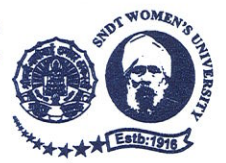




# SIR VITHALDAS THACKERSEY COLLEGE OF HOME SCIENCE

(Empowered Autonomous Status)

S.N.D.T. WOMEN'S UNIVERSITY, MUMBAI



NAAC Accredited 'A' Grade, UGC Honor- College with Potential for Excellence (CPE Grant 2006-2020)

RUSA-2 Infrastructure Grant ( 2018-2020), Best College Award, SNDTWU (2021)

SVT/Quotation/2023-24/1007

Date: 07<sup>th</sup> March, 2024.

**Subject: Quotation from Agencies for Digitization of Answer Books and Computer Based Assessment for Final Examinations for Academic Year Term II (2023-24) & Term I (2024-25) using College Fund for Sir Vithaldas Thackersey College of Home Science (Empowered Autonomous Status), SNDT Women's University, Sir Vithaldas Vidyavihar Campus, Juhu Tara Road, Santacruz (West), Mumbai.**

Madam / Sir

Sealed Quotations are invited from Agencies for Digitization of Answer Books and Computer Based Assessment for Final Examinations for Academic Year Term II (2023-2024) & Term I (2024-25) using College Fund for Sir Vithaldas Thackersey College of Home Science (Empowered Autonomous Status), SNDT Women's University, Mumbai.

The quotations are invited in two parts under three envelope system. Technical Bid shall be enclosed and sealed in Envelope No.1. Financial Bid shall be enclosed in Envelope No.2. Both the sealed envelopes shall be enclosed in Envelope No.3. Failure to furnish all the information mentioned under Technical and Financial bid and qualifying Criteria may result in the rejection of the quotation. The College reserves the right to reject the quotation in whole assigning any reason thereof.

Quotation should be submitted to The Principal, Sir Vithaldas Thackersey College of Home Science (Empowered Autonomous Status), SNDT Women's University, Sir Vithaldas Vidyavihar Campus, Juhu Tara Road, Santacruz (West), Mumbai on or before Date: 21st March, 2024 (before 4.00 PM).

### Terms and Conditions

1. Sir Vithaldas Thackersey College of Home Science (Empowered Autonomous Status), SNDT Women's University, Santacruz (West), Mumbai reserves the right to reject any or all quotations without assigning any reasons thereof.
2. Previous experience of working with the institution would be considered.
3. The decision of the College Management will be final.

Dr. Jagmeet Madan  
(Principal)



(Offer should be filled on letter head)

**Technical Bid (Envelopes 1)**

To,  
The Principal,  
Sir Vithaldas Thackersey College of Home Science (Empowered Autonomous Status),  
SNDT Women's University, Juhu, Santacruz (West),  
Mumbai - 400 049.

**Subject: Quotation from Agencies Digitization of Answer Books and Computer Based Assessment for Final Examinations for Academic Year Term II (2022-2023) & Term I (2023-24) using College Fund for Sir Vithaldas Thackersey College of Home Science (Empowered Autonomous Status), SNDT Women's University, Sir Vithaldas Vidyavihar Campus, Juhu Tara Road, Santacruz (West), Mumbai.**

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Respected Sir / Madam

With reference to subject cited above we would like to furnish our quote with best rate possible as below:

**Format of Technical Bid**

Sr. No.	Specifications	Yes/No	Details/Remark
1.	Answer Book Digital Evaluation Solution and Services. The cost including solution and services for all following and related components. 1.1. Barcode System 1.2. Scanning & Pre Scanning Processes 1.3. Security measures during evaluation process 1.4. Evaluation Process 1.5. Result Processing Data generation 1.6. Revaluation Process 1.7. Governance 1.8. Archival and Retrieval 1.9. Report Generation 1.10. High level Non-Functional Requirements		



## Scope of Work

### 1. Details of requirement

The College is looking for barcode system, digital Scanning and Onscreen evaluation of Answer Sheets during the Evaluation process for the examinations. 'Concealed Digital Evaluation through Barcode Solution and Services (Onscreen Evaluation)' is divided into Three Basic parts. They are as follows:

- Barcode, UID and related stationery
- Answer Book Scanning
- Evaluation by Examiners / Moderators

In this system, the Answer sheets (Answer sheet contains main answer booklet plus supplements attached if any) shall be firstly pasted with barcode and UID, then scanned in secure premises of allocated by the College authority. Following this, the scanned answer sheets are assessed on computers / laptops by the appointed examiners at the center in the campus/place provided by the College for evaluation

As its implementation depends upon the experience, the College shall take a call whether to further expand the usage of this solution.

As a part of implementation, to save on the capital expenditure, College is ready for an option of application services hosted on an on-premise location.

### 2. High Level Functional Requirements

Following are the functional requirements of a desired hardware and software system and its components which describes the business processing and other functionality that define what a system is supposed to accomplish.

#### a. Barcode System

Bar-code stickers to be printed from database files supplied by the College. The encrypted bar-code should contain the information about candidate's seat no., sticker no., subject name & code or any additional information as suggested by the College. The right and left hand side of the sticker should have the same information in readable form with minimum one-inch gap between the two.



The barcode sticker should be printed & packed along with Invigilator Report, date-wise, session-wise, subject-wise or as required by the College.

In addition to above bar code stickers, Emergency bar code stickers to be printed with left hand side having only sticker no. and other information with blank space. & the right- hand side with bar code. The emergency stickers are to be printed in quantity of about 2% (or as required by the College) of the quantity of bar code stickers.

UID bar-codes are to be printed with bar-code and readable information of Course code, subject, lot no. & serial no. and readable no. on right hand side & only readable number on left hand side.

This printing is to be done on the basis of data supplied by the College with additional UID's for the emergency usage.

The Agency has to verify the data with regard to the Absent candidates, Emergency stickers used from the information in Invigilators Report and accordingly make necessary amendments in the respective data, and generate mismatch or discrepancy report.

#### b. Scanning & Pre-Scanning Processes

Solution should support, Masking of student identity by using Bar-coding on answer books used by College.

Solution should be capable to integrate with existing mechanism adopted by College. Necessary input data will be provided by COLLEGE for barcode system.

Solution should also support masking of marks through software, allocated during the re- evaluation.

Solution should support Digitization of the answer book by scanning the complete answer book; including blank papers and supplements.

Solution should support scanning without cutting or de-threading of Answer sheets with Book Scanner.  
Solution should have functionality for Scanning Quality check of scanned Answer Books.



All Necessary Hardware infrastructure and Applications for Scanning of Answer sheets should be provided by Vendor.

Data can be hosted locally at the College server.

c. Security measures during the evaluation process

- Solution should have User Management functionality for evaluators with authentication; integration with Directory services is preferred.
- Solution should have the functionality to integrate a Digital signature on the answer book evaluated by the evaluator.
- Solution should have the facility to get all logs, based upon IP, username, PC details, time and other related attributes.
- Solution should have a mechanism in place to secure all the answer sheets, evaluation marks and any other related information and files.
- Solution provider agency will also ensure the physical security of the hard-copy answer scripts for the course of digitization of the answer script or as agreed by the College's examination section.
- The service provider should maintain and provide the primary digitized copy of all the answer sheets and maintain Backup on a regular basis.

d. Evaluation Process

Examiners and moderators are involved in order to complete the activity of the answer sheet evaluation process. Thus, the evaluation process can be divided as follows:

- Solution should have functionality for evaluator attendance management.
- Solution should support users of all Paper Evaluators and Moderators appointed as per regular procedure laid down by the College system.
- Solution should have functionality for a subject profile with all possible attributes for managing the subject's information.
- Answer papers should be allocated to the evaluators randomly. Provision will be there to cancel or reallocation of the answer paper to the same evaluator or to other.
- After each set of papers is evaluated, they are ready for moderation as per College guidelines. The moderator can view the evaluated paper scores in a tabular format.
- Solution should have the facility for centralized or distributed evaluation. Evaluator while evaluating the answer sheet will enter the "marks awarded" for each question. There will also be an option (not mandatory) of annotating the answer-sheet.



- Solution should have functionality for Answer scripts allocation to the evaluators/Moderators along with answer keys.
- The administrator of the evaluation activity (College Exam section) should be able to see and monitor the entire activity associated with the answer sheet evaluation. The solution provider agency should provide a dashboard for this purpose.
- Solution should have functionality, allocating specific subjects to specific examiners as per the directives of the Examination authority.
- Solution should have functionality for multiple evaluation of the same script by different evaluators.
- Randomization of scripts: Solution should have a feature allowing the answer script not to be evaluated twice by the same evaluator in any of the processes.
- Solution should have provision for rotation, zooming of answer copies during digital evaluation. However, the service provider should provide the document in aligned form.
- Editing/Correction Facility: The solution should provide a feature to edit or modify the evaluation. If the examiner has added the wrong annotation/awarded incorrect marks then it should be possible to edit/modify before final submission of that particular answer sheet.
- Solution should have auto totaling of marks functionality.

**e. Result Processing**

Solution should have the functionality by which, post evaluation final scores are getting tabulated automatically and are provided as digital output to the existing examination system for result processing in the format required by the examination section.

**f. Revaluation Process**

This includes retrieval from archival the requested scanned answer scripts without annotation and marks and to assign them to evaluator for re-evaluation. All steps of Evaluation and result processing are applicable here as narrated above.

**3. Governance - Following points are expected to be supported by the solution**

Analysis: Real time, item level data to support quality analysis of answer books and evaluators performance.

Dashboard: Real time monitoring of evaluation process progress and quality parameters.



#### **4. Archival and Retrieval**

Archival: Solution should have functionality for archival of digitally evaluated answer copies.

Retrieval: Solution should have the provision for the functionality to deliver evaluated answer copies to the students through their College email IDs in the form of PDF file after getting concurrence from the Examination section of the college.

Solution should have the feature allowing the specific answer scripts to be extracted and to be made available for evaluation to the evaluators.

Solution should have the facility to archive the scanned and evaluated answer sheets at least for the period of 3 years.

#### **5. Reports expected by the solution**

- Evaluator, subject, course, department specific reports for examination section to monitor/ identify issues.
- Providing marks record school wise, department wise, course wise, subject wise.
- Facility to generate all statutory reports with print out.

#### **6. High Level Non-Functional Requirements**

- Disaster recovery - For on premise solution the solution framework should support the integration with DR site.
- Legal - The Selected Vendor shall be held responsible if any discrepancy found in the marks awarded by the evaluator to the answer book and output data provided for further processing.
- Application should demonstrate the capacity to maintain confidentiality, integrity and availability of the data. Application should also demonstrate the detailed Audit trail facility for important transactions.

#### **7. Volume and evaluation / revaluation processes**

The process shall be executed for evaluation, photocopy and revaluation process for answer sheets of EOSE Semester Examination. Approximate copies will be around 5000 in each EoSE.



**Annexure - B**  
**Financial Bid (Envelope 2)**

We comply with the following Criteria as required in this engagement.

**Financial bid to be filled by bidder**

<b><u>Sr.No</u></b>	<b><u>Particular</u></b>
1.	Digital Evaluation of Examination Booklet as per scope of work (Rate per Booklet*)
2.	Taxes, if any
3.	Should hold a valid PAN.
4.	Should have valid GST Number.
5.	Declaration on the company letter head if GST is not applicable.

**\*NOTE:**

- A) Rate quoted should be **FOR** Sir Vithaldas Thackersey College of Home Science (Empowered Autonomous Status), SNDTWU, Mumbai.
- B) Price per Answer sheet irrespective of pages in words: Rupees \_\_\_\_\_ Only
- C) The rate should be inclusive of all charges.
- D) GST amount to be mentioned clearly in the quotation.

All the terms and conditions given in notifications are studied thoroughly and accepted fully.

I hereby acknowledge that the information provided above is correct.

**Signature:**

**Date:**

**Designation:**

Yours truly,  
Name of the Company  
Signature of the Proprietor:  
Date: