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INDIAN RAILWAYS  
DMW/PATIALA

NO: DMW/P/S-I/T&P/MW/Elect. JE-II (Ranker)

Dated: 08.11.10

Sub:-Syllabus for the post of JE-II, 25% Ranker Quota -Trade MW/Elect.  
Ref:- Notice of even number dated 07.09.2010.

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The words of "The question paper will be in two parts – the first part for technical knowledge and second part about establishment and general matters as above at least one question the second part will be compulsory" are deleted from the syllabus published on 07.09.2010.

This issues with the approval of the competent authority.

The syllabus for selection to the post of JE-II, Grade Rs. 9300-34800+4200/- from HSK MW/Electrical Artisan – 25% D.P.Q. is given below:-

I) **TECHNICAL KNOWLEDGE:**

- a) Basic principles of electricity and magnetisin AC and DC power supply. AC and DC electric machines transformers, batteries etc.
- b) Basic electronics diodes, transistors, rectifiers voltage stabilization and its applications.
- c) Knowledge of electric measuring instruments, their principles and construction.
- d) General knowledge of servo motors, stepper motors welding control and servo control.
- e) Knowledge of various electromechanical/magnetic control relay, contractors, microswitches, limit switch proximity or sencer switches etc. and their application in various machine tools and workshop equipments.

t) **MAINTENANCE AND SERVICING:**

- i) Trouble shooting techniques and modern repair techniques, proper use of electrical test instruments/equipment for trouble, shooting and servicing of electrical/electronics systems.

- ii) Knowledge of modern test and measuring equipment available in electrical repair shop and their, application.

Importance of preventive maintenance use of check lists, scheduling/ planning for prevent maintenance (Six Monthly) work, maintenance log cards.

- g) Electrical installation of machinery and plant with specific attention to power space requirement and installation illumination, grounding methods of improving grounding resistance with special attention to CNC/ Electronically controlled machine.
- h) Knowledge of power and control circuit drawings component layout nomenclature, code of practice of engineering drawing, schematic symbols, free hand sketching of electrical circuits, relays contractor timers etc.



## II) SHOP MANAGEMENT:

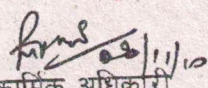
- i) Knowledge of functions of Time Office and procedure orders for gate passes. Knowledge of incentive scheme, work order system, booking of labour hours, etc., production planning and control and workshop documents processing.
- ii) Stock and non-stock and procedure for Indemnity and drawl of stores and return of serviceable and scrap items to Stores Depot.
- iii) Various registers maintained in shops and their need. Stock verification authorities and periodicity.
- iv) Various safety measures to be followed on the shop floor in general and for various machines and equipments in particular.
- v) Staff protective clothing and their entitlements.
- vi) Methods to control consumption of stores and electric energy.

## III) GENERAL & ESTABLISHMENT KNOWLEDGE:

- i) 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.
- ii) Rules for engagement and discharge of casual labours / substitutes and knowledge of relevant sections in the Industrial Disputes etc.
- iii) Workmen's Compensation Act.
- iv) Factory Act.
- v) Hours of Employment Regulations.
- vi) Various types of leave which can be granted to staff.
- vii) Railway Service Conduct Rules.
- viii) General Knowledge about working in various other departments in Railways.
- ix) Cannons of financial propriety.
- x) Staff Council and Rules of its formation/working.

## IV) राजभाषा:

1. भारत सरकार का राजभाषा नीति का सामान्य परिचय।
2. राजभाषा अधिनियम 1963 तथा राजभाषा संशोधन अधिनियम 1976.  
..... 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।
3. प्रचलित शब्दावली

  
सहायक कार्मिक अधिकारी,  
डी०एम०डब्ल्यू०/पटियाला।