b) permitted when communications are transmitted on behalf of third parties

c) permitted during amateur radio contests d) not permitted

284. The broadcast of music is allowed in amateur service [c]

a) on request b) when channel is free c) Never d) only for testing

285.What is the “Q” signal used to indicate that you are receiving interference‘ from other stations? [a]

a) QRM b) QRN c) QTH d) QSB

286.What is the term used to describe an amateur station that is transmitting and receiving on the same frequency? [c]

a) Full duplex communication b) Diplex communication

c) Simplex communication d) Half duplex communication

287.What is the allowed repeater frequency offset in the 2 meter band? [b]

a) Plus 500 kHz b) Plus or minus 600 kHz c) Minus 500 kHz d) Only plus 600 kHz

288.A3E indicates [b]

a) SSB b) AM-DSB voice c) FM Voice d) FSK

289. The Phonetic used for alphabet ‘N’ is [b]

a) Norway b) November c) Neighbour d) Night

290. The Abbreviation for ‘ I have nothing for you’ [a]

a) QRU b) NIL c) QST d) None of the above

291.When the Amateur Service is a secondary user of a band and another service is the primary user, this means: [c]

a) nothing at all, all users have equal rights to operate

b) amateurs may only use the band during emergencies

c) the band may be used by amateurs provided they do not cause harmful interference to primary users
d) you may increase transmitter power to overcome any interference caused by primary users

292.What information is contained a station log? [d]

a) Date and time of contact b) Band and or frequency of the contact

c) Call sign of station contacted and the signal report given d) all the above

293.What is the meaning of the Q signal “QRS”? [d]

a) Interference from static b) Send "RST” report c) Radio station location d) Send more slowly

294. The abbreviation “73” means [a]

a) best regards b) Any station transmit c) called station only transmit d) All received correctly

295. The signal “QRL” means [a]

a) I am busy b) I am troubled by static c) Are you troubled by static d) I am being interfered with

296.A signal report of "5 and 1" indicates: [b]

a) very low intelligibility but good signal strength b) perfect intelligibility but very low signal strength

c) perfect intelligibility, high signal strength d) medium intelligibility and signal strength

297. The accepted way to call "CQ" with a SSB transceiver is: [a]

a) "CQ CQ CQ this is VU3XXX VU3XXX VU3XXX" b) "This is VU3XXX calling CQ CQ CQ"

c) "CQ to anyone, CQ to anyone, I am VU3XXX" d) "CQ CQ CQ CQ CQ this is from India"

298. The signal "QSY?" means: [a]

a) Shall I change to transmission on another frequency? b) Shall I increase transmitter power?

c) Shall I relay to .... ? d) Is my signal fading?

299. The "Q" signal which means "send faster" is: [b]

a) QRP b) QRQ c) QRS d) QRN

300. The correct phonetic code for the call sign VK5ZX is: [c]

a) victor kilowatt five Zulu x-ray b) victor kilo five Zulu x-ray

c) victor kilo five Zanzibar x-ray d) Victoria kilo five Zulu x-ray

301.An amateur station may transmit unidentified signals: [d]

a) when making a brief test not intended for reception by anyone else

b) when conducted on a clear frequency when no interference will be caused

c) when the meaning of transmitted information must be obscured to preserve secrecy

d) never, such transmissions are not permitted.

302.When conditions are good and signals are strong operators should: [c]

a) Increase power to the maximum permissible by regulation.

b) Increase power and use full compressor facility.

c) Use only sufficient power to make a good contact.

d) Increase power to the maximum capability of the equipment.

303. In India the standard time signal is broadcasted by [d]

a) ISRO b) WPC c) OCS d) NPL

304.Morse code is permitted for use by: [c]

a) Only operators who have passed a Morse code test

b) Those stations with computers to decode it

c) Any amateur radio operator

d) Only those stations equipped for headphone reception

305. PANPAN transmitted thrice indicates [c]

a) Distress b) Emergency c) Urgency d) Distress and emergency

306. In the Morse code, the Test signal contains the characters of [b]

a) CQ CQ CQ b) V V V c) RT RT RT d) None.

307. The ‘ Single Side Band with Suppressed Carrier ' is designated as [c]

a) HSE b) RSE c) J3E d) A3E

308. The space between two words in Morse code is [d]

a) a dot b) a dash c) a dot and a dash d) five dots

309. The distress frequency on Voice (Radio Telephony) is [b]

a) 2128 KHz b) 2182 KHz c) 1282 KHz d) 1228 KHz

310. The characters that a Safety Signal contains in Morse code are [d]

a) XXX b) MAY DAY c) PAN PAN d) SOS

311. The frequency range in 21 MHz band that is authorized to Amateurs is in [c]

a) 21000 - 21350 KHz b) 21100 - 21150 KHz c) 21000 - 21450 KHz d) 21000 - 21400 KHz

312. The character that represents the Morse code '- -. -' is [d]

a) Y b) Z c) C d) Q

313. The Amateur License is issued in India by [b]

a) Wireless Monitoring Organization b) Wireless Planning and Coordination Wing

c) Telecom Regulatory Authority of India d) Bharat Sanchar Nigarn Limited

314. The equivalent time in hours of 1730(IST) in UTC is [a]

a) 1200 b) 1230 c) 0000 d) 0530

315. The Q code for 'I will call you again at 0400 hrs in the evening' is [b]

a) QRX0400 b) QRX1600 c) QRX4 d) QRXO400Z

316. The Emission stands for an AM Broadcast with 3 KHz bandwidth is [b]

a) A3E3000K b) A3E3K00 c) A3EOK300 d) A3EOH30

317. The distress frequency 156M800 Hz falls in the range of [d]

a) HF band b) UHF band c) Microwave band d) VHF band

318. The character for Morse code '. .- -. . ' is [c]

a) Full stop b) Comma c) Question mark d) Hyphen

319. In a Morse code transmission what will be the duration of a dot, when the duration of a dash is 30mSec [b]

a) 90mS b) 10mS c) 1mS d) 9mS

320.What are the letters required to be sent for a third station to enter between two stations in a Morse code transmission are [b]

a) BR b) BK c) BREAK d) BN

321. The word used in voice which is equivalent to the word 'DE' transmitted in a Morse code transmission is [b]

a) FROM b) This is c) CALLING d) All the above

322. The letters those are required to be sent in the time of Distress in Voice transmission are [b]

a) SOS b) MAY DAY c) PAN PAN d) SECURTIE

323. The Q-code for Test Signal is [c]

a) QRK b) QSU c) QSV d) QUM

324. The frequencies those are designated with 'H' can be used [b]

a) during the day time b) in during the night time c) intermittently d) 24 Hrs of a day

325.What will be the speed in wpm. when at message being transmitted contains 60 characters in a minute [d]

a) 5 wpm b) 8 wpm c) 10 wpm d) 12 wpm

326. R3E designates: [d]

a) Amplitude modulation :Telephony, voice

b) Telephony, (voice) Frequency modulation

c) Telephony, (voice) Single sideband , suppressed carrier ,

d) Telephony, (voice) Single sideband, Reduced carrier ,

e) Telephony, (voice) Single sideband, full carrier.

327.Who can inspect and examine an Amateur Wireless station? [d]

a) An officer of State Government b) An officer of Local body

c) A police officer d) An officer authorized by the Central Government in that behalf in writing by them

328. Transmission of a message shall be terminated by the signal in radiotelegraphy [a]

a) AR b) BK c) VV d) CQ

329. The use of class B emissions (damped waves) is [b]

a) Allowed b) forbidden c) At night time only d) At day time only

330.When are amateur stations permitted to handle third party messages? [c]

a) Always b) Never c) In case of failure of normal telecommunication facilities and pertaining to natural calamities d) When the band is free

331.Which station's call sign will have a suffix 'MS' [a]

a) Amateur station on board a ship b) Amateur station on mobile

c) All amateur stations have d) None of the above

332. The Corresponding Metric Subdivision for 3 to 30 MHz band is: [c]

a) Kilometric waves b) Hectometric waves

c) Decametric waves d) Metric waves e) Decimetric waves

333. The phonetic code for 6 [a]

a) Soxisix b) Secasix c) Hexasix d) Setasix

334.When may you send indecent or profane words from your amateur station? [a]

a) Never b) Only when they do not cause interference to other communications

c) Only when they are not retransmitted through a repeater

d) Any time, but there is an unwritten rule among amateurs that they should not be used on the air

335.When may an amateur station in two-way communication transmit a message in a secret code in order to obscure the meaning of the communication? [c]

a) During a declared communications emergency b) During contests

c) Never d) When transmitting above 450 MHz

336.Which type of station may transmit one-way communications? [a]

a) Beacon station b) Repeater station c) HF station d) VHF station

337. If you transmit from another amateur's station, who is responsible for its proper operation? [d]

a) You, the operator b) Both of you

c) The station owner, unless the station records show that you were the operator at the time

d) The station owner

338.What identification, if any, is required when two amateur stations begin communications? [c]

a) No identification is required b) Each station must transmit its own callsign

c) Both stations must transmit both call signs d) One of the stations must give both stations' call signs

339.Amateur third party communications is: [c]

a) the transmission of commercial or secret messages

b) a simultaneous communication between three operators

c) the transmission of non- commercial or personal messages to or on behalf of a third party

d) none of these answers

340.An amateur station using radio telephony must install a device for indicating or preventing: [d]

a) resonance b) antenna power c) plate voltage d) over modulation

341. India is location in ITU Region: [c]

a) region 1 b) region 2 c) region 3 d) region 4

342.What is the Standard International Phonetic for the letter G? [a]

a) Golf b) George c) Germany d) Gibraltar

343.What is the correct way to call "CQ" when using Morse code? [d]

a) Send the letters "CQ" three times, followed by "DE", followed by your call sign sent once

b) Send the letters "CQ" ten times, followed by "DE", followed by your call sign sent once

c) Send the letters "CQ" over and over

d) Send the letters "CQ" three times, followed by "DE", followed by your call sign sent three times

344.What is the meaning of the procedural signal "CQ"? [a]

a) Calling any station b) Call on the quarter hour

c) An antenna is being tested d) Only the station "CQ" should answer

345.What is the meaning of the morse signal "R"? [a]

a) Received all correctly b) From c) Calling any station d) Directional Emissions

346.What is the meaning of the procedural signal "K"? [a]

a) End of message b) Any station transmit c) Called station only transmit d) All received correctly

347.What is meant by the term "DX"? [b]

a) Calling any station b) Distant station c) Go ahead d) Best regards

348.What is the meaning of: "Your signal report is 5 9 plus 20 dB"? [c]

a) The bandwidth of your signal is 20 decibels above linearity

b) Repeat your transmission on a frequency 20 kHz higher

c) A relative signal-strength meter reading is 20 decibels greater than strength 9

d) Your signal strength has increased by a factor of 100

349.What does "RST 579" mean in a Morse code contact? [a]

a) Your signal is perfectly readable, moderately strong, and with perfect tone

b) Your signal is perfectly readable, weak strength, and with perfect tone

c) Your signal is fairly readable, fair strength, and with perfect tone

d) Your signal is barely readable, moderately strong, and with faint ripple

350.What is a "QSL card"? [b]

a) A notice of violation from WPC

b) A written proof of communication between two amateurs

c) A postcard reminding you when your station license will expire

d) A letter or postcard from an amateur pen pal

351.What type of subjects are not prohibited communications while using amateur radio? [d]

a) Political jokes. b) Jokes and stories. c) Religious preferences. d) All of these answers are correct

352.When tuning up a transmitter, and in order to prevent jamming other users on the band, you must tune, initially: [c]

a) On a harmonic outside the band. b) Directly into an antenna.

c) Into a dummy load. d) Directly into a dipole.

353. COIL, using the international phonetic alphabet, would be announced as: [b]

a) Charlie, Ocean, Italy, Lima. b) Charlie, Oscar, India, Lima.

c) Colin, Oscar, Indonesia, London. d) Colin, Oscar, India, London.

354.QRT is defined as: [c]

a) I am going to send now. b) I am going to stand-by.

c) I intend to end this transmission. d) Are you going to send now?

355.QRP means: [d]

a) Close down. b) Address is. c) High Power. d) Low Power.

356. The maximum DC input to the final stage of an amateur HF transmitter, when the operator is the holder of General grade license is: [b]

a) 250 watts b) 400 watts c) 500 watts d) 1500 watts

357. The maximum DC input to the final stage of an amateur HF transmitter, when the operator is the holder of Restricted grade license is: [c]

a) 25 watts b) 30 watts c) 50 watts d) 500 watts

358.What is maximum DC input to the final stage of an amateur transmitter on 145.500MHz, if the operator has General grade license is: [a]

a) 25 watts b) 40 watts c) 50 watts d) 100 watts

359.What is maximum DC input to the final stage of an amateur transmitter on 145.500MHz, if the operator has Restricted grade license is: [b]

a) 5 watts b) 10 watts c) 25 watts d) 100 watts

360. The correct order for call signs in a call sign exchange at the start and end of a transmission is: [a]

a) the other call sign followed by your own call sign

b) your call sign followed by the other call sign

c) your own call sign, repeated twice d) the other call sign, repeated twice