

दक्षिणपूर्वरेलवे/SOUTH EASTERN RAILWAY

मुख्यालय/Headquarters
कार्मिकविभाग/Personnel Department,
11, गार्डनरीचरोड/11, Garden Reach Rd,
कोलकाता-43/Kolkata-700043

संख्या/No. SER/P-HQ/EM/JE(DE)/DPQ/Syllabus/2025

दिनांक/Dated: 23.01.2025

To,
The Sr. Divisional Personnel Officer,
South Eastern Railway/KGP/CKP/RNC/ADA.

To,
The Workshop Personnel Officer,
South Eastern Railway/KGPW

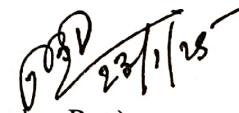
Sub:	Uniform Syllabus for the post of JE(DE) against 25%DPQ in Mechanical Department over S.E.Rly
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In order to Standardize the Syllabus for conduction the Selection through CCBT, the Syllabus as enclosed in **Annexure-'A'**, has been prepared for probable candidates of the category of JE(DE), L-6 against 25% DPQ of Mechanical Department 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 wide circulation of the same and it is also available on the website- www.ser.indianrailways.gov.in.

Encl: Annexure-'A'.


(P.Bhaskar Rao)
Asstt. Personnel Officer (HRMS)
कृतेप्रधानमुख्यकार्मिकअधिकारी
for Pr. Chief Personnel Officer

Copy forwarded for information to the:

- 1) Secy. to GM for kind information of GM.
- 2) Secy. to PCME for kind information of PCME.
- 3) PS to PCPO for kind information of PCPO.
- 4) CMPE/GRC.
- 5) Sr. DME/KGP/CKP/ADA/RNC
- 6) APO(HQ).
- 7) APO(Ruling).
- 8) OS/HRMS for uploading in the official website.

Uniform Syllabus for the post of JE(DE) against 25% DPQ in Mechanical
Department over S.E.RLY

S.N.	SUBJECT
1.	General Abilities
	a. Arithmetic's up to 10 standard- Profit loss, fraction and percentage, distance and speed, pipe and cistern, Birth and age, trigonometry, mensuration.
	b. Current Affairs- sports, place and person in news, politics, economics, current national issues.
	c. General Knowledge related to Indian Railways- History of IR, trains running between important station, basic information about zonal and divisional Railways, ideas on hierarchy of Indian Railways.
2.	Professional knowledge on Diesel Electric Locomotives.
	a. General information of HHP locomotives.
	b. Maintenance practice of traction alternator, traction motor and auxiliary power units, Overhauling of TA, TM. Drop test, ovality check, commutator cable connection, TA deflection, Rectifier , TAV , TAAI
	c. Maintenance practices of control and power side of diesel electric locomotives, Meggar test, Relays functionality, contactors (EM and pneumatics), wire connections, master controller fitment and testing, light circuits, protection devices, shunt, resistors.
	d. Basic knowledge of MEP and MCBG, their schedule maintenance practices and periodicity, control cards, ADB, RDBs, sensors, VCDs, Input channels, output channels, Alternator unit, PRS box, MCBG – MEP communication.
	e. Maintenance practices of various small motors, CCEM, FPM, Dust exhaust blower motors, frequency, voltage and rpm test.
	f. Recent modifications of electrical side of diesel electric locomotives, roof mounted grid blower, hatch type grids, rectifier mounted TA, REMMLOT, Woodward Governor to MCBG Governor
	g. Various Maintenance schedules of HHP locos.
	h. Different types of braking arrangement of HHP locos.
	i. Reliability and safety action plan of HHP locos.
	j. Starting circuit of HHP locomotives.
	k. Load testing, objective of load testing and remedial measures based on observation.
	l. Dynamic braking principle.
	m. Multiple Unit operation and their testing in Air Brake.

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	l. Dynamic braking principle.
	m. Multiple Unit operation and their testing in Air Brake.
	n. Working and attention of Wood ward Governor.
	o. MAS 696 / SIBUS -32 Excitation Control system schedule attention as per extant version.
3.	Professional knowledge on Electric Locomotives.
	a. Conventional AC & 3 phase Locomotives on IR
	b. Equipments in locomotives, their functioning / operations, maintenance / overhauling & testing parameters & maintenance schedules.
	c. Traction Power circuit, auxiliary circuit, control circuits and Pneumatic circuits.
	d. High voltage equipments.
	e. Safety during working in Electric locomotives.
	f. Basic Electricity.
	g. Procedure of isolation of OHE.
	h. Reliability and safety action plan.
	i. Different types of Braking arrangement.
	j. Schedule overhauling and testing of Relay, Contactors, Safety Relays.
	k. Bogie frame, CBC, Wheels, U / Gear Components, Parameters checking.
	l. Safety and fire prevention precautions in locomotives.
	m. Study of circuit diagram , loco testing and trouble shooting.
4	Establishment rules
	a. HOER
	b. Leave rules, Encashment of leave.
	c. Pass rules
	d. D & A rules
	e. Medical De-categorization and absorption Medically de-categorized staff
5	Stores Matter and Financial rules
6	Knowledge of Rajbhasa

OSB
23/1/25