

#### 4.3.1: Institution frequently updates its IT facilities including Wi-Fi

The institute has always given priority for up-gradation of IT facilities. Regular updating is done in facilities at institute level as well as department level. The description of the same is provided below.

**Internet Connection:** The institute regularly updates the internet connection every year and as of now, the available internet bandwidth is 500 MBPS provided by BSNL that is latest renewed in Jan 2022. A second backup line by RailTel is provided with bandwidth of 300 MBPS.

**No. of Systems and their Configuration:** Campus has a total of 1699 (1466+233) computers for students with the following configuration: Processor i5,4GB RAM,500 GB HardDisk,3.10 GHz CPU Speed and newly added system configuration is DELL Processor i5,16GB RAM,1TB Hard Disk,512 SSD,22” Monitor.

**Firewall/Security:** Campus uses firewall service from Sophos-XG 330 and the support license is latest renewed in 2020.

**Networking Peripherals:** Campus has networking switch provided by DLINK of speed 1 GBPS.

**Remote Centre for IIT:** The audio-visual setup enables the institute to often arrange workshops conducted by IITs via video conferencing. The equipment of audio visual setup was upgraded in 2015.

**Licensed softwares:** Institute has various softwares needed for academic purposes which includes Oracle, Flash Pro, Photoshop, MATLAB, Microwind, NetSim, IE3D, Xilinx ISE, Proteus VSM, Orell, Creo, ANSYS, autoSIM, DOE++, AutoCAD and SolidWorks apart from basic software like Office, Tally etc.

**Licensed version of OS:** The institute has license copies of Windows Operating System and also works with open-source operating systems like Ubuntu OS and other software tools such as Post gres, Cisco packet tracer, ns2, Wireshark, python, R, CLDC wireless toolkit, open GL, Spark, Hadoop.

**I/O Devices:** The institute purchases printers as per the requirements given by the departments. The institute has in all 45 laser printers.

**Media Lab/Video Lecture making Facility:** The institute has a well-equipped media lab where faculties can prepare their video lectures. This has been very useful during the initial phases of pandemic.

**LCD Projectors:** Upgrading of IT is seen in teaching learning process as OHPs in the institute have been intermittently replaced by LCD.

**Plotters:** The institute also has a plotter which can accommodate paper of A3 size.

**Upgrading Policy:** Computers in the institutes are upgraded every year by replacing certain old machines with the new ones.

Certain measures have been taken during the year 2020-21 due to pandemic for ensuring best teaching practices for students. Below is the list of those features:

**Virtual Labs:** Few practicals are being conducted using virtual labs concept of IIT (ex.For subject DLCOA from CE etc).

**Online Lectures:** The institute has licensed versions of G Suite and Microsoft Office Suite (Microsoft Teams) via which the online lectures and practicals from March till date are being conducted. Every student and faculty are given an id for the same.

**ERP System:** The institute is also in the process of automating all its manual work via JUNO ERP System.