

# Indian Institute of Technology Jodhpur

## <u>Syllabus for the post of JUNIOR TECHNICAL ASSISTANT</u> (Center for Research & Development of Scientific Instruments (CRDSI))

## (A) WRITTEN TEST

### Physics/Chemistry/Materials Science

- 1. Electricity and Magnetism
- 2. Waves and Optics
- 3. Solid State Physics
- 4. Basic Electronics
- 5. Quantum Mechanics
- 6. Semiconductor device
- 7. Crystal and microstructures of Materials
- 8. Properties of materials
- 9. Fundamentals of Organic, Inorganic and Physical chemistry
- 10. Spectroscopy

### (B) SKILL TEST

- a) Handling high end equipment such as NMR, AFM, SEM, TEM, XRD, Magnetic Measurement Systems, XRF, DLS, ICP, UV-Vis, FTIR, Mass spectrometer, Thermal Analyzer,
- b) Handling experience on Electronic Manufacturing Devices, Diffusion-Oxidation-Annealing furnaces, Sensors and Actuators

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