Ref. No: F. 23/ZG/24-003 dated 10 October 2024

Conduct of Examination and Minimum Standards for Examination Centers and Proctoring

I. Conduct of End Semester or Term End Examination for Online Programmes at Assam Don Bosco University:

Assam Don Bosco University, Assam offering programme through Online mode will conduct examinations using Computer based test in a proctored environment with all the security arrangements ensuring transparency and credibility of the examinations. It can also conduct online examination through technology mediated proctoring.

I(A) Schedule of examinations: –

Examination time table shall be prepared in coordination with Academic Calendar of ADBU, based on the tentative exam-period announced during admission-notification/prospectus of study-programme.
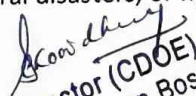
All processes of assessment of learners in different components of Examination are directly handled by the Controller of Examination of Assam Don Bosco University and no part of the assessment is outsourced. For ensuring transparency and credibility, the full-time faculty has been associated to function as Proctors, examination superintendents, observers, etc.
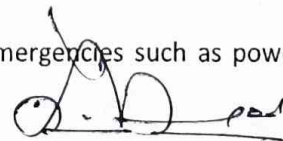
For online mode, the Department conducts examinations using Online **Remote proctoring or Computer-**based tests in a proctored environment in designated test centers with all the security arrangements ensuring transparency and credibility of the examinations.

The attendance of examinees is authenticated through the biometric system as per Aadhaar details or other Government identifiers for Indian learners and Passports for International learners.

II. Minimum Standards maintained at the Examination Centres (As per Annexure I)

a. Infrastructure: Examination centres have adequate infrastructure, including proper seating arrangements, lighting, ventilation, and restroom facilities.

b. Accessibility: Centres is easily accessible via public transportation and should include provisions for candidates with disabilities.

c. Security: Security measures such as CCTV cameras, metal detectors, and security personnel is installed to prevent unauthorized entry and ensure a secure environment.

d. Technology: Centres is equipped with the necessary technological infrastructure for conducting computer-based exams, including functional computers, reliable internet connectivity, and backup power supply.

e. Capacity: Centre have sufficient capacity to accommodate the expected number of candidates comfortably, avoiding any overcrowding.

f. Sanitation: Cleanliness and hygiene should be maintained through regular cleaning and proper sanitation procedures.

g. Emergency Preparedness: Centres have contingency plans for emergencies such as power failures, natural disasters, or medical issues.

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h. Compliance: All examination centres is complied with applicable UGC guidelines for ODL examinations, especially those concerning infrastructure, security, and technology.

III. Minimum Standards Maintained for the Online Examination: (As per Annexure I)

A. General Standards:

Infrastructure

Examination centre at ADBU have reliable internet connectivity, adequate computing devices and a power backup system to ensure the smooth conduct of online examinations without interruptions.

Security Measures:

i. All Security measures is implemented to protect examination centres from unauthorized access, data breaches, and cyber threats. This includes the use of firewalls, antivirus software, and encryption protocols.

ii. Fire extinguishers are functional, clearly marked, and easily accessible. Emergency exits should be well-identified and free from obstructions.

Accessibility:

Examination centres is accessible to all candidates, including persons with disabilities, through the provision of ramps, elevators, accessible restrooms, and other necessary facilities.

Comfort and Safety:
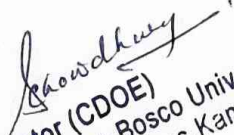
A comfortable and safe environment is maintained, with appropriate seating, lighting, ventilation, and sanitation for all candidates.

Compliance: Examination centre is adhered to relevant UGC guidelines for online examinations, particularly those related to infrastructure, security, accessibility, and technology.

B: Remote Proctoring: Annexure II

Secure browser: To ensure a secure and fair examination environment, Assam Don Bosco University (ADBU) uses the Safe Exam Browser (SEB), which is to be install from the LMS before the first attempt of the assessment examination on the devices. SEB restricts the opening of any other windows or applications during the exam, remote login, and output to external displays through VGA, USB, or HDMI ports. By creating a controlled digital environment, SEB helps maintain the integrity of the examination process and prevents any form of digital malpractice.
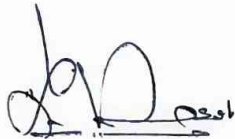
Remote Proctoring: Remote proctoring at Assam Don Bosco University involves continuous monitoring of candidates during online examinations to ensure academic integrity. This is achieved through periodic image capturing or live video streaming using the candidate's webcam, as well as screen capturing of the current activity on the candidate's device. These measures help in detecting and preventing any unfair practices during the examination.

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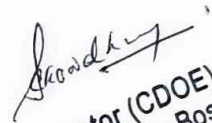Tapesia Gardens, Kamarkuchi
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Data Encryption: In response to the requirement for data encryption and secure handling of examination content, the following measures are implemented/planned for the LMS hosted at **online.dbuniversity.ac.in**:

- **Encrypted Storage**: All sensitive data, including the Question Bank and exam content, is stored using AES-256 encryption and accessible only to authorized personnel.
- **Secure Communication**: Server-client communication during exams is encrypted via HTTPS over TLS, ensuring end-to-end data protection.
- **Role-Based Access Control**: Access to exam modules is strictly governed by role-based authentication for faculty, exam cell, and students.
- **Two-Fact or Authentication**: ADBU is in the process of 2FA for faculty and administrators to enhance security.
- **Audit Logging**: System activities are logged and regularly audited to detect any anomalies.
- **Server Security**: LMS servers are protected with firewalls, intrusion detection systems, and regular security updates.

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Annexure-I: Security Arrangements in the Testing Centre for Online Exams, retaining the original meaning and structure while ensuring clarity and consistency:

Annexure-I
Security Arrangements in the Testing Centre for Online Exams

(a) Access to the examination centre prior to the start of the exam shall be restricted to authorized staff and designated external examiners only.

(b) During the examination, access shall be limited strictly to authorized staff and examinees.

(c) Authorized personnel, including external examiners, shall be granted access only as per their designated roles and responsibilities.

(d) The operating system, browser, and examination software must be regularly updated and patched in a timely manner to ensure system security.

(e) The testing application must have the capability to track and report all access attempts to the system.

(f) Each examination room must be equipped with CCTV surveillance for real-time monitoring.

(g) Centralized audio and video monitoring of all examination centres shall be maintained throughout the examination process.

(h) A dedicated examination application server or computer shall be installed at each examination centre. This server must be securely connected to a central server via Virtual Private Network (VPN) for the encrypted delivery of question papers at a scheduled time before the examination begins.

(i) The examination server must operate on a local area network (LAN) within the same subnet to enable seamless communication among test delivery applications without port restrictions.

(j) The online examination system shall support detailed audit logging to record user activities such as login, logout, exam access, question navigation, and answer responses. Geo-tagging techniques shall be used to track the precise location of users during the examination.

(k) IP-based authentication and authorization shall be enforced to restrict access, especially for admin logins, to a predefined list of IP addresses for enhanced security.

(l) Examination centres must have reliable internet connectivity with a minimum download speed of 4 Mbps and an upload speed of 1 Mbps to support timely delivery of question papers and uploading of scanned answer scripts.

(m) Separate devices must be used for Local Area Network (switch) and internet connectivity (router), avoiding the use of integrated units.

(n) Staff must verify each student's original Government of India-issued ID proof against the

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uploaded ID for proper authentication.

(o) No external electronic devices (e.g., mobile phones, pen drives, tablets, laptops, smartwatches) or reading materials shall be allowed inside the examination centres.

(p) The online examination platform shall be accessible via a unique user ID and password, generated separately for each student, examination session, and exam.

(q) Post-examination, all data shall be transferred in encrypted format through a secure Virtual Private Network (VPN) from the local examination server to the central server.

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