

रेल पहिया कारखाना/RAIL WHEEL FACTORY  
(रेल मंत्रालय/Ministry of Railways)

महा प्रबंधक का कार्यालय General Manager's Office,  
कार्मिक विभाग (Personnel Department),  
यलहंका, बेंगलूर Yelahanka, Bangalore-560 064.

No. RWF/PM-27/514

Dated: 09.04.2026

Dy.CEE/RWF/YNK

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*9.4.26  
09/04/2026*

*SEE S&T.*

विषय/Sub: Preparation of Question Bank for the post of JE/Tele

संदर्भ/Ref: This Office letter No.RWF/NG-27/514.Pt.VII dated 21.08.2025 &  
07.04.2026

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Further to this Office letter cited above, copy of the syllabus and Question Bank adopted in South Western Railway as approved by PCSTE/Zonal Railway, for the post of JE/Tele (due to non- availability of S&T officer in RWF) is enclosed herewith, for adoption of the same in RWF and publish the same in RWF website.

This issue with the approval of the competent authority.

Encls: as above.

*9/4/26*  
for Principal Chief Personnel Officer

*9/4/26*

ANNEXURE-C

**SYLLABUS FOR THE WRITTEN TEST FOR SELECTION TO THE POST OF JUNIOR ENGINEER/TELE IN LEVEL-6 /PB+ GP. Rs.9300-34800+4200 AGAINST 30 % PROMOTIONAL QUOTA.**

1. Basic information regarding General Rules and subsidiary rules and other manuals and circulars issued from time to time in connection with train operation.
2. General Knowledge of office and store procedures and instructions thereof, Knowledge of rules, pass rules, DAR rules, Hours of employment rules etc.,
3. Basic knowledge of maintenance practices of 6 quad cable system and OFC system- fault localization and restoration.
4. Basic knowledge of maintenance practice of electronic exchanges and line plant, WLL exchange /SAT phone operation.
5. Basic knowledge of maintenance of digital and analog Microwave network and VHF/UHF trans receivers.
6. Maintenance of Control communication equipment's, method of testing localization of faults and control patching.
7. Basic knowledge of working of PRS, FOIS, MIS, COIS, UTS, TAX etc.,
8. Installation and maintenance of power plant and battery backup for various Railway telecommunication and data communication installations.
9. Basic knowledge of working of Master-slave clocks, digital clocks, satellite synchronized clocks etc.,
10. Basic knowledge of working of CCTV, IVRS, PA system with prerecorded announcements and other public amenity gadgets.
11. Basic knowledge regarding Disaster Managements Communication at site and connectivity to HQRs.
12. Official Language act and Policy.

*Akma*

13/1/2016

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Question Bank for JE/Tele examination

| Sl No | Question   | A                                     | B                                   | C                                    | D                                  | E             | Answer |
|-------|--|---------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|---------------|--------|
| 1     | What is full form of DMTR  | Daily monitoring transaction register | Daily material transaction register | Duty monitoring transaction register | Duty material transaction register | all of above. | B      |
| 2     | Abbreviation of P.T.O is   | Personnel Ticket Order                | Permanent Ticket Order              | Privilege Ticket Order               | Pass & Ticket Order                | all of above. | C      |
| 3     | Casual Leave can be combined with Joining time   | TRUE..                                | FALSE..                             | Depends on the case                  | Cant say                           | None of above | A      |
| 4     | SF-11 is a Minor penalty   | TRUE..                                | FALSE..                             | Depends on the case                  | Cant say                           | None of above | A      |
| 5     | The highest level of pay matrix in seventh CPC is  | 13                                    | 18                                  | 25                                   | 22                                 | None          | B      |
| 6     | CRN in UDM stands for  | Conveyance Reference Number           | Community Rail Network              | Check Return Notification            | Consignee Receipt Note             | None          | D      |
| 7     | The DS-8 form number is  | S-1536                                | S-1537                              | S-1538                               | S-1539                             | None          | C      |
| 8     | Censure is a   | Major Penalty                         | Minor Penalty                       | not a penalty                        | None                               | all of above. | B      |
| 9     | DAR stands for   | Direct Appeal Rules                   | Discipline and Rules                | Discipline Amendment Rule            | Discipline and Appeal Rule         | None of above | D      |
| 10    | CCL can be merged with LAP   | TRUE.                                 | FALSE.                              | Depends on the case                  | Cant say                           | None of above | A      |
| 11    | JE/Tele comes under ___ Category   | Essentially intermittent              | Continuous                          | Excluded                             | None                               | all of above. | C      |
| 12    | SF-11  | Serious Frame                         | Sigle Failure Form                  | Standared Form                       | Serious Form                       | None          | C      |
| 13    | The abbreviation of UDM is   | Unified Data Management               | Unified Depo Mangement              | User Data Management                 | User Depot Module                  | None          | D      |
| 14    | The Internal Complaints Committee is to be setup at every workplace headed by woman having atleast _____ % of its members being women. | 0%                                    | 33%                                 | 100%                                 | 50%                                | None          | D      |
| 15    | The normal optic fiber cable drum length is ----- km   | 1                                     | 2                                   | 3                                    | 4                                  | None          | C      |
| 16    | Cable markers are normally provided at every ----- meters on the cable route in block sections.  | 5                                     | 10                                  | 150                                  | 50                                 | None          | D      |
| 17    | What is the purpose of loading in an underground telecom cable   | To reduce transmission loss           | To decrease cross talk              | To reduce noise                      | To increase attenuation            | None          | A      |
| 18    | The unbalance in capacitive couplings of quad cable causes   | Noise                                 | Attenuation                         | Cross talk                           | Distortion                         | None          | C      |
| 19    | Binder is available in six quad cable  | TRUE.                                 | FALSE.                              | Depends on the case                  | Cant say                           | None of above | A      |
| 20    | The nominal length of Six quad cable is _____ Km   | 1                                     | 2                                   | 3                                    | 1.5                                | None          | A      |
| 21    | The Six quad cable consists of _____ pairs   | 6                                     | 12                                  | 24                                   | 4                                  | None          | B      |
| 22    | Scattering and absorption of light signal cause -----.   | Total internal reflection             | attenuation                         | gain to the signal                   | Dispersion                         | None          | B      |
| 23    | The 24-fiber armoured optic fiber cable contains -----.  | 2 loose tubes                         | 3 loose tubes                       | 24 Single loose tubes                | 6 loose tubes                      | None          | D      |
| 24    | Cleaving of the fibre is performed to obtain ----- degree on end face of the fiber   | 60                                    | 40                                  | 30                                   | 90                                 | None          | D      |

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|----|--|--|-------------------------------------|--|-------------------------------|---------------|---|
| 25 | On OTDR trace Vertical axis represents-----<br>-----   | Launch Power                             | Distance                            | Return Power                               | Time                          | None          | C |
| 26 | Insulation Resistance Test should conduct  | Monthly                                  | Quartely                            | Halfyearly                                 | Yearly                        | None          | D |
| 27 | The Psophometric Noise shall not be more than  | 2V                                       | 1V                                  | 2mV  | 1mV                           | None          | C |
| 28 | The ITU-T recommendation describes the properties of Non dispersion-shifted fiber.                               | G.652                                    | G.653                               | G.654                                      | G.655                         | None          | A |
| 29 | SBC division is mostly having 6 quad cable of dia  | 0.9 mm                                   | 1.4 sq mm                           | 2.54 mm                                    | 1.5 mm                        | None          | A |
| 30 | The RDSO Spec No:<br>RDSO/SPN/TC/_____ for 1.4mm dia quad cable.   | 77/07                                    | 72/07                               | 70/07                                      | 75/07                         | None          | B |
| 31 | The impedance of loaded 0.9mm dia Quad cable is _____ ohms.  | 470                                      | 600                                 | 1120                                       | 560                           | None          | C |
| 32 | DSLAM stands for -----<br>---  | Digital Synchronous Line Multiplexer     | Digital line access multiplexer     | Digital subscriber line access multiplexer | None of the above             | None          | C |
| 33 | In VOIP based TCCS, IP phones shall be provided to way side station masters and other users of control circuits. | TRUE.                                    | FALSE.                              | Depends on the case                        | Cant say                      | None of above | A |
| 34 | In ISDN what does the word 'N' stands for  | Network                                  | Next                                | Networking                                 | net                           | None          | A |
| 35 | Storage of 1 KB means the following number of bytes  | 1000                                     | 1024                                | 960  | 1064                          | None          | B |
| 36 | The abbreviation of WLL Exchange is  | Wireless Line Loop                       | Wavelength Local Loop               | Wireless Line less                         | Wireless Local Loop           | None          | D |
| 37 | The abbreviation of CLIP in ISDN Exchange is   | Calling Line Identification Presentation | Connected Line Identification Point | Caller Line index point                    | Caller Line identifaction Pin | None          | A |
| 38 | The abbreviation of SIP is   | Session Index Protocol                   | Session Information Protocol        | Section Index Point                        | Session Initiation Protocol   | None          | D |
| 39 | The abbreviation of RJ 45 is   | Restorative Jack                         | Richard Jefferson                   | Radio Jockey                               | Registered Jack               | None          | D |
| 40 | The purpose of twisted pair cables in telecom cables is  | To reduce cross talk                     | To give strength                    | Ease in manufacturing                      | To avoid signal loss          | None          | A |
| 41 | Full form of UTP cable   | Unscreened twisted pair cable            | Unused twisted pair cable           | Unusual twisted pair cable                 | Unshielded twisted pair cable | None          | D |
| 42 | The standard drum length of Optic fiber cable is _____ Km  | 1  | 2                                   | 3  | 4                             | None          | C |
| 43 | Which is the control card in coral flexicom 6000 ?   | UGW                                      | iDSP                                | DTR  | MCB                           | None          | E |
| 44 | Which is the peripheral card in coral flexicom 6000 ?  | MCP                                      | CNF                                 | DTR  | SFD                           | None          | E |
| 45 | NAND is equivalent to a _____ gate   | AND gate plus OR gate                    | AND gate plus NOR gate              | AND gate plus NOT gate                     | All the above                 | None          | C |

*Arora*

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|    |   |                                      |                               |                                      |  |               |   |
|----|---|--------------------------------------|-------------------------------|--------------------------------------|--|---------------|---|
| 46 | Main disadvantage of EEPROM is _____  | It takes lesser time for programming | It can be erased electrically | It takes longer time for programming | Requires ultraviolet light for erasing | None          | C |
| 47 | Which one of the following is Universal gate  | NAND                                 | NOR                           | AND                                  | OR                                     | both A & B    | E |
| 48 | In Boolean algebra, the bar sign (-) indicates  | OR operation                         | AND operation                 | NOT operation                        | None of the above                      | all of above. | C |
| 49 | The D-channel data rate in ISDN _____ Interface is 16Kbps in ISDN Exchange                                    | PRI                                  | BRI                           | NRI                                  | FRI                                    | None          | B |
| 50 | How many slots are there in siemens hipath 3800 exchange ?  | 14                                   | 8                             | 16                                   | 12                                     | None          | E |
| 51 | The abbreviation of IP in IP67 is   | Internet Protocol                    | International Protection      | Ingress Protection                   | Intellectual Property                  | None          | C |
| 52 | Resistance of ammeter shall be  | very high                            | high                          | low                                  | very low                               | None          | D |
| 53 | In digital Radio transmission system circuit quality is _____ of link path.                                   | Independent                          | Dependent                     | Depends on the case                  | Cant say                               | None of above | B |
| 54 | The quality of digital signals is measured by _____ instead of S/N ratio as in analog microwave systems.      | C/N ratio                            | BER                           | both C/N ratio and BER               | None of the above                      | all of above. | B |
| 55 | The working voltage of VHF 25Watts set is   | 12VAC                                | 230VDC                        | 12VDC                                | 230VDC                                 | None          | C |
| 56 | The Spectrum charges for VHF sets is being paid by Railways to WPC  | TRUE.                                | FALSE.                        | Depends on the case                  | Cant say                               | None of above | A |
| 57 | The GDR fequency of Walkie Talkie is _____ MHz  | 160.25                               | 161.15                        | 161.25                               | 162.125                                | None          | B |
| 58 | An Antenna is classified based on   | Frequency                            | Size                          | Directivity                          | All of the above                       | None          | D |
| 59 | A ground plane antenna transmits a horizontally polarized signal  | TRUE.                                | FALSE.                        | Depends on the case                  | Cant say                               | None of above | B |
| 60 | The normal length of coaxial cable used for VHF 25 watts set is _____   | 25Mtrs                               | 30Mtrs                        | 15Mtrs                               | 20Mtrs                                 | None          | B |
| 61 | The frequency allotted by WPC in VHF for Indian Railways are in the band _____                                | 146-273MHz                           | 146-174MHZ                    | 245-275MHZ                           | 140-180MHZ                             | None          | B |
| 62 | The battery voltage of Walkie Talkie is   | 5VDC                                 | 12VDC                         | 7.2VDC                               | 24VDC                                  | None          | C |
| 63 | A mobile handset with higher S/N Ratio is assigned a Channel with-----  | Higher Reuse Factor                  | Lower Reuse Factor            | Medium Reuse Facor                   | None of the above                      | all of above. | B |
| 64 | Frequencies in the UHF range propagate by means of _____  | Ground waves                         | Sky waves                     | Surface waves                        | Space waves                            | all of above. | D |
| 65 | Which conversion mechanism is performed by parabolic reflector antenna?                                       | Plane to spherical wave              | Spherical to plane wave       | Both a & b                           | none of the above                      | all of above. | B |
| 66 | An antenna made up of a driven element and one or more parasitic elements is generally referred to as a _____ | Hertz antenna                        | Marconi antenna               | Collinear antenna                    | Yagi antenna                           | None          | D |
| 67 | The _____ coaxial cable is using for VHF 25W set  | RG215                                | RG210                         | RG213                                | RG211                                  | None          | C |
| 68 | An Antenna is basically a _____   | Transducer                           | Transmitter                   | Receiver                             | None                                   | all of above  | A |

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|----|--|-------------------------------------|------------------------------------|--|--|---------------|---|
| 69 | Radio waves travels $3 \times 10^{10}$ meters per second.  | 3                                   | 6                                  | 9  | 8                                      | None          | D |
| 70 | Painting of EC post should be alternately Black & White paint with _____ centimeter bands                | 20                                  | 15                                 | 10   | 30                                     | None          | B |
| 71 | The instrument used normally to check insulation is _____  | Multimeter                          | AVO meter                          | Tong Tester  | Megger                                 | None          | D |
| 72 | Transmission measuring sets are used for measuring _____   | Signal levels and transmission loss | Insertion loss                     | Return loss  | All of the above                       | None          | D |
| 73 | The purpose of twisted pair cables in telecom cables is _____  | To reduce cross talk                | To give strength                   | Ease in manufacturing  | To avoid signal loss                   | None          | A |
| 74 | Railway control communication circuits are of _____ type circuits  | Point to Point                      | Party to line                      | Omnibus  | All the above                          | None          | C |
| 75 | There is no _____ facility in a Control Telephones provided at way stations                              | Patching                            | Speech                             | Dialing  | None                                   | all of above. | C |
| 76 | If the voltmeter resistance is increased the error in the reading given by the voltmeter will _____      | Increase                            | Decrease                           | Increase or decrease depending upon the value of measurement | Be independent of voltmeter resistance | None          | B |
| 77 | Splice is indicated by a reflection event on OTDR trace .  | TRUE.                               | FALSE.                             | Depends on the case  | Cant say                               | None of above | B |
| 78 | Role of S&T in Control working is to _____   | To provide communication            | To provide efficient train control | To provide cooperation between departments                   | All the above                          | None          | A |
| 79 | A Portable EC Telephone is used by _____   | Guard                               | Loco pilot                         | Both A & B   | None of the above                      | all of above. | C |
| 80 | Master phone of Electronic LC gate system operates on _____ DC supply                                    | 3V                                  | 12V                                | 24V  | 48V                                    | None          | B |
| 81 | On line Video display unit enables the master in optimum planning of train movements in his jurisdiction | TRUE.                               | FALSE.                             | Depends on the case  | Cant say                               | None of above | A |
| 82 | Surge protection devices are divided into three classes.   | TRUE.                               | FALSE.                             | Depends on the case  | Cant say                               | None of above | B |
| 83 | GD Tube is a voltage switching and limiting device   | TRUE.                               | FALSE.                             | Depends on the case  | Cant say                               | None of above | A |
| 84 | A CRO can display _____  | AC signals                          | DC signals                         | Both AC and DC signals                                       | Time invariant signals                 | None          | C |
| 85 | A voltmeter using a 50 micro ampere meter has a sensitivity of _____                                     | 20 Kilo ohms per volt               | 50 Kilo ohms per volt              | 20 00 ohms per volt  | 20 Mega ohms per volt                  | None          | A |
| 86 | To measure the flux, devices used are based on _____   | Voltaic effect                      | Piezo-electric effect              | Half effect  | Photo-voltaic effect                   | None          | C |
| 87 | No. of tones used in DTMF system.  | 4                                   | 8                                  | 12   | 16                                     | None          | B |
| 88 | SCADA system is operating through _____ control circuit.   | Section                             | Traction Power                     | Traction LOCO  | Remote                                 | None          | B |

*Amur*

|     |  |                                       |                                       |   |  |               |   |
|-----|--|---------------------------------------|---------------------------------------|---|--|---------------|---|
| 89  | Factors affecting soil resistivity are   | Chemical composition                  | Salts dissolved                       | Moisture content                          | All of the above                       | None          | D |
| 90  | For 12 Volt and 40 mA, the power is  | 480mW                                 | 480W                                  | 480KW                                     | None of the above                      | all of above. | A |
| 91  | How many cycles will an AC signal make in 2 seconds if its frequency is 100 Hz?  | 50                                    | 100                                   | 15  | 200                                    | None          | D |
| 92  | There are _____ layers in OSI model formulated by ISO.   | 5                                     | 6                                     | 7   | 8                                      | None          | C |
| 93  | 100 BASE-T type of Ethernet uses   | Coaxial cable                         | Optical Fiber cable                   | Switch Board cable                        | UTP/STP cable                          | None          | D |
| 94  | Railnet is a   | Extranet                              | Internet                              | Intranet                                  | Piconet                                | None          | C |
| 95  | FOIS stand for   | FREIGHT OPERATIONS INFORMATION SYSTEM | FLIGHT OPERATIONS INFORMATION SYSTEM  | FREIGHT OPERATIONS INTERNET SYSTEM        | None                                   | all of above. | A |
| 96  | The main objective of PRS in Indian Railway is to provide  | reserved tickets                      | un reserved tickets                   | Freight booking                           | flight booking                         | None          | A |
| 97  | UTS can provide computerized unreserved tickets through  | hand held terminals                   | smart card                            | automatic vending machines                | All above                              | None          | D |
| 98  | Back bone connectivity of FOIS network is on   | VSAT links only                       | 64 Kbps data lines                    | 2 Mbps data lines                         | All of the above                       | None          | D |
| 99  | Routers are used to connect  | Similar LANs                          | Dissimilar LANs                       | Different networks                        | None of the above                      | all of above. | C |
| 100 | Collisions are totally controlled in a LAN using device  | HUB                                   | SWITCH                                | ROUTER                                    | FIREWALL                               | None          | B |
| 101 | Application Servers of FOIS are located at   | Divisional Hq.                        | Zonal Hq                              | Rly Board                                 | CRIS / NDLS                            | None          | D |
| 102 | The main objective of UTS in Indian Railway is to provide  | reserved tickets                      | un reserved tickets                   | Freight booking                           | flight booking                         | None          | B |
| 103 | MIS stands for   | Management Information System         | Master Information system in PRS      | Master information system in UTS          | Material Information System            | None          | A |
| 104 | COIS stands for  | Coaching Operation Intimation system  | Coaching Operation Information System | Coaching Operation Information Status     | Coaching Open Intimation System        | None          | B |
| 105 | ICMS stands for  | Integral Coaching Management System   | Integrated Coaching Management System | Information of Computer Management System | Integrated Coach Module System         | None          | B |
| 106 | In coaxial Ethernets, the transmission is  | Full duplex                           | Half duplex                           | Simplex                                   | All                                    | None          | B |
| 107 | The Dynamic protocol used for unification of PRS & UTS is  | RIP                                   | OSPF                                  | IGRP                                      | None                                   | all of above. | B |
| 108 | UTS means  | Unified Ticketing system              | Unique Ticketing system               | Unreserved Ticket system                  | Unreserved Ticketing system            | None          | D |
| 109 | The standard complaint & cost effective solution for connecting dumb terminal and thin clients at remote site for PRS – UTS integration is | Statmux                               | Terminal Server                       | DCM                                       | NeTS                                   | None          | D |
| 110 | COA stands for   | Computer Operation System             | Control Office Application            | Chart Operation System                    | Control Operating Software Application | None          | B |
| 111 | Name of IEEE standard for Gigabit Ethernet of speed 10000 Mbps for cable type copper(4Pairs)   | 802.3z                                | 802.an                                | 803.ab                                    | 803.3u                                 | None          | B |

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|     |  |                     |                    |                      |                      |               |   |
|-----|--|---------------------|--------------------|----------------------|----------------------|---------------|---|
| 112 | The IEEE-LAN standards for Broad band wireless   | 802.16              | 802.15             | 802.14               | 802.12               | None          | A |
| 113 | Capacity of any Lead Acid cell is given in   | Ampere Hours        | Ampers             | Hours                | Voltage hours        | None          | A |
| 114 | The Specific gravity of Sulphuric Acid is 1.835  | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 115 | The Specific gravity of Pure water is 1.0  | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 116 | _____ is an instrument used to measure the Specific gravity of electrolyte                                       | Thermometer         | Sp. gravity meter  | Mass flow meter      | Hydrometer           | None          | D |
| 117 | Lead Acid cell can be discharged up to voltage of _____ in C/10 discharge rate, 10 indicates                     | 1.7                 | 1.8                | 1.85                 | 1.9                  | None          | B |
| 118 | Unit of Capacity of a cell   | Volt                | Amps               | Current              | Hours                | None          | D |
| 119 | Master Phone (Voice Recording type ) of Electronic LC gate system has _____ Port                                 | Ah                  | A                  | H                    | HA                   | None          | A |
| 120 | Function of separators in Lead acid cell is to prevent _____   | HDMI                | DVI                | USB                  | All the above        | None          | C |
| 121 | Slave Phone of Electronic LC gate system has _____ Port  | Over charging       | Short-circuit      | Deep discharge       | Plate damage         | None          | B |
| 122 | Fibcom 6325 Node is containing _____ number of slots for its modules.  | HDMI                | DVI                | USB                  | All the above        | None          | E |
| 123 | The TJ100MC-1 has redundant power supplies   | 18                  | 15                 | 9                    | 8                    | None          | C |
| 124 | If there no ringing at a way station one of the likely cause can be _____  | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 125 | Computer connectivity to the Voice logger is through Ethernet port   | Faulty DTMF decoder | Wrong code setting | Rx amplifier failure | Any one of the above | None          | D |
| 126 | Since VOIP is internationally accepted technology, future improvement in the system shall also benefit the TCCS. | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 127 | How much current is produced by a voltage of 18kV across a 15kohm resistance                                     | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 128 | PIMI Module of Fibcom 6325 Node contains _____ number of STM1/4 Optical ports                                    | 1.2A                | 12A                | 120mA                | 12mA                 | None          | A |
| 129 | The power consumption of TJ100MC-1 system is nearly 120 W  | 0                   | 1                  | 2                    | 4                    | Nil           | D |
| 130 | The status of the Active LED of TE31 card of TJ100MC-1 system will be _____ if the card is in use                | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 131 | The power consumed by an E1 tributary card of TJ100MC-1 system is 8 W  | Amber               | Blue               | White                | Green                | None          | D |
| 132 | The maximum power consumed by an STM-1 tributary card A011 of TJ100MC-1 is _____                                 | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 133 | Full Form of WWW in internet   | TRUE.               | FALSE.             | Depends on the case  | Cant say             | None of above | A |
| 134 |  | World Web Wire      | World With Web     | World Wide Web       | World Width Web      | None          | C |

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*Amma*

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|     |   |   |   |   |                       |                   |   |
|-----|---|---|---|---|-----------------------|-------------------|---|
| 135 | The maximum Loop Resistance of six quad cable is _____ ohms/KM  | 54  | 56  | 58  | 63                    | None              | B |
| 136 | The digital clock uses GPS receiver to receive correct time   | TRUE.                                     | FALSE.                                    | Depends on the case                           | Cant say              | None of above     | A |
| 137 | RTC stands for Real Time Clock  | TRUE.                                     | FALSE.                                    | Depends on the case                           | Cant say              | None of above     | A |
| 138 | The GPS clock has internal local battery  | TRUE.                                     | FALSE.                                    | Depends on the case                           | Cant say              | None of above     | A |
| 139 | The RDSO specification of analog clock system with GPS synchronization is RDSO/SPN/TC/ _____ /2008  | 70  | 71  | 75  | 76                    | None              | D |
| 140 | The RDSO Specification of Digital clock system with GPS synchronization is RDSO/SPN/TC/ _____ /2008   | 60  | 61  | 62  | 107                   | None              | C |
| 141 | Wired Ethernet standardized under IEEE  | 802.11                                    | 802.16                                    | 802.3   | 802.4                 | None              | C |
| 142 | The IP scheme of Railnet for SWR is   | 10.205.1.1                                | 10.205.0.0                                | 10.205.1.0                                    | 10.205.0.1            | None              | B |
| 143 | The Transmission loss in VF range of loaded cable is _____ dB/Km  | 0.63                                      | 56  | 0.56  | 63                    | None              | A |
| 144 | The Octal system has a base of  | 2   | 4   | 8   | 16                    | None              | C |
| 145 | Logic of EX-OR gate is of _____ parity  | Odd parity                                | Even parity                               | No parity                                     | None of the above     | all of above.     | A |
| 146 | The selection logic in multiplexer is provided by a _____   | Clock                                     | Decoder                                   | Register                                      | All the above         | None of the above | B |
| 147 | The resistance of a photoconductor  | Increase with increase in light intensity | Decrease with increase in light intensity | May increase or decrease with light intensity | Remains constant      | None              | B |
| 148 | A pn junction acts as a   | Controlled switch                         | Bidirectional switch                      | Unidirectional switch                         | Omni direction switch | None              | C |
| 149 | Three hundred joules of energy are consumed in 15 seconds. The power is   | 2Watt                                     | 20Watt                                    | 200Watt                                       | 2000Watt              | None              | B |
| 150 | The merger of hole and free electron in semiconductor is called   | Covalent bond                             | Recombination                             | Thermal Energy                                | Free Electrons        | None              | B |
| 151 | NIC card working condition shall checked by pinging _____   | 127.0.0.1                                 | 127.1.1.1                                 | 127.0.0.1                                     | 10.205.2.21           | None              | C |
| 152 | Four amperes of current are measured through a 24 ohm resistor connected across a voltage source. How much voltage does the source produce? | 960V                                      | 9.6V                                      | 96V   | 9V                    | None              | C |
| 153 | Condenser microphones require polarizing voltage  | TRUE.                                     | FALSE.                                    | Depends on the case                           | Cant say              | None of above     | A |
| 154 | Reverberation is an accumulation of echoes.   | TRUE.                                     | FALSE.                                    | Depends on the case                           | Cant say              | None of above     | A |
| 155 | Line output jacks offer output for connecting to line input of a booster amplifier or any other ampifier                                    | TRUE.                                     | FALSE.                                    | Depends on the case                           | Cant say              | None of above     | A |

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|     |  |                                      |                                       |                                     |  |               |   |
|-----|--|--------------------------------------|---------------------------------------|-------------------------------------|--|---------------|---|
| 156 | As per Railway Board guidelines Electronic Train Indication boards should provide at NSG-5 stn as per classification of stations   | TRUE.                                | FALSE.                                | Depends on the case                 | Cant say                                 | None of above | B |
| 157 | The full form of IVRS is   | Interactive Voice Receiver System    | Intergrated Voice Response System     | Interactive Voice Response System   | Integrated Voice Receiver System         | None          | C |
| 158 | IPIS stands for  | Intergrated Public Information Sysem | Integred Passenger Information System | Integred Private Information System | Interactive Passenger Information System | None          | B |
| 159 | Bass is a low frequency control  | TRUE.                                | FALSE.                                | Depends on the case                 | Cant say                                 | None of above | A |
| 160 | As per Railway Board Guidelines Platform Shelter comes under Passenger Amenities.  | TRUE.                                | FALSE.                                | Depends on the case                 | Cant say                                 | None of above | A |
| 161 | Microphone converts _____ energy in to electrical energy.  | DC                                   | AC                                    | Acoustic                            | Electro magnetic                         | None          | C |
| 162 | Tweeter reproduces _____ notes in a musical program  | Lower                                | Higher                                | Mid                                 | Impedence                                | None          | B |
| 163 | The MDCH/PDCH are having atleast _____ inputs ports and minimum 16 output ports as per RDSO specification of IPIS.   | One                                  | Two                                   | Three                               | Four                                     | None          | B |
| 164 | The abbreviation of POET is  | Public Operated Enquiry Terminal     | Public Operating Enquiry Terminal     | Passenger Operated Enquiry Terminal | Passenger Operating Information Terminal | None          | C |
| 165 | The Call centre maintained by  | CRIS                                 | Railway                               | IRCTC                               | IRISET                                   | None          | C |
| 166 | The abbreviation of PTZ camera is  | Public Thief Zoom                    | Passenger Thief Zoom                  | Pan Tilt Zoom                       | Passenger Tilt Zoom                      | None          | C |
| 167 | _____ is the amount of voltage generated by the microphone for an applied sound pressure at 1KHz shows as mv/Microbar.   | Frequency                            | Impedence                             | Pressure                            | Sensitivity                              | None          | D |
| 168 | The abbreviation of RCA connector  | Radio Corporation of Australia       | Radio Corporation of Africa           | Radio Corporation of America        | Radio Corporation of Austria             | None          | C |
| 169 | The Display board should be covered with U.V stabilized polcarbonate single sheet without any joints having minimum thickness of ___ mm for better visibility and protection against dust. | One                                  | Two                                   | Three                               | Four                                     | None          | C |
| 170 | The RDSO specification of TRUE Colour Video cum Train Information System is RDSO/SPN/TC/_____/2013   | 65                                   | 66                                    | 67                                  | 68                                       | None          | C |
| 171 | The RDSO specification of IP based CCTV survilence system is RDSO/SPN/TC/_____/2016  | 63                                   | 64                                    | 65                                  | 66                                       | None          | C |
| 172 | The RDSO specification of Eight Port layer-2 switch is RDSO/SPN/TC/_____/2008  | 53                                   | 63                                    | 73                                  | 83                                       | None          | D |
| 173 | _____ Response is the ability of a microphone to produce a proportionate output to the sound pressure applied for the specified range of frequencies.                                      | Impedence                            | Sound                                 | Wavelength                          | Frequency                                | None          | D |

|     |   |                  |                  |                     |                  |               |   |
|-----|---|------------------|------------------|---------------------|------------------|---------------|---|
| 174 | The total number of frequency as per railway board for VHF set is   | 18               | 12               | 22                  | 20               | None          | D |
| 175 | As per Railway Board guidelines maximum number of Megaphone should kept in ART                                    | 1                | 2                | 3                   | 4                | None          | D |
| 176 | IRIDM stands for Indian Railway Institute for Disaster Management   | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | A |
| 177 | TCAS stands for Train Collision Avoidance System  | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | A |
| 178 | _____ numbers of Magneto Telephone is recommended for Class "B" ART   | 1                | 2                | 3                   | 4                | None          | B |
| 179 | _____ numbers of Walkie-Talkie sets (5 W VHF) with 100 % spare batteries is recommended for Class "B" ART         | 10               | 5                | 20                  | 30               | None          | C |
| 180 | _____ numbers of Cell phone is recommended for Class "A" ART  | 1                | 2                | 4                   | 10               | None          | C |
| 181 | _____ Mtrs of Field service PVC insulated cable is recommended for Class "A" ART                                  | 300              | 100              | 500                 | 1000             | None          | C |
| 182 | The ART VHF set frequency is  | 147.970MHz       | 147.875MHz       | 147.800MHz          | 147.975MHz       | None          | D |
| 183 | The Railway Board allotted frequency for Shunting & Yard communication is 162.100MHz                              | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | A |
| 184 | The Railway Board allotted frequency for S&T dept is 159.650MHz   | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | A |
| 185 | The Railway Board allotted frequency for LC gate is 159.750MHz  | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | B |
| 186 | Over Time Allowance is eligible for nominated non gazzetted ART Staff   | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | A |
| 187 | SPART stands for Self-propelled Accident Rehabilitation Train   | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | B |
| 188 | The ART should start with in the target time _____ minutes during the day time from the receipt of information.   | 20               | 25               | 30                  | 45               | None          | C |
| 189 | ARMV stands for Accident Relief Medical Vans  | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | A |
| 190 | The VHF channel should be programmed with _____ coding.   | CTSS/ME          | CTCSS/ME         | CCSS/ME             | CTCSS/MF         | None          | D |
| 191 | The MASTER PHONE of Electronic LC gate phone system has Auto Download feature                                     | TRUE.            | FALSE.           | Depends on the case | Cant say         | None of above | A |
| 192 | The siren code for out station & main line is blocked & ART is to be turned out with ARME                         | 4 long & 1 short | 4 long & 2 Short | 2 long & 2 short    | 2 long & 1 short | None          | A |
| 193 | The ART should start with in the target time _____ minutes during the night time from the receipt of information. | 30               | 40               | 45                  | 60               | None          | C |

|     |   |   |  |   |                                       |                   |   |
|-----|---|---|--|---|---------------------------------------|-------------------|---|
| 194 | For cameras, IP rating means  | Inner Product Specification                   | Ingress Protection                                       | Impedance Protection                                  | Inward Protection                     | Impact Protection | B |
| 195 | Desired IP rating for outdoor camera at a railway station is  | IP61  | IP 56  | IP 65   | IP 64                                 | All above         | C |
| 196 | Which of the following possess maximum frequency?   | Gamma Rays                                    | UV Rays  | Microwaves  | Radio waves                           | All above         | A |
| 197 | In Purely capacitance circuit :   | Voltage leads current by 90 Degree phase      | Current leads Voltage by 90 Degree phase                 | Current leads Voltage by 180 Degree phase             | both Voltage and current are in-phase | None of above     | B |
| 198 | Which of the following color possess the longest length in the visible spectrum?  | Yellow  | Red  | Blue  | Violet                                | All above         | B |
| 199 | What is the relationship between wavelength and frequency?<br>C is Velocity   | frequency = wavelength / c                    | c = wavelength / frequency                               | c = wavelength * frequency                            | wavelength = c * frequency            | None of above     | C |
| 200 | UHD is  | 1920 X 1080 pixels                            | 3,840 x 2,160 pixels                                     | 5120 x 2880 Pixels                                    | 1280 x 720 pixels                     | None of above     | B |
| 201 | Full HD is  | 1920 X 1080 pixels                            | 3,840 x 2,160 pixels                                     | 5120 x 2880 Pixels                                    | 1280 x 720 pixels                     | None of above     | A |
| 202 | Common Collector(CC) Amplifier is known as Voltage follower with non inverting voltage gain of 1. it means :  | Output voltage is in phase with input voltage | Output voltage is in 180 degree phase with input voltage | input-output voltage phase difference can be anything | All of above                          | None of above     | A |
| 203 | Common Collector(CC) Amplifier is known as Voltage follower with non inverting voltage gain of 1. it means :  | CC amplifier amplifies Current.               | CC amplifier amplifies Voltage.                          | CC amplifier amplifies Power                          | Both A & C                            | All above         | D |
| 204 | Impedance of a loud speaker would generally in the range of   | 3-10 Ohms                                     | 30-100 Ohms  | 300-1000 Ohms   | 3k- 10K Ohms                          | non of above      | A |
| 205 | 1 Inch = Centi Meters   | 2.5   | 2.51   | 2.53  | 2.54                                  | None of above     | D |
| 206 | TAN 6001 is about wiring discipline of Digital axle counters.<br>As per this TAN, Quad cable twisting shall be ensured during termination so that minimum _____ twists per _____ is maintained till the last inch into terminations | 3, inch                                       | 1, inch  | 1, cm   | 2, cm                                 | None of above     | B |
| 207 | As per PCCL of HASSDAC, Attenuation loss measured at 2 KHz Shall not be greater than _____ dB for full length of the cable (including tail cables) _____ sed.   | 10  | 20   | 30  | 40                                    | 50                | C |
| 208 | In Purely Inductive circuit :   | Voltage leads current by 90 Degree phase      | Current leads Voltage by 90 Degree phase                 | Current leads Voltage by 180 Degree phase             | both Voltage and current are in-phase | None of above     | A |
| 209 | In Purely Resistive circuit :   | Voltage leads current by 90 Degree phase      | Current leads Voltage by 90 Degree phase                 | Current leads Voltage by 180 Degree phase             | both Voltage and current are in-phase | None of above     | D |

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|-----|--|----------------------------|-----------------------------|---------------------------|--------------------------|---------------|---|
| 210 | A capacitor stores energy in an electric field; an inductor stores energy in a magnetic field. | TRUE.                      | FALSE.                      | Depends on the case       | Cant say                 | None of above | A |
| 211 | _____ card of Siemens Hipath 3800 Supports Cordless Telephone?                                 | SCLN                       | SLNC                        | SLCN                      | SCNL                     | None          | C |
| 212 | TMS stands for   | Terminal Management System | Train Management System     | Terminal Module System    | All the above            | None          | B |
| 213 | VRLA stands for Valve Regulated Lead Acid  | TRUE.                      | FALSE.                      | Depends on the case       | Cant say                 | None of above | A |
| 214 | Specification of 48V DC auto/manual battery charger for S&T equipment is _____                 | IRS.TC.72/97               | IRS.TC.86/2000              | IRS.S.86/2000             | RDSO/SPN/TL/23/99        | None          | B |
| 215 | _____ ine matching transformers (LMT) are being used in Impedence matching method.             | TRUE.                      | FALSE.                      | Depends on the case       | Cant say                 | None of above | A |
| 216 | ERS stands for   | Elected Reservarion Chart  | Electronic Reservation slip | Electronic Reserved Chart | Electroinc Railway Chart | None          | B |
| 217 | The abbreviation of XLR connector  | External Line Receiver     | External Loop Receiver      | External Line Return      | External Loop Return     | None          | C |

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