

Non-Teaching Staff Recruitment
(Advertisement No. IITT/STAFFREC/01/2025 dated 14-07-2025)

Syllabus - Junior Technician (Computer Centre)

Part A:

- 1. Quantitative aptitude :** Number systems, simplification, decimals, fractions, LCM, HCF, ratio & proportion, percentage, log and trigonometric functions, solutions of simple equations (linear and quadratic), basic statistics.
- 2. Logical aptitude :** Analogies, similarities, differences, space visualization, analysis, judgment, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning.
- 3. Language aptitude :** Comprehension, vocabulary, basic grammar in English.

Part B:

- 1. Linux Operating Systems:** Boot process: Understanding the boot process, daemons, boot loaders (GRUB), startup scripts, process life cycle, and process monitoring and management; Commands and utilities: user account management, access control list, directory file management, disk backups, process management, text processing, filters and communication commands; File system management: disk partitions and file systems like EXT4, EXT3, VFAT and file system permissions; Package management tools such as rpm, dpkg, apt, and yum for installing and maintaining software.
- 2. Linux Shell scripting (bash):** Use of shell scripts, Numerical operations, Looping, Swapping Technique, String operations, Using Command line arguments, Date Functions, Relational operations, Logical operations, Boolean operations, Basic arithmetic operations, Case statement, Search Directory or File.
- 3. Computer Hardware and Servicing:** Motherboard and its components; Memory: primary and secondary memory, different configurations, memory speed, access time, wait states, errors; Storage: harddisks, construction, working principle, external drives, USB flash drive, solid state drives, formatting and troubleshooting; Keyboard and Mouse: working mechanism, components, signals, errors and troubleshooting; Printers and Scanners: types of printers and scanners, working mechanism, errors, maintenance, troubleshooting; Displays and Graphic Cards: types, working principles, errors, and troubleshooting, SMPS: basic principles and operations. o/p voltage, cable color code - connectors and power good - common failures; BIOS: BIOS functions - cold and warm booting - BIOS error codes - BIOS interrupts - BIOS advanced setup, upgrading BIOS, flash BIOS-setup.
- 4. OS/ Software/ AV systems/ Projectors:** Understanding of internal components, installation, dual boot, configuration, troubleshooting, maintenance, and repairs.
- 5. Networking:** Basic of computer networks, various network devices and concepts like DNS, DHCP, VLAN, SNMP, etc.

Selection Criteria for Junior Technician (Computer Centre)

Exam Level	Nature	Syllabus
Level-I (Screening Test)	MCQ with negative marking	Part A and Part B
Level-II	Descriptive	Part B
Level-III (Skill/Trade Test)	Qualifying exam with pass or fail in nature. Minimum score required to pass 50%	Part B

Note: Equal weightage will be given to the Level-I and Level-II for the purpose of preparing merit list. Level-III test is qualifying in nature (Pass/Fail), however, 50% score is required to qualify.
