



दक्षिण रेलवे/Southern Railway

प्रधान कार्यालय/ Headquarters office  
कार्मिक शाखा/ Personnel Branch  
चेन्नै/Chennai - 600 003.  
दि./Date: 03.02.2023

सं पी / No. P(S) 608/IX/PTJ/Instr/Tele

PCSTE/MAS CCE/MAS PCPO/SWR/UBL PCSTE/SWR/UBL  
CWM/S&T/PTJ Principal/S&T/TC/PTJ  
DRM(P)MAS MDU TPJ PGT TVC SA,  
DRM(P)UBL, SBC, MYS/SWR, Sr.DSTE/SBC, UBL, MYS/SWR  
DY.CSTE/Project/MS PTJ TPJ  
DY.CSTE/CN/MS, TBM MDU CLT ERS TPJ MTP/MS  
APO/CN/MS Sr.DSTE/MAS, PGT, TPJ, MDU, TVC, SA  
CPD/RE/MS DY.CSTE/CN&MTP/MS APO/S&T/PTJ SPO/RE/MS  
CSTE/CN/MS CSTE/Proj/MMC/MAS

विषय/Sub: Selection for the post of Instructor/Tele /TC/PTJ in Level- 6  
of VII CPC-Pay Matrix – S & T dept-reg.

संदर्भ/Ref.: This office notification No.P(S)608/IX/PTJ/Instr./Signal/Vol.VI dated 02.12.2022

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Further to this office notification dated 02.12.2022, the last date for receipt of application for the post of Instructor/Tele/TC/PTJ in Level-6 of VII CPC Pay Matrix – S&T Dept. is hereby extended up to 01.03.2023. Please give wide publicity to attract more volunteers for the above selection.

Applications should be submitted through online mode only from 06.02.2023 to 01.03.2023 at <http://notifications.srhqpb.in/> duly adhering to the procedures and instructions envisaged in PBC No 150/2022 & 232/2022.

After submission of the application by the employee, Cadre Personnel Officer will download applicant details in Excel format by duly login with username and password provided already and certify the correctness of the application, make necessary changes if any in Excel sheet duly mentioning the correction details in Remarks column. A covering letter duly indicating the eligible/ ineligible application details along with corrected / updated Excel file should be forwarded to HQrs in e-office on or before 16.03.2023 along with DAR, SPE/Vig.clearance. If no volunteers are there a 'Nil' report may please be sent.

The other terms and conditions stipulated in the notification dated 02.12.2022 cited above stands good.

Please note & notify the same.

  
(B.Indumathy)

Senior Personnel Officer/EMS  
for Principal Chief Personnel Officer

Copy to: Ch OS/System – to upload the above notification in Railnet.

Syllabus for the written test for the selection to the post of  
[11] Chief Instructor/Tele. in pay band ₹ 9,300 - 34,800 with Grade Pay of  
₹ 4600 & [21] Instructor/Tele. in pay band ₹ 9,300 - 34,800 with  
Grade Pay of ₹ 4200

#### 1. TRAIN CONTROL COMMUNICATION

- Installation of Maintenance of S&T Test Room at Divisional Control Office.
- Location of test room at Control Office
- Types of Control Circuits and routine periodical Test including EMC testing
- Power supply and procedure arrangements
- Routine tests, periodical testing and protection arrangement test bond in control office
- EMC
- Radio patching/Protection standby circuits
- Digital Voice Recorders
- Hot line telephones; Networking of Data Loggers.
- NMS and Fault Management
- Control efficiency and failure, Interruption & co-ordination with other department like BSNL
- Extension of communication at accident site and co-ordination

#### 2. OPTICAL FIBRE COMMUNICATION

- RDSO Specification of Cables, Types, Cable construction
- Planning and Design system
- Cable laying procedure/Protection/Precautions Termination of Fiber
- Location of OFC room and survey
- Splicing, Type of tools and equipment
- Testing and Measuring instruments OTDR etc.
- Fault localization
- NMS
- STM1,4,15, PD MUX equipments (Installation & Maintenance)
- Power supply requirement
- Provision of Voice & Data Channels
- Ring/ABC earth for OFC equipment
- Maintenance practice
- Guidelines for maintenance of OFC cable and equipment

#### 4. EXCHANGE:

- Digital Exchanges & Tax Exchanges etc.
- NGN connectivity, IP based Exchange
- Operator's console
- Maintenance console
- Alarms
- Service features in exchanges
- Cable Terminations/MDF/IDF
- Protective arrangements
- Power supply for Exchanges
- Telephones (Types) Features Installation, maintenance and wirings
- Exchange equipment Cards - functions, Programming of numbering schemes
- Inter connectivity of Exchanges
- Periodical preventive maintenance
- PRI/BRI/EI Card
- DID/DOD
- Traffic assessment
- Documentation
- Periodical Inspection, testing and maintenance
- AMC

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## 5. DATA COMMUNICATION

- Basic principles of Data Communication and applications
- Classification Network Topology, Layers
- PRS - HQs, Satellite locations, Equipments, Connectivity
- UTS Unreserved Ticket System Topology Installation and maintenance, UTS Divisional, NMS System, HQ UTS System, NMS maintenance, station UTS system.
- NTES
- FOIS, COIS, CMS - Purpose, Equipments, connectivity
- Remote V-SAT Terminals
- DATA Modem, Routers, Hub, Firewalls and switches
- DATA Circuit Cables (Indoor)
- Train Information System
- RAILNET Connectivity - Testing - Maintenance - Programming - TCP/IP, MPLS working
- E-Mail/FAX, Internet
- Fault Diagnosis, Earthing, DO's and Don'ts
- IP based networks/Non - IP based networks

## 6. MOBILE TRAIN COMMUNICATION

- Mobile Train Radio Communication (MRTC) for Train Operators and (GSM/R) and technics
- Train Management and Information System

## 7. QUAD CABLE COMMUNICATION -

### (4/6 QUAD AND RE MAIN TELECOM. CABLE AND DERIVATION CABLES

- Type of Quad Cable - 4/6 Quad Cable, Construction, Quad allocation
- Laying practices
- Precautions before laying.
- Special requirements in 25 KV A/C
- Joints/Terminations
- Balancing & loading derivations in Quad Cables,
- Testing - Measuring instruments
- Fault localization/Restoration
- Periodical testing of parameters
- Quad Cable based communication in Non-RE area

## 8. EXCHANGE CABLES: Planning - Installation - Maintenance

- Type of cables and sizes
- U/G cable laying, terminations, Testing, Fault tracing
- Jointing practices - Terminations - with protective devices
- Indoor suitable Switch Board wiring - Subscribers premises cabling and terminations
- Maintenance and testing
- Structured cable system

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CEE/MAS  
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## 9. DISASTER MANAGERMENTS

- Vital communication facilities at accident site
- Cellular Telephones and deployment
- ART/MRV communications - List of equipments, Functional testing of ART equipments
- VHF System at accident site/Walkie-Talkie arrangement
- WLL Exchange
- Inmarsat/SAT Phone/WLL phones
- EMC/Portable communication
- Video conferring
- V-SAT communication
- Public Address System
- Inspection, Testing

## 10. PASSENGER AMENITIES

- Integrated Passenger amenities system - RDSO Specification  
LED Display Boards, Coach Guidance System, GPS based Clocks,  
LED Train Indication Board
- True colour Video - cum - Train information display system
- PA Systems : Conventional/microprocessor based
- IVRS
- Video Surveillance System
- Sound Distribution System - indoor and outdoor

## 11. (a) POWER SUPPLY SYSTEMS AND PROTECTIONS

- Stabilizer - different types
- Batteries - Secondary Cells
- Low Maintenance cells, Valve Regulated lead acid (VRLA)
- Battery Charger - Automatic, SMPS and other types for Tele. Applications
- DC-DC Converter & Inverter
- Diesel Generators, Installation and Maintenance
- Solar Cells - Design, Installation and Maintenance
- Primary Cells and Rechargeable Cells : Lithium, Ni-Cad, NIMH Cells, LI - ion batteries and chargers
- UPS types

## (b) EARTHING & LIGHTNING PROTECTION

- Earthing - Installation, measurement, maintenance of different types of earth for telecom instruments.
- Surge protection device (SPDS) and applications, Class A, B, C protection

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## 12. GENERAL

### (I) RULES AND CODES

Must have adequate knowledge of all working rules, manuals, circulars, check list and procedure including General and Subsidiary Rules, Block Working Manual, Railway Accident Manual, Telecom. Manual, RE practices, WPC, PTCC, RTCC, Schedule of Dimensions.

### (II) Personnel matters & Stores

- Establishment Rules – HOER, Pass Rules, DAR, WCA, Allowances and Advances, Staff Welfare, Leave Rules, Conduct Rules.
- Contract Management, Measurement Book, Tender schedule & conditions. G.C.C.
- Stores maintenance -Type of Stores, Ledgers
- Indenting & Procurement
- Disposal of unserviceable/obsolete materials
- Tools and plant items
- Use of Rajbhasha in Railway Offices and Railway installations – Hindi – Incentives. Use of Technical Terms and correspondence in Hindi.

### III. Teaching Ability and skill in provision of teaching aids of the following.

1. Sufficient communication and teaching skills, knowledge of public speaking and general knowledge and accessories of Teaching aids.
2. Should have sufficient working computer knowledge like MS Office Package etc. including presentation in power point and system.
3. Should have ability to prepare handouts, Notes, Diagrams, Modules, Specimens etc.
4. Should have knowledge in e – learning system and video conference for remote class room with system installation.
5. Should have ability to install the all teaching systems like Projector, Lap top, Public address system, cordless mike, recording, display of slides.

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*S. K. Das*  
10.11.10  
CCB/MAS

I/182399/2022



दक्षिण रेलवे/Southern Railway

प्रधान कार्यालय/ Headquarters office,  
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विषय/Sub: Selection for the post of Instructor/Tele /TC/PTJ in Level- 6  
of VII CPC-Pay Matrix – S & T dept- reg.

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It is proposed to conduct selection to fill up one UR vacancy of Instructor/Tele in Level- 6 of VII CPC Pay Matrix at S&T/TC/PTJ.

1. Volunteers are called for from the employees working as Technical Supervisors in the Tele Stream only in identical Level -6 VII CPC Pay Matrix.
2. As per the instructions contained in Railway Board's letter No. E(MMP)2002/3/31 dated 07.06.2004 issued under PBC No. 129/2004 dated 15.07.2004 eligible employees from among Technical Supervisors in Level – 6 (Tele Stream) in S & T Department of Bangalore, Mysore and Hubli Division of South Western Railway may also volunteer for the above posts through Proper Channel. Principal Chief Personnel Officer/SWR/UBL may give appropriate publicity for this purpose.
3. Upper age limit as on date of notification should be 55 years and the tenure of the post is five years in terms of PBC No.05/2021.
4. The Selection process will consist of written test (75 marks) and class room lecture trial (25 marks) in terms of PBC No.109/2019. Written test will consist of objective type question (MCQ) only, in terms of PBCNo.263/2018,46/2019 and there will be negative marking @ 1/3 marks for wrong answer in terms of PBC No.264/2019.
5. The selected staff will be eligible for 12% of the basic pay of the cadre post as "Teaching Allowance" in terms of Board's letter No.E(MPP)2012/3/28 dt.06.10.2017.
6. The employees should have completed minimum 2 years in cadre post on repatriation from S& T Training School for volunteering. Serving employees already working in another Ex-cadre post need not apply as per CPO's letter No. P(R) 608/P/Ex-cadre dated 25.05.2005 (PBC No.72/2005).
7. Volunteers are called for from among Technical Supervisors in the Tele stream in Level- 6 who fulfill the eligibility condition laid down in the above paragraphs.
8. In terms of Railway Boards letter No. Hindi/87/OL/1/10/3 dated 03/11/1988 there will be questions in Official Language Policy & rules for at least 10% of the total marks prescribed which is optional.
9. The syllabus for the above selection is enclosed as Annexures.

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**GENERAL INSTRUCTIONS FOR SUBMITTING APPLICATIONS**

- 1) Applications should be submitted through online mode only from 16/12/2022 to 30/12/2022 at <http://notifications.srhqpb.in/> duly adhering to the procedures and Instructions envisaged in PBC No. 150/2022 & 232/2022.
- 2) The link for the web portal will be made available from 16/12/2022 in the Personnel Department website <http://notifications.srhqpb.in/> and also in the Railnet website of Southern Railway
- 3) The employees willing to apply for the above selection have to submit their applications through the above mentioned website in online mode duly affixing latest photo only. Applications received from any other mode will be summarily rejected,
- 4) The employees should upload the requisite documents in the above mentioned website **in PDF format as a single file only.**
- 5) After submission of the application by the employee, Cadre Personnel Officer will download applicant details in Excel format by duly login with username and password provided already and certify the correctness of the application, make necessary changes if any in Excel sheet duly mentioning the correction details in remarks column. A covering letter duly indicating the eligible/ ineligible application details along with corrected / updated Excel file should be forwarded to HQrs in e-office on or before 30/12/2022 along with DAR,SPE/Vig.clearance for those who opt for writing the written examination in Hindi and should be specifically mentioned.
- 6) The specimen application form along with syllabus are enclosed herewith as annexures for information to the applicants,
- 7) If there are no volunteers for the proposed selection of Instructor/Tele in Level – 6 then the Cadre controlling officer/Personnel Officer concerned shall send NIL report on or before 30/12/2022 through e-office certainly to avoid delay in processing of the selections.
- 8) Wide publicity may be given to this letter, duly exhibiting in the office notice boards for information of all staff concerned.

Digitally Signed by

B.indumathy

Date: 02-12-2022 16:35:46

Reason Approved  
(B.indumathy)Senior Personnel Officer/EMS  
for Principal Chief Personnel Officer.

Copy to: CSTE/SWR/UBL - for information and necessary action.

Syllabus for the written test for the selection to the post of  
[1] Chief Instructor/Tele. in pay band ₹ 9,300 - 34,800 with Grade Pay of  
₹ 4600 & [2] Instructor/Tele. in pay band ₹ 9,300 - 34,800 with  
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- Installation of Maintenance of S&T Test Room at Divisional Control Office.
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- Traffic assessment
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- Periodical Inspection, testing and maintenance
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## 5. DATA COMMUNICATION

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- PA Systems : Conventional/Microprocessor based
- IVRS
- Video Surveillance System
- Sound Distribution System – indoor and outdoor

## 11. (a) POWER SUPPLY SYSTEMS AND PROTECTIONS

- Stabilizer – different types
- Batteries – Secondary Cells
- Low Maintenance cells, Valve Regulated lead acid (VRLA)
- Battery Charger – Automatic, SMPS and other types for Tele. Applications
- DC-DC Converter & Inverter
- Diesel Generators, Installation and Maintenance
- Solar Cells – Design, Installation and Maintenance
- Primary Cells and Rechargeable Cells : Lithium, Ni-Cad, NIMH Cells, LI-ion batteries and chargers
- UPS types

## (b) EARTHING & LIGHTNING PROTECTION

- Earthing – Installation, measurement, maintenance of different types of earth for telecom instruments.
- Surge protection device (SPDS) and applications, Class A, B, C protection

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- Contract Management, Measurement Book, Tender schedule & conditions. G.C.C.
- Stores maintenance – Type of Stores, Ledgers
- Indenting & Procurement
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3. Should have ability to prepare handouts, Notes, Diagrams, Modules, Specimens etc.
4. Should have knowledge in e – learning system and video conference for remote class room with system installation.
5. Should have ability to install the all teaching systems like Projector, Lap top, Public address system, cordless mike, recording, display of slides.

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