

NARULA INSTITUTE OF TECHNOLOGY

81, Nilgunj Road, Agarpara, Kolkata -700109

Phone – (033) 25638888, Fax –(033)2583 7029

Website : www.nit.ac.in , E-mail : info@nit.ac.in

Best Practice

Title: Digitization of Script Evaluation System

OBJECTIVES: The institute has been a pioneer in the changing world of education system. Digitization of the education system is the need of the hour. The institute had fully automated the examination system from the academic year of 2018-2019.

The institute has always maintained its endeavour to declare the results within 20 days from the end of examination. Digitization of the answer script evaluation will speed up the overall process, along with maintaining **assessment records safe and easily accessible in the cloud**. In addition, it maintains superior confidentiality and transparency of the evaluation process. Result declaration will be possible within the stipulated time with requirement of lesser man hour.

THE CONTEXT:

The traditional paper checking process is extremely time consuming and involves many logistic activities. The Answer scripts sometimes get misplaced during transportation and are associated with the problem of storing huge number of answer scripts. The result declaration in this context is a lengthy procedure and less reliable as it involves the threat of transcription error at many stages. Therefore, to publish the results within the assigned timeframe, a technology-driven system is very important. The present system was introduced to keep the assessment records safe and easily accessible in the cloud. This leads to faster evaluation and smooth assessment process. This also minimizes the possibility of errors that were present in the manual setup.

The resource persons can work from any locations and thus unavailability of evaluators in certain regions is no longer an issue.

THE PRACTICE

From the Academic Year 2018-19, a highly comprehensive digital infrastructure; IntelliEXAMS system from MindLogicX has been installed at the institute for digitization of the answer script evaluation and processing of result where the entire data is securely stored on a cloud platform with encryption. The system supports both the pen and paper-based assessments and online assessments. The system is supported by all the common platforms like Windows, Android and iOS. Some unique features of the system

- Ensure no loss of answer scripts with scanning and archival, absolutely no chance of loss of any data
- Tampering of answer scripts are not possible as they are encrypted

- Answer scripts can be evaluated by the Examiner / Head Examiner from anywhere and anytime
- Outcome based performance analysis,
- Student request for Scan Copy and Re-evaluation can be quickly addressed by the system.
- Examination Results can be tracked by the students on IntelliEXAMS mobile app.

Steps followed

(i) Answer Sheet Scanning: High Speed scanners are used to scan the answer sheets. Student's identity like name and roll no are masked in the process.

(ii) Scripts Allocation: Definite numbers of scripts are allocated to the examiners from the COE office.

(iii) Digital Correction of Exam Papers: Examiners can securely log in to the system and can evaluate scanned answer sheets. It has both freehand and inbuilt annotations along with space to provide remarks for individual answers. The system helps to auto calculate the total. The system also takes into consideration the best of the performances of the students for optional answers. During the script evaluation process if the internet goes off, the data will be stored in the device and synchronize as soon as the net connectivity is restored. Faculty can install the mobile app of on-screen marking system and can evaluate from a mobile. The system gets locked automatically if the evaluator stops the evaluation process for some time.

(iv) Result Generation: The automated system compiles internal marks and script evaluation marks and generates mark sheets without any manual intervention. There is a facility to export the result in excel

format. It helps to speed up the result generation process.

(v) Online Result and printing of Grade Cards: On official publication of the result, the students can view and print their results from their PC / Laptop / Mobile. The Grade Cards / Provisional Certificates are printed at the COE section and distributed to the students.

EVIDENCE OF SUCCESS:

Distribution of Answer Scripts: Before digitisation it was a laborious task with involvement of large number of manpower and after digitisation answers script distribution is done from the COE office on the same day.

Internal Marks Entry: Before digitisation hard copy of internal marks was submitted by the faculty members to the COE office and the examination cell members used to enter the marks to preparation of marksheets. After digitisation the internal marks are directly entered online by respective faculty members from the logins provided to respective department from the COE office.

Storage of Answer scripts: Before digitisation the answer scripts were stored for 5 years under strict security whereas after digitisation the answer scripts are securely stored in cloud in an encrypted manner.

Storage of marks and related data: Before digitisation maintenance of hard copy files were needed whereas after digitisation as all the important data are stored in cloud it saves not only the space but is also an eco-friendly approach of the institute.

Student Grievance: A huge reduction in the number of student's grievances (PPR post publication review applications & PPS post publication scrutiny applications) was observed after digitisation which is depicted by bar diagram.

PROBLEMS ENCOUNTERED & RESOURCES REQUIRED:

Senior faculties faced some problem to adapt to the new method of evaluation. As multiple agencies are involved in the process a strong synchronisation is required for successful implementation of the process. Master data uploading is a crucial part of the process which must absolutely error free and in a secured manner. Access to the data is restricted and cannot be accessed without permission. Few other problems encountered are fibre optic failure; adobe acrobat version, file permission, dot net compatibility and forgetting of passwords by the students. As the system has no geo barrier and the examiner can access the scripts anytime and from any location internet speed sometimes becomes a challenge for them. Resources required are platforms like Windows, Android and iOS, applications like adobe acrobat & dotnet and internet connectivity.