# भारतीय प्रौद्योगिकी संस्थान तिरुपति

### INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

# भारतीय प्रौद्योगिकी संस्थान तिरुपति

Yerpedu - Venkatagiri Road, Yerpedu Post, Tirupati District, A.P - 517 619

Non-Teaching Staff Recruitment (Advertisement No. IITT/STAFFREC/02/2023 dated 23-08-2023)

## **Syllabus for JTS (Systems)**

- 1. **Desktop/Server/Peripherals:** Linux system administration, maintenance and monitoring; Bash scripting, Powershell Scripting. Linux OS installation and configuration, Intermediate computer hardware knowledge.
- 2. **HPC:** HPC System management tools; Job schedulers for HPC such as OpenPBS and Slurm; Cluster hardware knowledge; Familiarity with HPC storage and filesystems; Familiarity with high speed HPC networks such as infiniband; Basic knowledge of MPI and GPUs;
- 3. **Networks:** Network devices, DNS, DHCP, VLAN. Network management and debugging using SNMP, Commandline scripting and editing: Bash 4.0 and vim, Basic network security knowledge, Linux network management tools

#### **Exam Format**

#### <u>Level - I</u>

**Screening Test (**MCQ type with Negative marking): Both technical questions and logical/analytical aptitude questions.

#### Level - II

- A. **Written Test** (Descriptive type): Understanding and application of knowledge/skills.
  - a. Practical usage of basic system administration utilities. Automation of different administration tasks through scripting
  - b. Hardware troubleshooting of systems and networks.
- B. **Practical Test:** Practical usage with more emphasis on command-line usage, as applicable.

#### Level - III

**Trade Test** (Pass/Fail nature, minimum 50% score is required to Pass): Basic working with Linux systems, Computer Hardware, and Networks