

One has to attempt either Part A from 91 to 100 or Part C 101 to 110

- 1 Data flow between two devices, in _____ mode occurs in both directions simultaneously
A. Full-duplex B. Semi-duplex C. Simplex D. Half-duplex
- 2 _____ network is a collection of many separate networks globally.
A. LAN B. WAN C. Internet D. An intranet
- 3 The process-to-process delivery of the entire message is the responsibility of the _____ layer
A. Network B. Physical C. Transport D. Application
- 4 MAC address is stored in _____
A. RAM B. ROM C. C Drive D. NIC
- 5 The method of type data transmission in multicast method is _____
A. One to many B. One to all C. One to none D. One to one
- 6 OSPF is based on _____.
A. Latency vector routing B. Link state routing C. Distance vector routing
D. Path vector routing
- 7 Which layer produces the OSPF message
A. Transport B. Data link C. Network D. Application
- 8 A routing table contains _____.
A. The destination network ID B. The user name of the system
C. The router loop back address D. The router serial number
- 9 In _____ routing, the mask and destination addresses are both 0.0.0.0 in the routing table.
A. Next-hop B. Network-specific C. Default D. Host-specific
- 10 Periodicity of meggering of Quad cable is
A. Six Months B. One Year C. Two Year D. Five year
- 11 1 st Quad of 6 Quad cable is being used for
A. Block circuit B. Emergency control C. Gate telephone
- 12 DSLAM stands for _____
A. Digital Synchronous Line Multiplexer B. Digital subscriber line access multiplexer
C. Digital multiplexer with line access D. Digital line access multiplexer
- 13 Which of the following is a false statement
A. Digital signals can be transported to longer distance compared to analog Signals.
B. Analog signals can be transported to longer distance compared to Digital Signals.
C. Speech quality in digital signals are better as compared to analog signals.
D. Digital signals have better security compared to Analog Signals.
- 14 What connectors are used for Ethernet cable terminations?
A. RJ11 B. RG6 C. RJ9 D. RJ45
- 15 UTP/STP cables belong to _____ layer of the TCP/IP network model.
A. Data Link B. Application C. Physical D. Network
- 16 Which statement is a false statement?
A. STP cable must be used in RE area.
B. STP cable must be used in closed non RE area situated loop.
C. It is essential to earth the shield of STP cable.
D. UTP cable must be used in the areas having low AC voltages.
- 17 How many speech channels are there in 2 Mbps.
A. 5 B. 16 C. 32 D. 30

- 18 In a Cat-6 cable there are ____ twisted pairs.
A. 4 B. 8 C. 2 D. 6
- 19 MAC address is defined in which layer of TCP/IP network?
A. Transport B. Network C. Physical D. Data Link
- 20 What will be the capacity of battery chosen if the load is 20 A and a back up of 10 Hrs is required considering the depth of discharge 70%.
A. 80 AH B. 120 AH C. 180 AH D. 300
- 21 Which of these is not a problem being faced in Lead Acid Battery
A. Sulphation B. Buckling C. Reverse Voltage D. None of these
- 22 Specific gravity of fully charged lead acid cell is-----
a 1180 B. 1220 C. 1180 gm/cc d 1220 gm/cc
- 23 Specific gravity is measured with the help of-----
A. Hygrometer B. Hydrometer C. Multimeter D. Ohmeter
- 24 Psophometer is used to measure
A. Noise B. Cross Talk C. Power loss D. Both a and B
- 25 OTDR is used to measure
A. Loss in OFC B. Loss in Cable C. Distance of OFC cut D. Both a and c
- 26 TDM uses _____ sharing of the transmission media
A. Frequency B. Amplitude C. Phase D. Time
- 27 Time slot TS0 carries the _____
A. Synchronisation B. Supervisory C. NMS D. All of these
- 28 A 30 channel PCM has a bit rate _____
A. 2.048 Mbps B. 8 Mbps C. 34 Mbps D. 155 Mbps
- 29 Signalling bits are carried in ----- slot.
A. 1st B. 16 th C. 24 th D. 32 th
- 30 An employee has served for ten days in a month and was absent for twenty days, the number of LAPs that will be credited to his account for that month will be
A. One Day B. Two and half days C. Two day D. Nil
- 31 If it comes to your knowledge that two trains are running in opposite direction and a head on collision will occur shortly, you will first inform to
A. S&T Control B. DRM C. Sr. DSTE D. Remote control
- 32 The broadcast address for 10.129.5.91/16 is
A. 10.129.5.255 B. 10.129.155.155 C. 10.129.0.0 D. 10.129.2.1
- 33 The time period of one multiframe is -----
A. 1 ms B. 125 micro second C. 2 ms D. 500 Micro second
- 34 IP Addressing scheme for Railnet is-----
A. Public B. Private C. Class D IP address D. None of these
- 35 Dumb Terminals used in UTS/PRS are connected to -----
A. Router B. Switch C. Terminal server D. LAN Extender
- 36 FOIS network is for
A. Rack management system B. Terminal management system C. RR generation
D. All the above
- 37 The Dynamic protocol used for unification of PRS & UTS is
A. RIP B. OSPF C. IGRP D. None of these
Number of locations per area shall not exceed
A. 30 B. 50 C. 60 D. 70
- 38 The connector used to connect terminal server and a dumb terminal is known as
A. RJ 45 B. RJ6 C. 9 Pin D connector D. 25 Pin D connector

- A. Switch B. Router C. Modem D. Terminal server
- 40 Which of these command is not used for fault analysis in networking
A. Telnet B. Ping C. Tracert d traceping
- 41 VLAN (Virtual Local Area Network) is used to
A. Increase the speed B. Reduce the broadcast in LAN C. Enhance the security of LAN
D. All of these
- 42 The loop resistance of 6Quad cable of conductor diameter 0.9 mm is
A. 23.2 ohm/km B. 56 ohm/km C. 80 ohm/km D. 90 ohm/km
- 43 Induced Voltage reduction in 6 Quad cable is achieved by
A. Earthing Al foil B. Aluminum Screen C. Armour D. All of these
- 44 Which of these is not a joint of 6 quad cable used in Railway
A. Straight Through B. Derivation C. Loading Coil Joints D. None of these
- 45 The full form of NTES is
A. National Train Entry System B. National Train Enhancement system
C. National Train Enquiry System D. Nation Wide train Entry System
- 46 In class B surge Protection devices, if the rating of SPD used between Phase and neutral is 50 KA, 10/350 Micro second, then the rating of SPD used between Neutral and Earth is
A. 25 KA, 8/20 Micro second B. 50KA, 10/350 Micro second
C. 100KA, 10/350 Micro second D. 8KA, 10/350 Micro second
- 47 Individual S&T equipments are connected to the earthing system in the order of
A. Earth, MEEB, SEEB B. SEEB, MEEB, EARTH
C. MEEB, SEEB, EARTH D. MEEB, EARTH, SEEB
- 48 The appropriate power supply for Telephone exchanges is
A. 12 V D. C B. 230V AC, 50 Hz C. 48 V, DC D. -48V, DC
- 49 Transmission loss of optical fiber at a wavelength of 1310 nm is about ----- dB/Km.
A. 0.35 dB/Km B. 3.5 dB/Km C. 0.25 dB/Km D. 2.5 dB/Km
- 50 Which of the following wavelengths is/are being used in OFC in Railway.
A. 850 nm B. 1310 nm C. 1510 nm D. Both b and c
- 51 Multimode fiber is best designed for ----- transmission distances.
A. Longer B. Shorter C. Medium D. very short
- 52 Impurities and irregularities in the physical construction of optical fiber causes -----
A. Scattering B. absorption C. total internal reflection D. Modal dispersion
- 53 The normal optic fiber cable drum length is -----.
A. 2 Km B. 3 Km C. 1 Km D. 4 Km
- 54 Cable markers are normally provided at every ----- meters on the cable.
A. 5 B. 10 C. 150 D. 50
- 55 Which of the following is not a connector of OFC?
A. FCPC B. SC C. LC D. RC
- 56 The loss offered by a mechanical splicing of optic fibers is less than -----
A. 0.005 B. 0.05 C. 0.5 D. 1.5
- 57 Optical power meter has got the option for displaying optical power in -----
A. dBm or μ W B. dBm only C. μ W only D. dBm or pW
- 58 OTDR works on the principle of
A. Back Scattering Method B. Reflection C. Refraction D. Reilleigh Scattering

- A. LED B. LASER C. Avalach photodiode D. None of these
- 60 Which of these will provide maximum number of communication channels?
A. PDH Mux B. SDH C. WDM D. DWDM
- 61 Maximum number of stations that can be placed in DTMF control system is
A. 30 B. 50 C. 99 D. 100
- 62 The Earthing system must be measured once in
A. Six months B. One Year C. Two Year D. Three Years
- 63 Walkie- Talkie used by S&T staff must have
A. S&T frequency B. Driver Frequency C. Operating frequency D. All of these
- 64 The power output of VHF sets being used by Railway is ----- Watts.
A. 5 B. 10 C. 25 D. 50
- 65 If two speakers each of 4 ohm resistance are connected to an amplifier, then the resistance of the amplifier to which the connections be done in order to have maximum power output is ----- ohm.
A. 2 B. 4 C. 8 D. 16
- 66 Axle Counters being used in Railway will be functional in
A. 6 Quad Cable B. OFC C. Switch Board Cable D. Both a and b
- 67 9 (Nine) is written as----- in binary system.
A. 1111 B. 1011 C. 1001 D. 1101
- 68 ISDN stands for
A. International standard Digital Network B. International Services Digital Network
C. Integrated Services Digital Network D. Integration of digital services on Network
- 69 IP Telephones can only work if their exist
A. Copper cable B. LAN C. D connector D. RG6 connector
- 70 Identify the false statement.
A. In a LAN only the packets of one computer is being sent at a time.
B. In a LAN, the packet of all the computers are being sent at the same time.
C. Routers connect different network.
D. STP cables may be used to increase the speed of networking.
- 71 For caller ID facility on telephones for the calls coming from different exchanges----- ckt is mandatory
A. E1 B. PRI C. E&M D. All of these
- 72 The NGN circuit is connected to ----- NGN exchange which in turn routes all the calls to differnt parts of India in Railway.
A. Secunderabad B. New Delhi C. Zonal Head Quarter D. Any divisional Exchange
- 73 The possible protection schemes in the STM network of FIBCOM AC1 family include SNC protection ----- signals.
A. VC-4 only B. VC-3 only C. VC-12 only D. VC-4, VC-3 and VC-12
- 74 Management of FIBCOM FOCUS AC1 family can be performed from a -----
A. Local craft terminal only B. Network element manager only
C. Network management system only D. All the three
- 75 The data rate of STM-4 -
A. 622.080 Mbits/s B. 2.488 Mbits/s C. 155.52 bits/s D. 140 Mbits/s
- 76 How many complementary pass may be issued to a non gazetted employee who take retirement

- A. One B. Two C. Three D. Four
- 77 Which of the following is true?
 A. SSE/JE have the power of withholding an application of NOC of the employee who have applied for the post of higher grade pay.
 B. SSE/JE can convert an application of LAP to extraordinary leave (LWP).
 C. JE/SSE have certain power to issue minor penalty chargesheet.
 D. JE/SSE may not join any union of their choice for their benefits.
- 78 Identify the false statement.
 A. Leave not due may be granted by leave sanctioning authority.
 B. During study leave, an employee gets salary.
 C. Commutated leave may be sanctioned stringently (Strictly) on medical ground only.
 D. Hospital leave (IOD) of more than 120 days may be sanctioned by Sr.DSTE.
- 79 The maximum number of days that a person can apply for encashment of leave in entire service period is ---- days.
 A. 30 B. 50 C. 60 D. 100
- 80 Identify the false statement.
 A. Leave can not be claimed as a matter of right.
 B. An employee can never get children allowance for more than two children under any circumstances.
 C. Volunteer retirement may be taken only after serving 20 years.
 D. An employee may get pension after ten years on joining an Govt/PSU.
- 81 Identify the false statement.
 A. An employee will get the full encashment of leave in case of dismissal/removal.
 B. Encashment of LHAP may be done if an employee does not have LAP in his account after superannuation.
 C. Maternity leave of 180 days is allowed to female employee for two children.
 D. 45 days maternity employee is allowed to female employee on account of abortion/miscarraige in entire career.
- 82 JE/SSE has been classified as ----- category according to HOER.
 A. Intensive B. Continuous C. Essentially Intermittent D. Excluded
- 83 --- type VF transformer is used in derivation joint of 6 Quad cable.
 A. 470:600 B. 470:1120 C. 470:470 D. 600:720
- 84 _____ VF transformer is used for impedance matching between OFC and Control equipment.
 A. 470:600 B. 470:1120 C. 470:470 D. 600:720
- 85 What is the maximum length of the cable used to connect a computer with a Fast Ethernet switch.
 A. 500m B. 10m C. 50m D. 100m
- 86 Which type of modem are used for broadband on communication cable.
 A. ADSL B. ADSL 2+ C. G703 Modem D. Both A & B.
- 87 The earth resistance for telecom equipments must be less than ----- ohm
 A. 10 B. 5 C. 2 D. 1
- 88 The insulation resistance of 6 quad cable (loaded) measured with 100 V megger is
 A. 1 Mega ohm B. 5 Mega ohm C. 100 Mega ohm D. 1000 Mega ohm
- 89 Y-protection in OFC hut is provided between ----- and----- in OFC.
 A. Power Supply and Charger B. Charger and equipment

various modules.

- A. 10 B. 13 C. 14 D. 15

PART- B

- 91 WEBFIL Mux uses Faulty B cross-connect table when _____ tributary is having major alarm.
A. A B. B C. Either A or B D. Neither A nor B
- 92 ----- card is used at the place from which telephone is to be extended at way side stations.
A. Subscriber B. Exchange Interface C. NIM D. E& M
- 93 Suppose there is provision of 21 E1s in a stream of STM-1 being used by Railway and the section carries FIBCOM equipment. If there is a requirement of additional 21 E1s, then there will be requirement of ----- card
A. LI Card B. TEXT C. ADM D. Subscriber Interface card
- 94 ----- card is required to add third direction to a running two direction Tejas equipment.
A. A012 B. TET C. TP01 D. ADM
- 95 Suppose there is a layer 2 managed switch and an IP address is to be assigned for diagnosis purpose, then which statement is true
A. One has to select the the first port and assign an IP address.
B. One has to select the the last port and assign an IP address.
C. One has to select a virtual port and assign an IP address.
D. Layer2 Managed switches, there isn't any prvision of assigning an IP address.
- 96 TP01 card being used in Tejas STM 1 acts as
A. Unmanaged Layer2 Switch B. Managed Layer 2 Switch C. Layer 3 Switch
D. It may be used as powerful routers.
- 97 The property of combining more than 1Es and increasing the bandwidth in STM is known as
A. CATENATION B. CONCATENATION C. PIPELINING D. ISOTOPING
- 98 Which one is not a kind of test for Tejas STM equipment?
A. Near End Test B. Far end Test C. Remote Loopback D. Reliability test
- 99 Which one is not a test for modems being used for networking?
A. Local loopback B. Remote loopback C. Digital loopback D. None of these
- 100 MLNN (Managed Leased Line Network) hired by Railway for networking has
A. A fixed speed of 64 Kbps B. A fixed speed of 2 Mbps
C. A fixed speed of 100 Mbps D. An speed upto 2 Mbps in multiple of 64 kbps

माडल प्रश्न पत्र (हिन्दी)

20

- प्र. 1. राजभाषा से संबंधित संवैधानिक प्रावधान भारत के संविधान के किस भाग में है?
- (क) भाग 15 (ख) भाग 16
(ग) भाग 17 (घ) भाग 18
- प्र. 2. संघ की राजभाषा के बारे में भारत के संविधान के किस अनुच्छेद में उल्लेख है?
- (क) अनुच्छेद-112 (ख) अनुच्छेद-120
(ग) अनुच्छेद-340 (घ) अनुच्छेद-343
- प्र. 3. भारत के संविधान के अनुसार संघ की राजभाषा हिंदी तथा लिपि है?
- (क) रोमन (ख) खरोष्ठी
(ग) देवनागरी (घ) ब्राह्मी
- प्र. 4. संसदीय राजभाषा समिति में कितने सदस्य होते हैं?
- (क) 10 (ख) 20
(ग) 30 (घ) 40
- प्र. 5. संसदीय राजभाषा समिति में राज्यसभा के कितने सदस्य होते हैं?
- (क) 5 (ख) 10
(ग) 15 (घ) 22
- प्र. 6. संविधान की किस अनुसूची में भाषाओं का उल्लेख है?
- (क) सातवीं (ख) आठवीं
(ग) नौवीं (घ) दसवीं
- प्र. 7. राजभाषा अधिनियम कब बना?
- (क) 1961 (ख) 1962
(ग) 1963 (घ) 1968
- प्र. 8. गोवा राज्य किस वर्गीकरण में आता है?
- (क) क क्षेत्र (ख) ख क्षेत्र
(ग) ग क्षेत्र (घ) इनमें से कोई नहीं
- प्र. 9. एक राज्य और दूसरे राज्य के बीच या किसी राज्य और संघ के बीच पत्रादि की भाषा के बारे में भारत के संविधान के किस अनुच्छेद में उल्लेख है?
- (क) अनुच्छेद-346 (ख) अनुच्छेद-347
(ग) अनुच्छेद-348 (घ) अनुच्छेद-349
- प्र. 10. हिंदी भाषा के विकास के लिए निर्देश का उल्लेख भारत के संविधान के किस अनुच्छेद में है?
- (क) अनुच्छेद-343 (ख) अनुच्छेद-344
(ग) अनुच्छेद-345 (घ) अनुच्छेद-346