

Sub:- Syllabus for the post of J.E., Welder trade against 25% Ranker Quota.

I) TECHNICAL KNOWLEDGE:

SHOP MANAGEMENT:

1. Knowledge of functions of Time Office & Procedure orders for gate passes.
2. Knowledge of incentive scheme, work order system, booking of labour hours, etc., production planning and control and workshop documents processing.
3. Stock and non-stock and procedure for indenting and drawl of stores and return of serviceable and scrap items to Stores Deptt.
4. Various registers maintained in Shops and their need.
5. Stock verification authorities and periodicity.
6. Various safety measures to be followed on the shop floor in general and for various machines and equipments in particulars.
7. Staff protective clothing and their entitlements.
8. Methods to control consumption of stores and electric energy.
9. Knowledge of Robotic welding

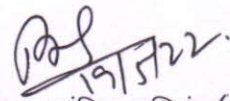
II) GENERAL & ESTABLISHMENT KNOWLEDGE:

1. Knowledge of Indian Railways as an Organisation and its working.
2. D&AR Rules: Various definitions, the applicability suspension and issue of Minor Penalty charge sheet, appeals, since the Sr. Subordinates are authorized to issue minor penalty charge sheets etc.
3. Rules for engagement and discharge of Substitutes and knowledge of relevant section in the Industrial Disputes Act.
4. Workmen's Compensation Act.
5. Factory Act.
6. Hours of Employment Regulations.
7. Various Types of leave which can be granted to staff.
8. Railway Service (Conduct) Rules.
9. General knowledge about working of various other departments in Railways.
10. Staff Council and Rules of its formation/ working.
11. Canons of financial propriety.
12. Heat treatment of steel, tempering, stress relieving, normalizing, hardening of plain carbon and low alloy steels. Iron carbon diagram.
13. Various types of electrodes, ISO code for nomination of electrodes, flux, its importance and problems.
14. Gas welding and oxy-cutting. Its limitations. Knowledge about cutting torches and flames.
15. MIG & TIG welding. Its applications knowledge about plant and equipment.
16. Welding of cast iron, stainless steel.
17. Welding of non-ferrous material i.e. copper and aluminum.
18. Submerged Arc welding, Plasma Arc welding, Termite Welding, principle of operation plant used.
19. Health and safety aspects in welding.
20. Arc welding, principles, DC and AC welding, Plant welding power and current requirements.
21. Flaws introduced in welding, non destructive testing of welding including X-ray & Gamma Ray detection.
22. Advantages of welding process vis-a vis riveting, bolting and other fastening devices.

III) राजभाषा: -

1. भारत सरकार का राजभाषा नीति का सामान्य परिचय।
2. राजभाषा अधिनियम 1963 तथा राजभाषा संशोधित अधिनियम 1976.
3. राजभाषा के सम्बन्ध में कार्यालयीन नीति/गृह मंत्रालय के आदेश, प्रोत्साहन योजना पुरस्कार आदि। उपरोक्त 1 एवं 2 के संबंध में व्याख्या हेतु रेलवे बोर्ड द्वारा जारी राजभाषा हिन्दी विषयक आदेशों का संकलन (तृतीय संस्करण 1993) देख सकते हैं।

प्रचलित शब्दावली।

  
उप मुख्य यांत्रिक अभियंता (LMS & HMS)