

1. Full form of MTBF is
 - a. Mean time before failure
 - b. Mean time between failure**
 - c. More time between failure
 - d. Mean time by failure
2. Consider the following two statements :
 - a. MTBF should be as high as possible
 - b. MTTR should be as low as possible

Choose the correct option :

 - a. Both statements are correct**
 - b. Both statements are incorrect
 - c. Statement 1 is correct and Statement 2 is incorrect
 - d. Statement 1 is incorrect and Statement 2 is correct
3. Emergency communication sockets are placed at a interval of
 - a. 0.5 km
 - b. 1 km**
 - c. 1.5 km
 - d. 2 km
4. Range of very high frequency is
 - a. 0.3 MHz to 3 MHz
 - b. 3 MHz to 30 MHz
 - c. 30 MHz to 300 MHz**
 - d. 300 MHz to 3000 MHz
5. Megger is used to measure
 - a. Insulation Resistance**
 - b. Conductance
 - c. Capacitance
 - d. Earth Resistance
6. Psophometer is used to measure
 - a. Perceptible noise of a telephone circuit**
 - b. Power transmitted by antenna
 - c. Insulation resistance
 - d. None of the above
7. The equivalent Pshophometric noise voltage in voice circuit should be
 - a. More than 5 milli volts
 - b. Less than 5 milli volts
 - c. More than 2 milli volts
 - d. Less than 2 milli volts**
8. Which of the following measurements can be done with an OTDR
 - a. Insertion Loss
 - b. Splice Loss
 - c. Both A and B**
 - d. None of the above
9. Condition for distortion less condition of a transmission line is
 - a. $RC = LG$**
 - b. $RL = CG$
 - c. $RG = LC$
 - d. None of the above
10. Conductor resistance of 0.63 mm diameter conductor PIJF cable is
 - a. 128 ohm/km
 - b. 32 ohm/km
 - c. 64 ohm/km**
 - d. 256 ohm/km

11. Loop resistance of pair of 0.51 mm diameter conductor PIJH cable is
 - a. 92 ohm/L KM
 - b. 184 ohm/L KM**
 - c. 46 ohm/L KM
 - d. 196 ohm/L KM
12. Marking on PIJF cable is placed at an interval of
 - a. 0.5 m
 - b. 1.0 m**
 - c. 1.5 m
 - d. 2.0 m
13. Loop resistance of 6 quad cable is
 - a. 28 ohm/L KM
 - b. 56 ohm/L KM**
 - c. 84 ohm/L KM
 - d. 112 ohm/L KM
14. Which of the colors are not present in 6 quad cable :
 - a. Red
 - b. Black
 - c. Grey
 - d. Pink**
15. Which quad number is used for emergency control :
 - a. 1
 - b. 2
 - c. 3**
 - d. 4
16. For long distance block section (>25 KM), which diameter of quad cable will be used :
 - a. 0.9
 - b. 1.4**
 - c. Both
 - d. 1.2
17. A woofer produces
 - a. Higher notes
 - b. Lower notes**
 - c. Both a and b
 - d. None of the above
18. Voltage of a fully charged and fully discharged Lead acid cell is
 - a. 2.2 V and 1.8 V**
 - b. 1.8 V and 2.2 V
 - c. 2.0 V and 2.2 V
 - d. 2.0 V and 1.8 V
19. Specific gravity of a fully charged and fully discharged Lead acid cell is
 - a. 1.220 and 1.180**
 - b. 1.180 and 1.220
 - c. 1.835 and 1.220
 - d. 1.835 and 1.180
20. Specific gravity of concentrated H₂SO₄ is
 - a. 1.220
 - b. 1.180
 - c. 1.835**
 - d. 2.000
21. Coidal life of Lead Acid batteries used for telecom power supply is
 - a. 3 years
 - b. 4 years**
 - c. 5 years
 - d. 6 years

22. A rectifier converts
- AC into DC
 - DC into AC
 - DC into DC
 - None of the above
23. Class B surge protection devices are connected in between
- Phase and Neutral
 - Neutral and Earth
 - Both a and b
 - Phase and Earth
24. Class C surge protection device is connected in between
- Phase and Neutral
 - Neutral and Earth
 - Both a and b
 - Phase and Earth
25. Distance between two adjacent earth electrodes should be
- More than twice the length of earth electrode
 - Less than twice the length of earth electrode
 - More than length of earth electrode
 - Less than length of earth electrode
26. Power supply unit of TEJAS STM TJ1400 gives ___ V output to system
- 6 V
 - 12 V
 - 18 V
 - 24 V
27. Frequency allotted by WPC in VHF to Indian Railways
- 142MHz to 170MHz
 - 146MHz to 176 MHz
 - 146MHz to 174MHz
 - 176MHz to 198MHz
28. 25 W VHF sets provided to SM works in which mode
- Simplex
 - Half Simplex
 - Duplex
 - Full Duplex
29. VHF frequency used for communication at disaster site
- 148.975 MHz
 - 147.975 MHz
 - 146.975 MHz
 - 150.100 MHz
30. Which of the following does not form part of GSM
- BSS
 - VLR
 - HLR
 - PUC
31. Frequency used for Uplink in GSM is
- 890 MHz – 915 MHz
 - 885 MHz – 910 MHz
 - 935 MHz – 960 MHz
 - 930 MHz to 955 MHz
32. IPV4 address has been classified into how many address
- 3
 - 4
 - 5
 - 6

33. IP address 255.255.255.255 is used
- Used for default network
 - Used as universal loop back address
 - Used as automatic private IP address
 - Used as universal broadcast address
34. Function of network address translation (NAT) in a LAN is
- Translate private IP to public IP
 - Translate public IP to private IP
 - To Broadcast
 - None of the above
35. How many tones and type of frequency is used in DTMF calling?
- Two harmonically unrelated tones
 - Two harmonically related tones
 - One harmonically related tone
 - Three harmonically related tone
36. In control telephone, to repeat the last code which button needs to be pressed?
- RT
 - LR
 - DL
 - RL
37. Voltage required for way side control phone is
- 6 V
 - 12 V
 - 18 V
 - 24 V
38. _____ amplifier provides side tone to enable the conversation between way stations in control communication.
- Buffer
 - Leak
 - Remote
 - None of the above
39. 4 wire control communication can be converted into 2 wire control communication by using
- Phantom Circuit
 - Superimposed Circuit
 - Terminal Circuit
 - Hybrid Circuit
40. ACSR full form is
- Aluminum conductor steel reinforced
 - Aluminium Copper steel reinforced
 - Aluminium conductor silicon reinforced
 - Aluminium conductor silicon reinforced
41. Transmission loss of RE cable when loaded is
- 0.63 dB/KM
 - 0.25 dB/KM
 - 0.36 dB/KM
 - 0.86 dB/KM
42. Resistance of a conductor increases with increases in
- Length
 - Area
 - Diameter
 - None of the above

43. The loss offered by a fusion splicing of optic fibers shall not exceed
- 0.1 dB
 - 0.2 dB
 - 0.3 dB
 - 0.4 dB
44. The S/N ratio under normal operating condition of the amplifying systems shall not be worse than
- 30 dB
 - 40 dB
 - 50 dB
 - 60 dB
45. The ringing voltage of exchange is
- 75V/25Hz
 - 85V/25Hz
 - 75V/ 30 Hz
 - 85V/30 Hz
46. Which card supports tone dialing?
- CNF
 - RMF
 - TGD
 - XSC
47. In Fibcom 6325, Node the Optical connectors used are of the type
- Fc
 - SC
 - LC
 - All of the above
48. The Dynamic protocol used for unification of PRS & UTS is
- SIP
 - OSFP
 - OSPF
 - IGRP
49. VLAN is a grouping of computers in a network
- Logical
 - Physical
 - Both a and b
 - None of the above
50. BSSID of access point is
- 48 bit IP address
 - 32 bit IP address
 - 48 bit MAC address
 - IPV6 address
51. The shortest frame in HDLC protocol is usually the frame.
- Management
 - Supervisory
 - Information
 - Performance
52. Which layer is responsible for moving frames from one hop (node) to the next.
- Data link Layer
 - Physical Layer
 - Transport Layer
 - Network Layer
53. When data and acknowledgement are sent on the same frame, this is called
- Back Packing
 - Piggy Backing
 - Piggy Packing
 - Back Backing

54. Which layer produces the OSPF message?
- Physical Layer
 - Data Link Layer
 - Network Layer
 - Application Layer
55. In an Asymmetric Digital Subscriber Line modem
- Upstream and downstream is same
 - Upstream is higher than downstream
 - Upstream is lower than downstream
 - None of the above
56. In GSM-R, the interface in between BTS & BSC is called
- BSS
 - MSC
 - HLR
 - ABIS
57. The multiplexing process is used in GSMR is
- FDMA
 - TDMA
 - CDMA
 - CSMA
58. Nos of inputs and outputs of MDCH & PDCH
- 2 & 8
 - 8 & 2
 - 2 & 16
 - 16 & 2
59. Zero dispersion occurs in _____ wavelength
- 800 nm
 - 910 nm
 - 1210 nm
 - 1310 nm
60. Consider the following statements
- Single mode fiber is best designed for longer transmission distances.
 56. Multi mode fiber is best designed for shorter transmission distances.
- Choose the correct option
- Both statements are true
 - Both statements are false
 - Statement 1 is true and 2 is false
 - Statement 2 is true and 1 is false
61. Periodicity of cross talk test and insulation test is
- Yearly
 - Quarterly
 - Quarterly and Yearly
 - Yearly and Quarterly
62. The cable route indicators are to be placed at every
- 5 m
 - 10 m
 - 15 m
 - 20 m
63. Value of loading coil in 6 Quad cable is
- 101 mH
 - 111 mH
 - 118 mH
 - 127 mH
64. Length of loading section in RE area is
- 1530 m
 - 1630 m
 - 1730 m
 - 1830 m

65. Interface between the main cable and branch line cable shunted with high impedance is called
- Hybrid amplifier
 - Leak Amplifier
 - Buffer amplifier
 - Power amplifier
66. In RE area, electromagnetic induction can be minimized by providing
- Step down transformer
 - Amplifier
 - Isolation transformer
 - Buffer Amplifier
67. Maximum capacitance unbalanced permitted in a quad cable for full loading section is
- 20 pF
 - 30 pF
 - 40 pF
 - 50 pF
68. Capacitance can be increased by connecting 2 or more capacitance in
- Series
 - Parallel
 - Series and Parallel
 - None of the above
69. For testing NEXT (Near end cross talk), distance required is
- 1 meter
 - 2 meter
 - 3 meter
 - 0.5 meter
70. LMT (Line matching Transformer) is used in _____ matching method
- Voltage
 - Current
 - Impedance
 - Power
71. Consider the following statements
- MLDB & CGDB are **single** faced train indication board
 - AGDB & PDB are **double** faced train indication board.
- Choose the following option
- Both statement are true
 - Both statements are false
 - Statement 1 is true and 2 is false
 - Statement 2 is true and 1 is false
72. Slot-12 and slot-13 has equal and parallel access to time slots _____ in WEBFIL mux
- 28 & 29
 - 29 & 30
 - 30 & 31
 - 31 & 32
73. OTDR works on the principle of
- Back Diffraction
 - Back Reflection
 - Back Scattering
 - Interference
74. Visibility of train indication board must be
- 50 to 70 m
 - 70 to 100 m
 - 100 to 120 m
 - 120 to 150 m

75. If an Ethernet destination address is 07-01-02-03-04-05, then this is a Address
- Unicast
 - Broadcast
 - Multicast**
 - All of the above
76. ADSL modem uses modulation method
- FDM + FSK
 - TDM + FSK
 - QAM + FDM**
 - All of the above
77. Choose the correct option for an OFC
- Refractive index of core is greater than cladding in optic fiber
 - Refractive index of core is less than cladding in optic fiber**
 - Refractive index of core is equal to cladding in optic fiber
 - Refractive index of core is unrelated to cladding in optic fiber
78. In GSM, full form of VLR means
- Voice location register
 - Video location register
 - Visitor location register**
 - Voice latent register
79. IIM Sirmaur that was seen in news recently, is located in which state?
- Uttar Pradesh
 - Himachal Pradesh**
 - Punjab
 - Haryana
80. Recently Shipping Ministry has approved Rs 107 Crore for improving fire-fighting facilities in which major port?
- Kolkata port**
 - Kandla Port
 - Chennai Port
 - Cochin Port
81. Which Indian state has banned the sale of dog meat and commercial import and trading of dogs?
- Sikkim
 - Arunachal Pradesh
 - Nagaland**
 - Assam
82. What is the theme of the 'World Teachers Day 2022'?
- Teaching Importance of Sustainability
 - Teaching Equality
 - The change of education begins with teachers**
 - Leaving No one Behind
83. 'Optimus' is the prototype humanoid robot, launched by which company?
- Apple
 - Tesla**
 - Amazon
 - None of the above
84. UIDAI is a statutory authority established under which Union Ministry?
- Ministry of Electronics & Information Technology**
 - Ministry of Home Affairs
 - Ministry of Finance
 - Ministry of Science and Technology
85. Aung Suu Kyi is the former leader of which country?
- Thailand
 - Myanmar**
 - Bangladesh
 - Nepal

86. 'Good Governance Week' is observed during which month?
- December
 - January
 - March
 - May
87. Which state organises the world's largest open-air theatre 'Dhanu Yatra' festival?
- Gujarat
 - Odisha
 - West Bengal
 - Kerala
88. Which institution launched the 'One Week, One Lab' campaign?
- NITI Aayog
 - BARC
 - CSIR
 - ISRO
89. Which city is the host of 'Khadi Fest – 2022 Exhibition'?
- Chennai
 - Mumbai
 - Ahmadabad
 - Kolkata
90. Swachh Bharat Diwas is celebrated on which date in India?
- 2 October
 - 30 January
 - 14 November
 - 26 January
91. Which institution regulates the 'National Pension System' in India?
- LIC
 - PFRDA
 - SEBI
 - IRDAI
92. Which is the first state to launch its dedicated climate change mission?
- Kerala
 - Tamil nadu
 - Karnataka
 - Goa
93. When is the 'International Anti-Corruption Day' observed?
- 9 September
 - 2 October
 - 3 November
 - 9 December
94. Who is the chairman and CER of Railway board?
- Sri Arun Arora
 - Sri Sunit Sharma
 - Sri Anil Kumar Lahoti
 - Sri V K Tripathi
95. Tungareshwar Wildlife Sanctuary, which was seen in the news, is located in which state?
- Karnataka
 - Maharashtra
 - Kerala
 - Andhra Pradesh

96. For the series 36,34,30,28,24..., which number will come next?
- 20
 - 22
 - 26
 - 32
97. India's first gold ATM has been inaugurated in which city?
- Varanasi
 - Hyderabad
 - Ahmadabad
 - Lucknow
98. Manu Bhaker and Sarabjot Singh, who were in the news recently, are associated with which sports?
- Hockey
 - Shooting
 - Squash
 - Cricket
99. As per the Ministry of Culture, how many centrally protected monuments are missing?
- 10
 - 20
 - 50
 - 100
100. Capital of state Mizoram is
- Aizwal
 - Gangtok
 - Kohima
 - Imphal
101. As per Article 343(1) the official language of the union is.
- Hindi
 - English
 - Tamil
 - Bengali
102. Section 3 of the Official language act 1963 came into force on
- 26th day of January, 1967
 - 30th day of October, 1945
 - 14th day of November, 1974
 - 26th day of January, 1965
103. The chairman of Rail Hindi Salahakar Samiti is-----
- .
- Rita Bahuna Joshi
 - Piyush Goyal
 - Harish Dwivedi
 - Ahilesh Prasad Singh
104. The official language rules 1976 are come into force in entire India except the state of -----.
- Tamil Nadu
 - West Bengal
 - Karnataka
 - Maharashtra

105. There are -----languages in eighth schedule of the constitution.
- Twenty-two
 - Twenty
 - Nineteen
 - Fifteen
106. Under the Individual cash award scheme of railway board for doing maximum and commendable official work in Hindi the cash award amount is ----- .
- 1000
 - 5000
 - 3000
 - 500
107. On doing work in Hindi in prescribed quantity, Incentive allowance of Rs ----- is admissible to English stenographer
- 240/month
 - 120/month
 - 180/month
 - 60/month
108. An application or appeal made in English but signed in Hindi by the staff than shall be replied to in -----.
- Hindi
 - English
 - Any Language
 - Any other
109. The chairman of Divisional official language implementation committee is -----
- General manager
 - Divisional Railway manager
 - Zonal Head
 - None of the above
110. Delhi and Agra come under region-----
- C
 - B
 - None of the bove
 - A