

No. E/254/III/91/LDCE/Pt.III (O)

To

PCME, PCEE, PCSO, CWE, CRSE/F, CWM/NBQS & DBWS, CME/O&S, CME/Plg., CESE, CEGE, CEDE, CELE ; DG/RDSO; Sr.DEE & Sr.DSO/ KIR, APDJ, RNY, LMG & TSK; DRM(P)s/KIR, APDJ, RNY, LMG & TSK; Sr.DEE/TRD/KIR, SR.DMEs/KIR,SGUJ,APDJ, RNY, LMG & TSK; SPO/DBWS; Principal/MDTC/RNY, PSTC/NBQS; SR.DMEs/D/MLDT,SGUJ & NGC; Sr.DME/C&W/LMG; Sr.CDO/GHY, DME/NJP,ADMEs/TDH, RPAN, TSK & BPB ; ACMT/MLDT, ADME/Dsl./MLDT; DMEs/NJP, DEMU; SMM/RE/NJP; AWM/NBQS & DBWS.

**Sub.:- Selection for the post of AME(Group 'B') against 30% LDCE quota vacancy.**

**Ref :-** Railway Board's letter No. E(GP)2018/2/31 dated 19.03.2019, 12.01.2021, 21.01.2021, 17.03.2021 and No. E(GP)2022/2/4 dated 28.06.2022, 07.07.2022, 08.08.2022, 06.09.2022, 04.10.2022, 07.10.2022, 18.10.2022, 26.10.2022, 07.11.2022, 11.11.2022, 28.11.2022, 07.02.2023 & No. E(GP)2022/2/20 dated 14.11.2022 and DG/NAIR's letter No. EG/NAIR/ **CBT/GBS** dated **04.01.2023, 30.01.2023 & 07.2.2023.**

It has been decided with the approval of competent authority to hold a selection for forming a panel of **01(UR)** for the post of AME (Gr.'B')against 30% LDCE quota vacancy.

**1. Condition of eligibility :-**

**(i)** The above selection is open to all non-ministerial Group 'C' staff of Mechanical Engineering Department holding the post in Level-6 (Rs.35,400 – 1,12,400) and above in pay matrix with 05 years regular service in Level-6 (Rs.35,400 – 1,12,400) and above in the pay matrix.**[Ref: Railway Board's Recruitment Rules vide No. 2016/E(G)RR/15/2/Mech.Engg. dated 17.03.2022 have been notified in the Official Gazette vide GSR No.202(E) dated 15.03.2022].**

**(ii)** In terms of Railway Board's letter no. E(NG)I-81/PMI/76 dated 25.04.1981 and No. E(NG)I-93/PMI/4 dated 18.01.1993, the time spent by a railway servant under training immediately before appointment to service is to be counted as non-fortuitous service for the purpose of appearing in LDCE(Group 'B') selection.

**(iii)** As per Railway Board's letter No. E(GP)2019/2/25 dated 16.03.2022, it is mentioned that Sr.Technicians in Level-6 with requisite length of service are eligible for appearing in the LDCEs held for promotion to Group 'B' posts. However JE-I being a promotional post of Sr.Technicians, they stand lower in hierarchy notwithstanding the fact that they are in identical pay level.

**(iv) Loco Polit (Shunting)** of Mechanical dept. in Pay Band- 5200- 20200/--(PB-1) with GP –Rs.2400/- (Level-5 of 7<sup>th</sup> CPC) equivalent with stationary post in Pay Band- 9300-34800/ (PB-2) with GP-Rs.4200/- (Level-6 of 7<sup>th</sup> CPC) and above, in terms RBE No. 92/2015 are also eligible to be considered for promotion to Group 'B' service in Mechanical Department.

**(v)** The cut of date of eligibility on the length of required years of non-fortuitous services of the staff of Mechanical Engineering department is as on **01.01.2023.**

**(v)** All the volunteers, who fulfill the conditions of eligibility as mentioned vide Col.(i),(ii) ,(iii)&(iv) above, will be allowed to appear in the written examination, without any restriction to the number of candidates.

**2. Scheme of examination :[Authority : Railway Bd's letter No.E(GP)2022/2/4 dated 28.06.2022]**

**(i)** LDCE will be one stage only and will comprise of only 1 Paper with the following set up :

**(a)** Single paper of 150 marks comprising 100% Objective type Multiple Choice Questions with following distribution of marks :-

	Topics	Distribution of marks
(a)(i)	Technical (Professional) subject including optional	80 marks
(a)(ii)	General Knowledge including optional Questions of 15 marks on Official Language Policy & Rules	40 marks
(a)(iii)	Establishment and Financial Rules	30 marks
(b)	Qualifying Marks	90
(c)	<b>Duration</b>	<b>3 hours.</b>

- (ii) Question Paper will have 175 questions out of which 150 questions are to be attempted.
- (iii) 1 mark will be allotted for every correct answer. There shall be negative marking for incorrect answers and 1/3<sup>rd</sup> of Marks allotted for each question will be deducted for every wrong answer.
- (iv) Optional Questions on Official Language Policy and Official Language Rules in the LDCEs shall be included in terms of provision contained in Para 204.3 of IREM Vol.I.
- (v) Examination for 30% LDCEs will be held on a single day only. On the same day exam for the post of APO will be held in the second shift, so that candidates who have appeared in exam for AMM/ACM/AOM in the first shift and also want to appear for APO can do so in second shift. Similarly, exam for AME and AEE will also be held in different shifts with agap of 3 hours between both the shifts.
- (vi) CBT for 30% LDCEs for a particular department for Zones/Pus will be held on the same day across Indian Railways. There is **no provision for a Supplementary Exam**.
- (vii) The schedule for finalizing various stages in LDCE of current vacancy cycle through CBT is as under-
- |   |    |                       |
|---|----|-----------------------|
| (a) Last date for submission of options | :- | <b>by 16.03.2023.</b> |
| (b) Finalization of willing candidates  | :- | by 05.04.2023         |
| (c) Date of Examination (tentative)     | :- | 14.05.2023.           |

3. The syllabus as prescribed by Railway Board for 30% LDCE held for promotion to AME(Gr.'B') vide Board's letter No. E(GP)2022/2/4 dated 07.11.2022 is enclosed as **ANNEXURE-'A'**.

4. The selection will be based on candidates performance both in Written Examination, Viva-voce test and record of service. Only those candidates who qualify in the written examination and thereafter in **Medical examination as per Para 530(a) of IRMM/Vol.I** will be eligible for the viva-voce test provided they are declared physically fit to hold the Group 'B' post. Before commencement of the viva-voce test, Medical examination from the respective Railway Medical authority of the candidate concerned should be done, which is mandatory. The final panel will be prepared **as per Merit**, subject to other provisions concerning empanelment.

5. All controlling officers should notify this widely amongst the staff under their control . **The last date of filling up applications form by candidates is 16.03.2023.** It has been decided to call up the applications on **ONLINE** link as provided below. **No application will be accepted after the last date i.e. 16.03.2023.**

6. The filled up applications should be scrutinized properly with the service records to avoid any factual errors and future complications. The caste certificate (SC/ST) should also be verified carefully. The applications should also be signed by the controlling officer with official seal and should have the counter signature of the concerned cadre controlling Personnel Branch Officer or Officer who deal with P.Case & Service records.

7. In terms of **RBE No. 142/2019** as per **para.(ii)** Pre-selection training is not required if there is no reserved vacancy and candidates are appearing in the Selections/LDCEs against unreserved vacancies.

[Candidates may visit the website [www.nfr.indianrailways.gov.in](http://www.nfr.indianrailways.gov.in) -> General Info Department Personnel -> Notice Board -> Link ---- <https://nfrailway.redpanchi.in/> **(for downloading the notification and filing up the application form)**

DA: (i) Syllabus (**ANNEXURE-'A'**)

AMISH  
GOGOI  
Asstt. Personnel Officer (GAZ)  
for General Manager(P)  
Digitally signed  
by AMISH  
(Amish GOGOI)  
Date: 2023.02.23  
12:37:10 +05'30'

Copy to :-

- (i) Secy. to PCME – for kind information of PCME.  
(ii) General Secy./NFREU, NFRMU, SC/ST & OBC Association.

AMISH  
GOGOI  
Digitally signed  
by AMISH  
(Amish GOGOI)  
Date: 2023.02.23  
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# ANNEXURE-'A'

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

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(Meenakshi Saluja)  
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**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 pipe. 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



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 Workshops/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