East Central Railway

Office of the
General Manager(P)
Hajipur

No:- ECR-HQ0PERS(Gaz)/13/2023

Date 21.02.2023

Secy. to GM/ECR: For kind information of GM
Dy. Secy. to AGM: For kind information of AGM
Secy. to PCPO:- For kind information of PCPO
CPO/MPP & Law/HQ; SDGM/ECR/HJP, General Manager (P)/CORE/Allahabad
General Manager/RITES/NDLS, PCME/ECR/HJP
CAO(Con)/S&N/MHX/ECR/PNBE, CAO/WPO/Patna, CAO/RWP/Bela
CAO(GELF)/ECR/DMH, CPD/RE/DNR, Chairman/RRB/Patna & MFP, Chairman/RRC
DRM/ECR/DNR, DDU, DHN, SEE & SPJ
CWM/PD/ECR/DDU, WS/SPJ & CRW/HRT
Sr.DPO/ECR/DNR, DDU, DHN, SEE & SPJ,
Sr. DMEs/DMEs/ECR/DNR, DDU, DHN, SEE & SPJ
Dy.CPO/HQ/MPP/IR&W/ECR/HJP
Principal/ZRTI/E.C.Rly/Bhuli & MFP, Principal/STC/SPJ
APO/Rectt./HJP, APO/M&E & APO/ESM/HQ/HJP
APO/IR&W/HQ, APO/MPP/HQ- For uploading on WEBSITE
All Extra Divisional Units.

Sub :- Selection for the post of Assistant Mechanical Engineer (Group-'B') in Level-8 of Pay Matrix as per 7th PC against 30% quota.

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With the approval of General Manager, it has been decided to hold a selection LDCE for forming a **panel of 01 person** for the post of AME(Gr.-'B') against 30% quota over E.C. Railway, as per details given below:-

Selection	UR	SC	ST	Total
AME (Gr.'B') 30%	01	Nil	Nil	01

As decided by Railway Board vide L/No. E(GP)2022/2/4 dated 28.06.2022, 06.09.2022 & 04.10.2022, that 30% selection for promotion to Group 'B' posts in all Organised departments in the vacancy cycle beginning from 01.01.2023 to 31.12.2024 are to be conducted through the Centralised Computer based Objective type examination by NAIR.

(1) **(a) Tentative date of Examination (CBT):- 14.05.2023.**
(b) Venue of Examination (CBT) & Date of Viva-Voce: - will be notified in due course.

(2) **Eligibility:-(As on 01.01.2023)**

a) All permanent Group 'C' technical staff & running staff of Mechanical Department working/holding lien in Mechanical Department of East Central Railway in Pay Band Rs.9300-34800 (PB-2) with Grade Pay Rs.4200/- (Level- 6 in 7th CPC) and above including Shunter-II of Mechanical Department/E.C. Railway working in Pay Band Rs 5200-20200/- (PB-1) Grade Pay Rs.2400/- (equivalent to the stationary post in Pay Band Rs.9300-34800/- (PB-2) Grade Pay Rs.4200/- & above as per RBE No. 92/2015) including those who are working in other Railways/units and on deputation having lien and seniority on East Central Railway and completed minimum 5 years of non-fortuitous regular service in the grade(s) **as on 01.01.2023** are eligible to volunteer for the LDCE.

NB:- However, Those Gr.'C' employees who have been given financial up-gradation in Grade Pay 4200/- or above in PB-2 (9300-34800/-) under ACP/MACP are not eligible to volunteers for the above (LDCE) examination.

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Contd.... P/2

(a) The cut-off date of eligibility for candidates for 30% LDCE is 01.01.2023, which is same as in the earlier part selection of 70% Quota.

(b) As per Railway Board's letter No. E(GP)2005/2/74 dt.13.03.08(RBE 40/08) in case of persons transferred at his own request to a new unit in the same category of post and assigned bottom seniority therein, the service rendered by them in the previous unit may be reckoned for determining their eligibility wherever a minimum length of service is prescribed as a condition for promotion in the new unit, subject to the condition that the length of service which is so allowed to be counted does not exceed the length of service of their immediate senior in the new unit.

(c) Those Railway employees who have come own request transfer/mutual transfer and joined E. C. Railway after the cut off date i.e. 01.01.2023 will not be eligible to appear in this examination.

(3) Eligible staff who desire to volunteer for the above LDCE may submit their application through proper channel to their respective Personnel Branch officer where they hold their lien.

(4) Eligible staff working in the Construction/Project Organization on deputation, training and any Ex-cadre Organization and having lien and seniority in ECR, who desire to volunteer for the above LDCE may also submit their application through proper channel i.e. their respective Personnel Branch officer, where they hold lien. The concerned Divisions/Units should send copy of notice to the staff who are on deputation after being released from that Divisions/Units.

(5) When an employee is holding an ex-cadre post, details of his/her post in regular cadre with the grade and date of entry as a regular measure should be furnished. This may also be brought to the notice of all concerned. It may be ensured that wide publicity is given to this notification amongst all the eligible staff. It is the personal responsibility of the personnel Officers/Controlling Officers of the Units to ensure that the notification reaches to all the eligible employee well in time.

(6) All the volunteers who fulfill the above mentioned conditions of eligibility will get the chance to compete in the said LDCE, without any restrictions to the number of eligible candidates to be allowed for appearing in the examination.

(7) The above LDCE will be based on the candidate's performance in written examination, Viva-Voce & record of service. Only the candidates, who qualify in the examination and found medically fit for Safety category of AME(Gr.B) as prescribed in Indian Railway Medical Manual will be called for Viva-voce test. The placement of the candidates in the panel will be based on their performance in written examination, viva-voce test and Record of service as per extant instructions of Railway Board and will be strictly as per merit.

(8) **Pattern of Examination:**

(i) The Examination will be conducted as per guidelines/instructions contained in Railway Board letter No. E(GP)2018/2/31 dated 19.03.2019 (RBE No. 53/2019), E(GP)2022/2/4, dt. 28.06.2022, 06.09.2022 & 11.11.2022.

The CBT/Written examination shall comprise of only one paper which shall have 100% objective type multiple choice question only. The paper will be of 150 marks and the distribution will be as under:-

a) Technical (Professional) subject:	80 marks
b) General knowledge including optional questions of 15 marks on official language Policy & Rules:	40 marks
c) Establishment and Financial rules:-	30 marks
d) Qualifying marks:-	90 marks
e) Duration of examination:-	03 Hours

All Objective type questions will carry equal marks. There shall be negative marking for incorrect answers. One-third of the marks allotted for each question will be deducted for every wrong answer.

21/01/23

Contd.... P/3

(ii) Total marks and qualifying marks under the heading "Viva-Voce and Record of service" are as under:-

Head	Maximum Marks	Qualifying Marks
Record of Service -	25 ┐Total	30 in which 15 marks for
Record Viva-voce test -	25 ┘50 marks	of service will be essential.

(9) **Syllabus: In terms of Rly. Bd's Letter No. E(GP)2022/2/4 dated 07.11.2022, copy of syllabus for above selection is attached as Annexure-'B'.**

(10)(a)The Controlling Officers should give the wide publicity of this notification amongst the eligible staff under their control and ensure submission of applications by the candidates in the prescribed Proforma (Specimen Copy enclosed as **Annexure-"A"**).

(b) The last date for submission of the application by candidates is 13.03.2023.

(c) The Controlling officers are also advised that applications submitted by the candidates (in prescribed proforma) must be forwarded to concerned Personnel Branch/Unit office by 15.03.2023.

(d) The applications should be scrutinized properly in Personnel Branch with the Service Record to avoid any factual errors and further complications. The applications should also be signed by the Controlling Officer with official seal and should have the counter signature of the concerned 'Personnel' Branch Officer to avoid any factual errors.

(e) All the scrutinized applications should be sent in a bunch through special messenger to **Dy.CPO/Gaz./ECR/ HJP on or before 22.03.2023 positively. Applications forwarded after the target date will not be entertained under any circumstances.**

It may also be noted that application other than in prescribed proforma, having incomplete information or without signed by controlling officer and countersigned by Personnel branch officer will not be entertained.

(11) In case the service particulars furnished by the volunteers and certified to be in order by the concerned authority are found incorrect/false subsequently, the candidature of the volunteer will be liable to be cancelled at any stage and suitable departmental action will be initiated against him/her.

(12) ACTION TO BE TAKEN ON RECEIPT OF APPLICATION BY CONCERNED PERSONNEL OFFICERS/CADRE CONTROLLING OFFICERS:-

(a) The Personnel Officer/Cadre Controlling Officer will check the correctness of all the particulars of the applications with the Service Records and other relevant records and certify the correctness of each column of the application. Without such certification, application received will summarily be rejected and the responsibility will be fixed for incorrect or incomplete certification against the Officer who will certify/verify. The Personnel Officer/Cadre Controlling Officer should invariably write "Checked and verified" in each and every application after checking and verifying the details duly attesting their signature and date of certification (the date of certification should invariably put in the application).

In case, the Personnel/Cadre Controlling Officers do not put the date after certification or merely forward the application without checking and verifying the details, the matter would be brought to the notice of PCPO and concerned PHOD for taking action against him.

(b) It may please be noted that Controlling Officers/heads of the Units have no discretion to entertain any application beyond the last date. **The applications of the employees who are eligible, should only be forwarded after verifying the other relevant particulars and ineligible application should not be forwarded.**

(C)The Personnel Officer/Cadre Controlling Officer should forward the scrutinized and checked applications in one bunch together under one covering letter furnishing **the details in the following proforma addressed to Dy.CPO/Gaz./HQ by 22.03.2023** indicating therein the total number of applications forwarded. (The details should be sent in soft copy in (MS Excel format also as in the form given in item-D below). The applications rejected may be intimated to the individuals giving reasons thereof by the concerned Unit/Divn where lien and seniority of concerned staff held.

21/2/23

Contd.... P/4

Proforma:-

Sl. No.	Particular/details of candidates	To be filled
1.	Name of applicant	
2.	IPASS Number	
3.	HRMS ID	
4.	Designation	
5.	Mobile No.	
6.	Email.ID (clearly)	
7.	Place of posting	
8.	Division/workshop/unit	
9.	Controlling officer	
10.	DOB (DD/MM/YYYY)	
11.	DOA (DD/MM/YYYY)	
12.	Community (UR/SC/ST)	
13.	Date of regular promotion to Grade pay (4200/- & 4600/-)	
14.	Total service in (GP) Rs. 4200/- (Rs.2400/- in case of L.P.S.II) & above in Mech. Deptt. as on 01.01.2023	

(13) **TRAINING OF SC/ST CANDIDATES:-**

As there is no reserved vacancy available, Pre-selection training is not required as per para 2 (ii) RBE No.142/2019 dated 28.08.2019.

(15) The eligible staff should also be advised that no absentee written examination would be held for the absentees under any circumstances. As per rule, there is no provision of absentee exam in LDCE.

(16) The concerned Personnel Branch Officer & Controlling Officers should ensure the submission of service records and ACRs/APARs of last 05 years and DAR/SPE/Vigilance clearance in respect of staff declared qualified for the viva-voce in due course/immediately after publication of the result of written examination through special messenger to SPO/Gaz/ECR/HJP.

(17) The above selection will be held as per procedure laid down in Master Circular No. 68, governing promotion from Gr. 'C' to Gr. 'B' issued by Railway Board and the instructions issued time to time. The said Master Circular is available on website www.indianrailways.gov.in....>ministry of railway...>railway board .....>Railway Board Directorates... >Establishment...>E(GP)circular →Master Circular. The department/ division/unit should ensure the compliance of instructions of item 15 of Master Circular-68.

(18) Application received after the target date should not be entertained and the same should be disposed off at the Division/Extra Divisional level by rejecting them on account of late receipt under advice to this office.

Please acknowledge receipt.

DA:- (i) Proforma of application (Annexure 'A').
(i) Syllabus (Annexure 'B')

21/2/23

(Alok Srivastava)
SPO/GAZ
For General Manager(P)/HJP

Annexure 'A'

PROFORMA OF APPLICATION AGAINST NOTIFICATION FOR THE POST OF AME (Gr.'B') 30% QUOTA.

1. Information regarding candidate:

Sl. No.	Particular	Filled by candidates
01	Name of applicant (In Block letter)	
02	IPASS Number	
03	HRMS ID	
04	Designation	
05	Mobile No.	
06	Email.ID	
07	Place of posting	
08	Division/workshop/unit	
09	Lien at	
10	Controlling officer	
11	DOB (DD/MM/YYYY)	
12	DOA (DD/MM/YYYY)	
13	Educational Qualification	
14	Community (UR/SC/ST) (if SC/ST, a copy of caste/Tribe Certificate duly attested by a Gazetted officer should be enclosed with application	

2. Date of appointment/promotion to the following grade on regular basis (6th PC):-

	DDMMYYYY
(a) In PB-II GP- 2400 (For Loco Pilot Shunting II only)	
(b)In PB-II GP-4200	
(c)In PB-II GP-4600	

3. Length of non-fortuitous service (Regular Promotion) to the following grade as on 01.01.2023.

	As on	Year(s)	Month(s)	Day(s)
(a) In PB-II GP- 2400 (For Loco Pilot Shunting II only)				
(b)In PB-II GP-4200				
(c)In PB-II GP-4600				

4. Present pay & scale & Date of promotion to present scale. :-
5. Choice of language to answer the questions :-
(English/Hindi). The candidate should indicate his/her choice, either any one of the above two language.
6. **DECLARATION OF THE CANDIDATE:-**

I do hereby declare that the above particulars furnished by me are true to the best of my knowledge and belief. I further undertake that in the event of any entry above is found incorrect or improper, my candidature shall liable to be cancelled at any stage during pendency of the above selection.

SIGNATURE OF THE CANDIDATE (HINDI) SIGNATURE OF THE CANDIDATE (ENGLISH)

(A) **Forwarding of application (filled-up) furnished by the candidate to the Personnel Branch Officer by his/her controlling officer:-**

The application is in prescribed proforma duly filled-up by the candidate, Shri/Smt._____ Designation_____ received within the target date is hereby forwarded to his/her Personnel Branch Officer for verification with the service record available and for onward transmission to the General Manager (P)/ECR/HJP.

SIGNATURE OF CONTROLLING OFFICER
(With office seal & date)

(B) Certificate to be furnished by the Personnel Branch Officer:-

If the volunteer comes under the circumstances mentioned in Para 2 (c) of the notification the service rendered by **immediate senior employee as on 01.01.2023** should be indicated invariably in the following format.

Sl. No.	Name(S/Shri) of immediate senior	Designation	Pay Band & GP	Year	Month	Day
			In PB-II GP- 2400 (For Loco Pilot Shunting II only)			
			In PB-II GP 4200			
			In PB-II GP 4600			

It is certify that the Service Particulars/Bio-Data furnished by Shri/Smt. ....., Designation..... in the prescribed proforma (Bio-data) have been verified with his/her service record and found correct.

The above mentioned candidate is eligible to appear in the said selection as per Notification and his/her application is hereby forwarded to GM (P)/Hajipur for further necessary action.

29/12/23

SIGNATURE OF THE CADRE ('P' BRANCH)
OFFICER (With office seal & date)

Note:- The application with any column unfilled will be summarily rejected

ANNEXURE-'B'

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. E(GP)2022/2/4 **New Delhi, dt:07/11/2022**

The General Managers,
All Indian Railways/PUs.

(Kind Attn.:All PCPOs/PFAs/Dy.CPO(G) & Dy.CAO(G)

Sub.: Promotions to Group 'B' posts on Indian Railways - Introduction of Centralized Computer Based Multiple Choice Objective type examination (CBT) in all departments having Organised Services

Board has prescribed syllabus for written examinations held as part of 30% LDCEs for promotion to Group 'B' posts in all Organised Services. Besides this, syllabus for 70% Selection for promotion to Group 'B' post of APO has also been prescribed by Board. Now, in the context of introduction of Centralised CBT for 70% Selections and 30% LDCEs for promotion to Group 'B' posts, Board has prescribed syllabus of 70% Selections and have also modified the syllabus for 30% LDCEs for all Group 'B' posts in Organised Departments. Similarly, syllabus for Establishment & Financial Rules has also been prescribed.

2. A copy each of the Syllabus for professional subjects prescribed by Board for 70% Selections and 30% LDCEs for promotion to Group 'B' posts in all Departments having Organised services along with the syllabus for Establishment & Financial Rules is enclosed for information. These syllabi are applicable for Selections & LDCEs to be conducted w.e.f.1.1.2023.

DA:As above

M Saluja
07/11/22

(Meenakshi Saluja)
Dy. Director, Estt.(GP)-III
Railway Board
Ph. No. 233047250
E.mail ID- meena.1964@gov.in

Syllabus for promotion to Group- B posts - 70% selection and 30% LDCE.

Syllabus for Establishment Rules:

1 Organization of the Personnel Department in Railways objectives functions and policies of Personnel Department.

2. Recruitment and Training, Classification of Services, Recruitment in Different services, Railway Recruitment Boards & Railway Recruitment Cells Compassionate Ground Appointments, Initial & In Service Training, Refresher Courses, Central Training Institutes, Training Centers in Zones, Divisions & Workshops, Training Modules for different posts, Training under Apprentices Act, Online Training, APARs.

3. General conditions of service in Railways, Seniority, Lien, Inter Railway & Inter Division transfers, Deputation, Promotion Policy & methods. Selection, Suitability, Trade Tests, Leave Rules, Pass Rules, Joining Time Reservation policy, HOER, Overtime, Payment of wages, current CPC Pay Rules, Advances in Railways.

4. Manpower planning, Rightsizing & Benchmarking, creation, extension and surrender of posts, creation of posts against new assets, different types of posts including workcharged posts.

5. The Railway Servants (Discipline & Appeal) Rules, 1968 and related instructions.

6. The Railway Services (Conduct) Rules, 1966 and related instructions.

7. Retirement benefits, qualifying service, pension, family pension, commutation gratuity, new pension scheme.

8. Staff welfare, SBF, Railway institutes, Railway schools, Ex-gratia payment, Incentive Bouns Scheme, Staff Grievances Redressal Mechanisms.

9. Industrial relations in Railways, recognized trade unions, industrial disputes. The Industrial Disputes Act, 1947. The Industrial Relations Code, 2020. The Trade Unions Act, 1926, PNM, PREM, JCM, Various Associations & Informal Meetings.

10. The Factories Act, 1948. The workmen’s Compensation Act, 1923. Functions of Labour Enforcement Officers, Right to Information Act.

11. The scope of Information Technology in Railway e – office. HRMS, IPAS , LIMBS, ARPAN, CPGRAMS, ANUBHAV etc.

Syllabus for Financial Rules:

1. Parliamentary Control over Railway Finance, Public Accountability, Cannons of Financial Propriety.

2. Railway Budget - Budgetary terms, Types of Budgets, Budget cycle, Demand of Grants, Budgetary and Financial Reviews.

3. Rules of Allocation - Classification of expenditure - Control of expenditure - Responsibility Accounting - Performance Budgeting - Exchequer Control - Financial Results of Working lines.

4. Works Programme - Financial justification of Works - Surveys - Preparation of Estimates - Capital Budget - Control over Capital Expenditure - Reappropriation of Funds.

5. Financial control over Stores Expenditure - Purchase and Stores Keeping Procedure - Inventory Control and ABC Analysis.

6. Financial & Cost Control in Railway *Wo*rkshops/Sheds/Units.

7. Rules and procedure relating to Tenders and contracts for execution of works and Procurement of Stores, M&P Programme and RSP.

8. Procedure for Possessing and finalizing Audit Objections and Draft Paras.

9. Delegation of Powers.

10. Losses, Frauds and Embezzlements.

11. General Financial Rules

12. Government e-Market (GeM)

13. Classification of Railway Revenue (Earnings)

14. Information Technology in general with specific reference to Railway's IT Applications
15. Taxation matters with special focus on GST & Income Tax

16. Organization of CGA and C&AG

17. Any other topic felt necessary from time to time

SYLLABUS FOR PROMOTION TO GROUP 'B' POST OF ADME/AWM THROUGH 30% LDCE IN MECHANICAL DEPARTMENT

Paper will be of two parts one part will be of General questions comprising questions from General Knowledge, Quantitative aptitude, Applied Mechanics, General Science Information Technology and EnHM.and other sections Comprising of questions from establishment , financial rules and Stores will be and Technical questions from four streams of Mechanical Department. Questions on PU are included in workshop segment. Question on Rajbhasha will be of optional nature of fifteen marks

Section A

GENERAL PORTION-

GENERAL KNOWLEDGE

This section would contain questions of general interest and importance which is acquired by general observation and reading without specific text book study. Subjects of national importance as well as achievements of railways will also be covered. The standard of General Knowledge shall not be more rigorous than Matriculation.

Quantitative Aptitude

- Arithmetic & Statistical Operations Graphs, Fractions, Percentage, Sampling & Averages
- Geometry-Area & volume upon Higher Secondary/Class 12 Standard
- Algebra, simultaneous equations etc upon Higher Secondary/Class 12 Standard
- Questions on General quantitative aptitude

Applied Mechanics

Various Engineering materials and their properties, Bearings, Stress & Strain, Fatigue, Hardness, Corrosion & Surface finish.

General Science

- Mechanics: Newton's Laws of Motion, Velocity & Acceleration, work, energy, power, Archimedes Principle etc.
- Temperature & its measurement
- Mechanics Velocity & Acceleration, work done & horse power etc upon Higher Secondary/Class 12 standard
- Heat & Work, Expansion of Solids Liquids & Gases
- IC Engines, Gas Turbines, Heat Recovery & Thermal Efficiency, Supercharging & Intercooling
- Ohm's Law, Coulombs Law, Faraday's Laws, Voltage, Current & Resistance, wet & dry batteries, power factor
- Simple Motors & Dynamos-Principle & working, transformer, relay, fuse, circuit breakers
- Power Supply, AC & DC, Rectification

INFORMATION TECHNOLOGY

Familiarity with Personal Computer Specs- Processor, RAM, Hard Disk, Floppy, CD, Multimedia etc.

- Basic MS Word, Excel and Power Point

- Basic Local Area Networks: Servers, Hubs, Switches, Structured Cabling, Nodes, Network applications
- Using Internet: Email, Browsing, Searching
- General Information on various portals used in Indian Railways including GEM,UDM,IREPS,FMM,E Office etc.

EnHM

- Environment, Quality Management Systems ISO 9000 & ISO 14000
- Environment management system (ISO 14001),
- solid waste management rules
- CTE (Consent to Establish) CTO, (Consent to operate)
- Water act, air act,
- hazardous waste management act
- water policy of Indian Railways

Section B

Part-A consists of questions from Establishment ,Financial rules & Stores.

Part-B Contains Professional portion in Four sections representing various streams of Mechanical Branch – Division & Workshop Management, Diesel Locomotives, Carriage & Wagon and Workshops,

PART-A (Stores Rules)

STORES

- Classification of Stores
- Procedure of drawal of Stores
- Indenting Procedures
- Procurement methods-Local purchase, Spot purchase, Bulletin tender, Advertised tender, Limited tender, Tender Committee, Direct Purchasing
- Schedule of Powers
- Incoming inspection requirements
  Scrap disposal

PART-B-Professional Portion-

DIVISIONAL WORKING & OPERATIONS MANAGEMENT

- Working Time Table
- Working in Control Office including Passanger grievance redressal portals e.g. Rail Madad
- Accident Classification, definitions, ART Ordering, Role of Supervisors & officers at accident site Management. ,Accident investigation including proforma for measurement
- 140 ton Crane Construction & safety in operations

DIESEL LOCOMOTIVES

- Basic Features and troubleshooting of HHP locomotives
- Preventive maintenance schedules
- Latest design improvements in diesel locomotives to reduce failures on line.
- Features of GE Locomotives
- Design improvements in bogies to make them fit for high speed operation
- Air Brake system of diesel locos including working of compressors and vigilance control devices and their maintenance
- Cooling water system of diesel engines
- Fuel oil system of diesel engines
- Control of lubricating oil consumption
- Safety devices used on diesel engines and locomotives
- Trouble shooting on locomotives running on the railways
- Fuel Economy on diesel locomotives
- Thermal loading of engine components
- Under gear maintenance
- Suspension bearings, wheels
- Electric Systems of Diesel Locomotive
- Load Box Testing
- MEMU ,DEMUs-types, systems & trouble shooting
- Basics of DPRS (Distributed Power Rolling Stock)
- Introduction to GM Locomotives and its systems

CARRIAGE & WAGON

Coaching stock- preventive maintenance schedules in Coaching Depots including IOH.POH, SS2, SS3 Schedules in shops

- Wagon Stock-preventive maintenance including ROH in depots and POH Schedule in shops ,Ride Index, Anti Telescopic features
- IRCA Rules for reject able defects
- ICF & LHB Coach Bodies and their maintenance in sick line/shops
- Generic details of train set
- Casnub Bogie & its modifications for high speed
- Corrosion repairs to caching and goods stock
- Couplers & Draw gear, Train Parting , Brake Binding & measures to avoid the same
- Water availability in coaches
- Fire prevention on Trains
- Air Brake System-Twin Pipe & single pine. Under frame & bogie mounted brake system, Test rig, Checking timings, trouble shooting, DV defects, slack adjustment methods. Brake Binding, WSP system, FIBA, Air spring suspension in LHB coaches
- Passenger amenity items
- OBHS , CTS and other coach cleaning systems

- Maintenance Pattern of freight trains including CC Rakes & Coaching stock maintenance including Revised Policy Circular-4
- Neutral Train Examination
- Maintenance of various components like DV, SAB, PEASD
- Latest design improvements of Carriage & Wagons to improve their performance and speed potential
- LHB Coaches & BLC Wagons
- Construction, Design & Maintenance of special purpose Wagons

WORKSHOPS and Production Units

- System of labour accountal GA Cards for time keeping documents, tally sheets, Job/Route Cards, inspection & rate fixing
- Rules & Calculations under incentive scheme
- Paints & painting systems
- Different types of machine tools such as lathes, milling machines, shapers, planers, cutting tools & cutting speeds
- CNC machines
- CLW Pattern of Incentive Scheme, Group Incentive Scheme
- Different types of welding processes, welding defects
- Wheels, tyres & axles and their ultrasonic testing
- Heat treatment of ferrous items such as surface hardening, annealing, normalizing etc
- Roller Bearing & Cartridge Bearings
- Injury free features in coaches
- Material handling
- Design of coaches and wagons
- Basic concepts of casting and Heat treatment methods
- Manufacturing and Heat treatment process of wheels and axles
- Factory Layout
- Process flow chart of Production Units
- Machinery and Plant maintenance

Rajbhasha

Optional questions of 15 marks