

South Eastern Railway

Office of the
Sr. Divl. Personnel Officer
S.E. Railway, Kharagpur

No. SER/P-KGP/EN/260/10/EN/JE(Tele)/LDCE/syllabus/25
To

Date:- 30.05.2025

The Sr. DSTE(Co-ord.)
S.E. Railway, Kharagpur

Sub: Approved uniform syllabus for the post of JE/Tele against 20% LDCE
quota in S&T Department of Kharagpur Division.
Ref: PCPO/GRC's letter No. SER/P-HQ/EN/JE(Tele)/LDCE/syllabus dated
30.05.2025.

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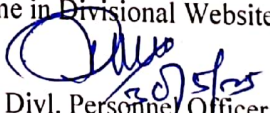
Enclosed please find the copy of PCPO/GRC's letter cited under reference
regarding syllabus for selection to the post of JE/Tele against 20% LDCE in S&T Department
of Kharagpur Division.

This is for your information and wide circulation amongst all the eligible staff of
this Division so as to enable all the probable candidates to prepare themselves for the
forthcoming examination.


Assistant Personnel Officer
for Sr. Divl. Personnel Officer
S.E. Railway, Kharagpur
Date:- 30.05.2025

No. SER/P-KGP/EN/260/10/EN/JE(Tele)/LDCE

Copy to Ch. OS/IT cell/Sr. DPO Office/KGP for uploading the same in Divisional Website.


for Sr. Divl. Personnel Officer
S.E. Railway, Kharagpur

o/c
Shahid
30/05/25

दक्षिणपूर्बरलवे / South Eastern Railway

मुख्यालय/ Headquarters:
कार्मिकविभाग / Personnel Department
गार्डनरीच, कोलकाता - ७०००४३
Garden Reach, Kolkata - 700043

NO: SER/P-HQ/EN/JE(Tele)/LDCE/Syllabus

Date: 30.05.2025

To
The Dy. CSTE/HQ
The Sr. Div. Personnel Officers
(ADA/CKP/KGP/RNC)
South Eastern Railway

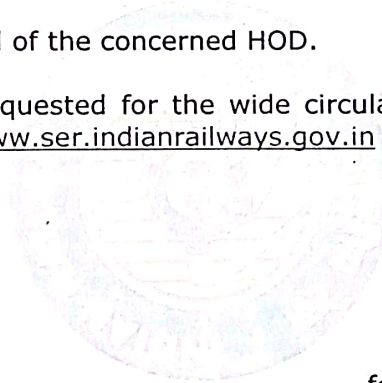
Sub: Approved uniform syllabus for the post of JE/Tele against
20% LDCE quota in S&T Dept. over S.E. Railway.

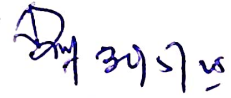
In order to Standardize the Syllabus for conducting the Selection through CCBT, the syllabus as enclosed has been prepared for probable candidates of the category of JE/Tele (Level-6) against 20% LDCE quota in S&T Dept. over South Eastern Railway. This may be circulated to all concerned so as to enable all the probable candidates to prepare themselves for the forthcoming examinations.

This has the approval of the concerned HOD.

You are therefore requested for the wide circulation of the same and it is also available on the website- www.ser.indianrailways.gov.in.

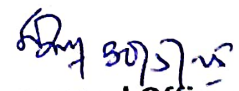
Encl: - As above.




(Satyajit Roy)
Asstt. Personnel Officer (HQ)
for **Pr. Chief Personnel Officer**

Copy forwarded for information to the: -

1. Secy. to GM for kind information of GM
2. PS to PCSTE for kind information of PCSTE
3. PS to PCPO for kind information of PCPO
4. CCE/CSTE(Proj)/CPO(A)
5. Dy. CSTE(Proj)/Dy. CPO(HQ)
6. Sr. DSTE (ADA/CKP/KGP/RNC)
7. APO(HRMS)/APO(Ruling)
8. OS/HRMS-for uploading in the Railway website


for **Pr. Chief Personnel Officer**

Syllabus of JE (Tele), L-2, LDCE (20%)

1. General Rules & Safety:
 - a) Organization Structure of Railways.
 - b) Organization Structure of Zonal S&T Department.
 - c) Telecom Manual.
 - d) Accident Manual.
 - e) Personal safety while working in Telecom Gears.
 - f) Fire Safety.
 - g) First aid and Cleanliness.
2. General Physics:
 - a) Ohm's Law,
 - b) Voltage, Current and Power calculation of Series and Parallel circuit.
 - c) Modulation and Multiplexing Technique.
 - d) VF Transformer.
 - e) Diode and Transistor.
 - f) Amplifier
3. Power Supply and Surge Protection :
 - a) Cells and Battery.
 - b) SMPS Charger.
 - c) UPS and Voltage Stabilizer.
 - d) SPDs and their application
 - e) Earthing practice.
4. Cables:
 - a) Type of cables used in Telecommunication.
 - b) Construction and color code of PIJF Pair cable.
 - c) Construction and color code of Quad cable as per RDSO.
 - d) Cable testing procedures and standard testing parameter.
 - e) Fault localization and Restoration.
 - f) Cable laying and Precaution,
 - g) Cable Joint and Termination.
 - h) Block working in Quad cable.
5. OFC System:
 - a) OFC cable Specification and Construction.
 - b) Cable laying, Termination and Splicing.
 - c) JPO of undertaking digging work.
 - d) Fault localization through OTDR and Power Meter.
 - e) SDH concept and Equipment.
 - f) PDH concept and Equipment.
 - g) Power Supply arrangement of OFC Equipment.
 - h) Installation and maintenance of OFC Equipment.

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6. Train Traffic Control Communication:
 - a) Types of Control Communication.
 - b) DTMF type of Control Communication.
 - c) VoIP based TCCS
 - d) Voice Logger.
 - e) LC Gate Communication.
 - f) Maintenance, fault localization and rectification of control circuit.
 - g) Power Supply arrangement of control communication.
 - h) Emergency Control Communication.
7. Data Communication:
 - a) Networking concept.
 - b) TCP/IP Protocol.
 - c) Datacom Equipment- Modem, Router, Switch, Server, Firewall
 - d) Railnet, PRS/UTS, FOIS, COIS, COA
 - e) IP-MPLS
 - f) Railway Broadband Services and GPON
 - g) VSS and ISS
 - h) E-Mail, E-Office.
 - i) NMS of all Datacom equipment.
 - j) Cyber Security Management of data circuit.
8. Exchange:
 - a) ISDN Exchange.
 - b) IP Exchange.
 - c) IP Telephony and NGN.
 - d) Power and protection arrangement of Telephone Exchange.
 - e) Installation and maintenance of IP Exchange.
9. Mobile Radio Communication:
 - a) VHF communication- Department wise frequency allocation, 5W and 25 W VHF set. WPC and SACFA
 - b) LTE, Tower installation and maintenance
 - c) Type of Antenna.
10. Passenger Amenities:
 - a) PA system.
 - b) IPIS- TIB and CIB
 - c) Wi-Fi, POET
 - d) GPS Clock
 - e) NTES
11. Other Communication:
 - a) Audio and Video conference.
 - b) Audio, video and data communication in VIP Function.
 - c) CUG Phones

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12. Disaster Management:

- a) Communication facility in Accident site and HQ.
- b) ART, ARME
- c) Minimum essential Telecom equipment provided at ART/ARME.
- d) Duty of Telecom staff at accident site.

13. Establishment Rules:

Leave Rules, Pass Rules, HOER, D&A Rules, Rajbhasa etc.

14. General Aptitude

Basic arithmetic and reasoning, General knowledge with focus on Railway and Telecom.

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