



### **4.3.1 Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection**

#### **Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words**

Our Institute has a fully enabled Wi-Fi facility, controlled by stringent policy and procedures our Institute frequently updates its IT facilities including Wi-Fi. Users are expected to register their Particulars to get regulated access. The system ensures installation of anti-virus software without which access to the network is denied. Our standards of purchase proposals hardware and software selection are based above the overall standards as per statutory recommendations. Maintenance procedures and different policies like password change, safety, firewall and networking remain as a benchmark in our Institution. Periodical backup of all the systems with an interim change over facility enables data protection during backup. The institution features a fiber-optic cable network infrastructure that connects all buildings and blocks in various laboratories with around 21 LAN switches, 26 Wi-Fi points, and 500+ PCs.

The ICT equipment includes multimedia projectors, public address systems, and a staff biometric attendance module. CCTV cameras are installed for surveillance. In order to meet the campus's needs for academic and research pursuits, the institution enhances its internet services and infrastructure regularly.

Number of PC systems with individual configuration: 400+ (for students' only)

Internet connectivity in all computer labs, Internet connectivity in all classrooms and hostels, Wi-Fi enabled campus, Reprography, Projectors in all classrooms, Digital Panel in Smart Classroom and Audio-Video enabled classroom. One network across the campus and internet/intranet resources under uniform network policy.

JBIT has 10 computer labs with 342 computers of Intel-i7, Intel-i5, Intel-i3, Intel G645, Intel Dual-core processors. JBIT has Microsoft Campus Agreement for Windows and other software for the latest configuration of hardware. The software is up to the mark as per the specification of the affiliating body. 64 new Computers were purchased in March as per requirements and specifications (i5, 10 Gen, 8GB RAM, 240 SSD) provided by the Department.



In March 2022, the institute increased the bandwidth of its internet leased line (1:1) from 50 Mbps to 100 Mbps. The bandwidth was expanded to 155 Mbps in May. 2023.

The institute has two generators, one of 125 KVA and the other of 63 KVA. On campus, UPS is also accessible and employs online UPS for continuous power supply to maintain Wi-Fi connections.

Considering numerous web security factors, JBIT Campus has secured the Internet UTM **Hardware Firewall**, which was upgraded in 2022 with a capacity of more than 400 concurrent users. The Institute's dedicated server room has two servers for managing bandwidth and **firewalls**.

106 CCTV cameras are strategically placed throughout the campus, keeping the area under electronic monitoring 24 hours a day. This helps to maintain campus security. On date with year, the institute added 14 new CCTV cameras to its existing security system throughout

IoT lab and AI/ML lab were both established by the institute in Feb. 2023

LCD projectors - There are LCD projectors throughout the institute's classrooms, seminar rooms, auditorium, and laboratories.

Email IDs: In 2020, JBIT upgraded Google workspace and faculty as well as staff use the Institute Email IDs ([...@jbitdoon.edu.in](mailto:...@jbitdoon.edu.in)).

A high end rack server system is used for web applications, video streaming, academic activities and other activities. Campus internet traffic is monitored through the high performance firewall for any possible spam, VIRUS and intrusion detection.