

**Syllabus for Entry-Level post of
Category-I: Technician (Maintenance, Workshop, General Services)
Pay Level 2 of 7th CPC Pay Matrix**

The questions in parts A,B,C,D & E will be of a level commensurate with the essential qualification viz. 10th Standard for Technician (Maintenance, Workshop, General Services) Pay Level 2 of 7th CPC Pay Matrix.

A. General Awareness (20 MCQ):

Questions will be designed to test the ability of the candidate's general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspects as may be expected of an educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to Sports, History, Culture, Geography, Economic scene, General Polity including Indian Constitution, and Scientific Research etc.

B. Mental Ability and Reasoning (20 MCQ)

It would include questions of non-verbal type. The test will include questions on similarities and differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discriminating observation, relationship concepts, figure classification, arithmetical number series, non-verbal series etc. The test will also include questions designed to test the candidate's abilities to deal with abstract ideas and symbols and their relationship, arithmetical computation and other analytical functions.

C. General English (20 MCQ)

Candidates' understanding of the Basics of English Language, its vocabulary, grammar, sentence structure, synonyms, antonyms and its correct usage, etc. and writing ability would be tested.

D. Arithmetic (20 MCQ)

The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The part will include questions on problems relating to number system, computation of whole numbers, decimals and fractions, relationships between numbers, fundamental arithmetical operations, percentage, ratio and proportion, average, interest, profit and loss, discount, use of tables and graphs, menstruation time and distance ratio and time etc.

E. Basic Science (20 MCQ):-

Matter-its nature and behavior (Nature of matter, Particle nature, Basic units, Structure of atoms), Organization in the Living world (Cell-basic unit of life, Tissues, Organs, Organ system, Organism, Biological diversity, Health and

Diseases), Motion, Force and Work (Motion, Force and Newton's Laws, Gravitation, Floatation, Work, Energy and Power, Sound), Our Environment (Physical resources, Bio-geo chemical cycles in nature), Food Production.

Chemical substances-Nature and behavior (Chemical reactions, Acids, Bases and Salts, Metals and Non-metals, Carbon compounds, Periodic classification of elements), World of living (Life processes, Control and co-ordination in animals and plants, Reproduction, Heredity and evolution), Natural phenomena (Laws of reflection, Laws of refraction, Functioning of human eye, Lens etc.), Effects of current (Electric current, Potential difference and electric current, Ohm's law, Resistance, Resistivity etc.), Magnetic effects of current (Magnetic field, field lines, Fleming's LHS, RHS etc.), Natural resources (Sources of energy, Our environment, Management of natural resources)

Trade Test

Over and above the written test based on the aforementioned syllabus, this category of candidate shall also have to undergo a trade test based on their respective trade as may be decided by the respective Directors of the Institute.

