

SYLLABUS FOR PROMOTION EXAM – JE (MECH) INTERMEDIATE QUOTA

PB-2 9300-34800 + 4200

CARRIAGE WORKSHOP JODHPUR

Part – A General Knowledge

Current affairs, features of national importance, Important events, authors, places & personalities, sports, “who is who” facts about Indian Railways & its organization.

Part – B English

Knowledge of English up to Xth standards. Active & passive voice, letter writing, story, Essay writing, Unseen passages. Direct / indirect formation, fill in the blank, English grammar up to Xth standard.

Part – C Mathematics (Xth Standard)

Knowledge of Mathematics up to Xth standards. Elementary knowledge of Arithmetic, Algebra, Geometry, Trigonometry, Statistics, etc. Circular, triangles, Arc, Square, Rectangles (GCM & ICM), Mensuration, Equations, Root, under-root, cube root, units of measurements, quadratic equations.

Part – D General Science

Elementary knowledge of science (Physics, Chemistry), Internal combustion engine, Diesel & Petrol engines, Gas engines, General knowledge of application of science in day today life and Railways, Kinds of energy – Heat, light & mechanical energy, Elementary knowledge of waves, simple Harmonic Motions. Electrostatics Electricity, Magnetism, Chemical equations, bond strength, type of oxides. Lab preparation of Oxygen, Hydrogen, Nitrogen & their general properties and usages.

Part – E Professional

Basic knowledge of various mechanical trades such as Machinist, Welding, Blacksmithy, Fittings, Painting, Foundry, Millwright, DSL Fitter, Tool & Template, Heat Treatment, etc. Physical & Chemical properties of metals, Ferrous & non-ferrous metals. Hand tools, general purpose tools and special purpose tools, elementary concept of Timber, seasoning of timber, painting & polishing, Progress & planning, Workshop, technology, Drawing.

Part – F Establishment

General knowledge regarding Pass Rules, Leave, Wages & Payment, Penalties, D&AR. Workman Compensation Act, Factory Act.