



NOTICE

Sub: Selection Procedure

Name of the Post: Technical Assistant (Mechanical) (PL 4; Group C)

Ref: Advt. No. IITGoa/RECT/2026/01 dated: 22.01.2026

1. Selection Will Be Based on Performance in Selection Test.

2. Pattern of the Selection Test:

- The Selection Test will be conducted in two stages, i.e. Selection Test I and Selection Test II. Candidates securing minimum qualifying marks as laid down by the selection committee in Selection Test I shall be shortlisted for Selection Test II. The final selection will be based on aggregate marks obtained from both the Selection Tests (I & II) with weightage of 40% in Selection Test I and 60% in Selection Test II.
- Selection Test I will be written test consisting of the following:
 - 50 Multiple Choice Questions of 1 Marks Each. 0.25 Negative Marks for every wrong answer.
 - Duration: 60 minutes
- Selection Test II: Descriptive/Trade Test /Both Descriptive and Trade Test of 50 marks

3. Syllabus: Selection Test I

- Drawing:** Concepts Of Orthographic & Isometric Projections and Development of Surfaces, Computer Aided Drafting.
- Solid Mechanics:** Concepts Of Stress and Strain, Shear Force and Bending Moment Diagrams, Moment of Inertia, Torsion, Bending.
- Theory Of Machines:** Kinematics Of Machines, Cams and Followers, Gears and Gear Trains.
- Thermodynamics:** Laws Of Thermodynamics, Steam Boilers, Steam Turbines, Steam Condensers.
- Fluid Mechanics and Hydraulics:** Fluid Properties, Pressure Measurements, Water Turbines, Centrifugal and Reciprocating Pumps.
- Energy Conversion:** Internal Combustion Engines, Energy Generation Through Power Plants, Wind and Solar Energy.
- Refrigeration And Air Conditioning:** Refrigerants Vapour Compression Refrigeration System, Refrigeration Components, Psychrometrics, Air Conditioning Systems.
- Engineering Materials:** Ferrous And Non-Ferrous Metals and Its Alloys, Non-Metallic Materials.
- Manufacturing Processes:** Foundry, Welding, Metal Forming Processes, Turning, Drilling, Boring, Milling, Shaper, Non-Traditional Machining.
- Metrology:** Errors and Its Sources, Limits, Fits and Gauges, Linear and Angular Measurements.

4. Syllabus: Selection Test II

- CNC Milling and Turning (Siemens/Fanuc Controller), Manual Machine Tools (Lathe, Milling, Drilling, Grinding), Metrology instrument for shop floor, UTM, Toughness and Hardness Measurement, Determination of metacentric height and thermal conductivity, Psychrometrics.

NOTE: SYLLABUS MENTIONED ABOVE IS ONLY INDICATIVE AND NOT EXHAUSTIVE

5. Date and Venue:

- Date of Selection Test:** 29.06.2026 (Monday) from 10:00 AM onwards
- Venue:** IIT Goa Campus