

Sub: Syllabus for the post of J.E.(Diesel Fitter Trade) against 25% ^{LDCE} ~~HMA~~ quota.

I Technical knowledge

- Various types of I.C. Engines and their working.
- Salient features of Diesel Electric loco (WDM3A, WDG3A, & WDFP1, WDP3A) Electric loco (WAP-7/ and WAG-9) and Diesel Electric Tower Car (DETC-8W ICF design).
- Constructional details of Diesel Electric Locomotives (WDM3A, WDG3A & WDP1, WDP3A) Electric loco (WAP-7/WAG-9) and Diesel Electric Tower Car (DETC-8W ICF Design).
- Knowledge of basic principles and working of diesel engines, Electric and Hydraulic transmission, ^{WAP-7/WAG-9} ~~WAP-7/WAG-9~~ ^{4-DETC} ~~4-DETC~~
- Knowledge of functioning, maintenance and test of following –Engine power pack assemblies, Turbo Super Charger, Auxiliaries, Lube Oil Pumps, Water Pump, Air cooler, Blowers, Radiator Fan.
- Fuel oil system including Fuel injection equipment and their function. System description defects and remedy.
- Lube oil system components involved in the lube oil system and their function defects remedy, system description.
- Cooling water system, components involved in the system, their function with defects and remedy, System description.
- Air brake system and their function. Components involved in the air brake system. Dynamic braking.
- Knowledge of function and maintenance of Air Compressor.
- Knowledge of inspection and attention to under truck and loco chassis Diesel Electric Loco, Electric Loco and 8 wheeler DETC.
- Knowledge of working and attention to MCB Governor.
- Knowledge of Periodical tests carried out in the diesel laboratory on lube oil, fuel oil, cooling water and control over their quality.
- Load Box testing, remedial measures to be taken based on observations.
- Modification carried out on Diesel Electric Locomotive, ^{WAP-7 & WAG-9} ~~WAP-7 & WAG-9~~
- Knowledge of functioning and maintenance of Air Dryer.
- Knowledge of Bogie of Diesel Electric Loco (WDM3A, WDG3A, WDP3A, WDP1), WAP-7/ WAG-9 and 8 Wheeler DETC (ICF design).

II SHOP MANAGEMENT

- Knowledge of functions of Time Office & Procedure orders for gate passes.
- Knowledge of Incentive scheme, work order system, booking of labour hours, etc Production planning and control and workshop documents processing.
- Stock and non stock and procedure for indenting and drawl of Store and return of serviceable and scrap items to Stores Deptt
- Various register maintained in Shops and their need.
- Stock verification authorities and periodicity.
- Various safety measures to be followed on the shop floor in general and for various machines and equipments in particulars.
- Staff protective clothing and their entitlements.
- Method to control consumptions of Stores and electric energy.
- Environment and pollution control, Quality management system ISO-9001:2000, Environment Management System ISO-14001:2004, and OSHAS & ISO 50001.

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III Mathematics

The questions will be of High School standard in Arithmetic and Trigonometry.

IV General & Establishment Knowledge

- General condition of Service –Service Record, transfer, allowance, joining time, efficiency bar, Rules of Railway quarters. PF –Eligibility, contribution, temporary and permanent withdrawal.
- Pension –Applicability, rules, commutation of pension, merits and de-merits, qualifying service.
- Leave Rules –Types, eligibility, maximum accumulated, special leaves, sanctioning authority.
- Pass rules – Kind of pass, class of accommodation, eligibility, PTO, penalty charges for loss of passes.
- Medical Assistance – Eligibility, Special diseases, facility to retired Railway Employees, Identity card, Health card.
- DAR –Applicability, appointing, disciplinary, appellate authority, minor and major penalty, standard form, review of penalty.
- Welfare measure – Functions, Employee Grievances, Functioning of staff council, SBF, Consumer Co.op Society, JCM, PNM, Labour participation Management, Payment of Wages Act, Minimum Wages, Railway Service Conduct Rule.
- Employees Compensation Act.
- Hours of Employment Regulations.
- Factory Act.
- Industrial Dispute –Strike, Retirement, industrial safety and fire prevention.
- Industrial Dispute Act 1947.
- Environment (Protection) Act, 1986, Air Act, Water Act.
- Canons of financial propriety.
- RTI Act

V) राजभाषा

- 5 संघ की राजभाषा नीति का सामान्य ज्ञान परिचय
- 6 राजभाषा अधिनियम 1963
- 7 राजभाषा संसोधन अधिनियम 1976
- 8 राजभाषा से संबंधित वार्षिक पाठ्यक्रम एवं प्रचलित शब्दावली

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