South Eastern Railway

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

No. SER/P-KGP/EN/260/10/EN/Safety Counsellor/syllabus/25

Date: 06.08.2025

To

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

Sub: Approved uniform syllabus for the post of Safety Counsellor in Pay

Level-7 (7th CPC) S&T Department of Kharagpur Division.

Ref: PCPO/GRC's letter No. SER/P-HQ/EN/Safety counsellor/syllabus

dated 04.08.2025.

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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 Safety Counsellor 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: 06.08.2025

No. SER/P-KGP/EN/260/10/Safety Counsellor

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

for Sr. Divl. Personnel Off

S.E. Railway, Kharagpur

दक्षिणपूर्बरेलवे / South Eastern Railway

मुख्यालय/ Headquarters: कार्मिकबिभाग / Personnel Department गार्डेनरीच, कोलकाता –७०००४३ Garden Reach, Kolkata – 700043

NO: SER/P-HQ/EN/Safety Counsellor/Syllabus

Date:04.08.2025

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 Safety Counsellor (Level-7) 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 ExCadre post Safety Counsellor (Level-7) 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- $\underline{www.ser.indianrailways.gov.in}$.

Encl: - As above.

(Satyajit Roy)

Asstt. Personnel Officer (HQ) for <u>Pr. Chief Personnel Officer</u>

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. CSE/CCE/CSTE(Proj)/CPO(A)/GRC

5. Dy. CSTE(Proj)/Dy. CPO(HQ/)/GRC

6. Sr. DSTEs (ADA/CKP/KGP/RNC)

7. APO(HRMS)/APO(Ruling)/GRC

8. OS/HRMS-for uploading in the Railway website

for Pr. Chief Personnel Officer

Syllabus for the post Safety Counsellor (S&T)

A. General:

- 1. General knowledge and current affairs pertaining to Railway and others.
- 2. Basic English: Drafting letters and preparation reports
- 3. General Arithmetic and Algebra like ration and proportion, time and work, speed and distance, percentage, average, profit loss & discount etc.
- 4. Rajbhasa Rules
- 5. Safety Inspections

B. Technical:

1. Mechanical Signalling: -

- i. Roding and wire transmission etc, different foundation and erection of Signal posts, Drawing and specification, HPK locks, Electrical Detectors.
- ii. SIP, R/D & SWR preparation and checking of Engg. Plan.
- iii. Schedule of dimensions.

2. General Rules: -

Basic concept of signaling, G&SR and SEM, Accident, Disaster management, opening of works, CRS sanction, periodical testing and overhauling, duties of Inspectors, Definition, isolation, overlaps, Braking distance, sighting distance, class of stns, standard of interlocking, section capacity, tool kits, safety rules and observance of precautions abbreviations etc.

3. Electrical Signalling, Block & General: -

- i. CLS signal units, cable details, cable testing, cable installation, selection table, signal control circuits, route indicators, indication, electric locking of points and signal lever, routes, sectional route release, slot circuits, cross protection, crank handle interlocking, siding control circuits, L/C gate circuits, C/On, shunt signal.
- ii. Principles of PI/RRI/MACLs, maintenance and installation.
- iii. Principles of modern signaling
- iv. Maintenance of DG Sets, power supply system, battery chargers, inverters, voltage stabilizers, IPS, data loggers, LED lit Signals, etc.
- v. Basic principles of electronics.



4. Tracks circuits & Relays: -

Types of relays & Track-circuits, installation, adjustments and maintenance of track circuits, block joints and other insulations, secondary cell, primary cell, Battery charging, solar panel and modules, parameters, modern track circuits etc.

5. Point machines: -

Types, parameters, essentials, installation and maintenance and controlling circuits of various types of point machine, ground connections, low voltage / high voltage, point contactor units, Safety features, etc.

6. Block: -

DLBI (SGE, UFSBI), TLBI and its circuits, safety features, installation and maintenance with parameters, overhauling and its schedules, power supply system, System of train working and block manual related to Signalling.

7. Miscellaneous: -

| i. | Essential | of | absolute | Bloc | k working |
|----|-----------|----|----------|------|-----------|
|----|-----------|----|----------|------|-----------|

ii. IBS

iii. Axle counter (SSDAC & MSDAC)

iv. Electronic Interlocking

v. Electrical Lifting Barrier

vi. Data logger & networking

vii. Digital Electronics

viii. Earthing

ix. Lightning protection arrangement

8. Trolley Rules: -

Trolley rules including their protection.

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