MANUAL/HANDBOOK FOR CONDUCT OF TERM END EXAMINATION

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ABSTRACT

Education has always been the building block of a society and a nation, so is the effective evaluation of formal learning. Due to an increase in access to education and higher enrollment, timely evaluation and declaration of results is continuously affecting the governance of examination process and procedures of Uttarakhand Open University (UOU). Therefore, digitization, at various levels in the examination process, has been initiated as an appropriate solution for timely preparation and declaration of examination results of UOU. Digitization has been initiated right from enrolling a fresh or existing learner in an academic session, continuously monitoring and modifying the process, whenever required, till the declaration of result. This process is not a step-by-step process; rather it is a continuous process having various stages entwined with each other. This process has helped in reducing the time involved in conducting the examination and declaration of results, which begins with preparation of date-sheet of examination in a precise & concise manner, and even converging three shifts of examinations to two shifts (i.e., noon and evening only). Digitization has helped in reducing the number of days of examination to 22 working days (44 shifts of exams for more than 750 papers) and preparation and declaration of all the results within 45 days from the last day of examination. It has further implications in reducing the expenditure in conducting exams via reducing an entire shift for a period of 22 days.

INTRODUCTION

For any formal process of learning, evaluation is an important phase for measuring the effectiveness of learning amongst the learners. Therefore, Examination Section plays an important role in any educational institution. Similarly, in Uttarakhand Open University (UOU), since its inception, the examination section is continuously discharging its role, duties and responsibilities for the betterment of learners, University and the society. However, changing expectations of the stakeholders have also get reshaped over the period of time. Considering these new expectations and underlying changes, UOU has identified the need for upgrading the examination processes and digitize it to ensure speed, efficiency,

accuracy, transparency, ease of record keeping, and quick retrieval of information and documents.

ABBREVIATIONS:

- UOU: Uttarakhand Open University
- SIS: Student Information System
- OMR:Optical Mark Recognition
- NAD: National Academic Depository
- ODL: Open and Distance Learning
- PWG: Pass with Grace
- OTP: One Time Password
- QR-Code: Quick Response Code

DESCRIPTION OF EXAMINATION AUTOMATION SYSTEM

The process of examination has been digitized right from enrolling a learner in a programme of study to award of degree and transcript, and even extending to verification of their documents later for any other purpose. After preparation of degree, the same is uploaded on the portal of National Academic Depository (NAD). Following is the step-wise detail of the digitized examination process of UOU:

1. Identification of Examination Cities: Before starting a session and enrollment of learners, the examination section of UOU identifies Examination Cities, considering the previous admission and examination pattern, such as Haldwani, Dehradun, Haridwar, etc. At this stage only Examination Cities (not the exam centers) are identified and indicated in the SIS & Admission form.

2. Establishing Contact with the Learners: A continuous contact is established with the learners to make them aware at every stage about their examinations. The contact is established via UOU web-portal, e-mail and SMS facility.

3. Enrollment of Learners and Filling-up of Examination Form: The process of enrollment in UOU is online (using UOU website) as well as off line (Admission Form). In distance education system students are connected to the University via different modes of correspondence which they have. Therefore, the learners have to compulsorily mention their choice of the particular city for examination (mentioned as Exam City in the form) while filling-in the admission form (either online or offline). This also includes submitting required examination fees of the learners for the courses offered in that particular programme of learning. However, considering that, this is the Open and Distance Learning (ODL) system and the learners must

have the liberty to opt when they want to appear for their examinations, they are provided with an additional facility through which, due to their inability to appear for the examination in that particular session, they may appear in the immediate next upcoming examinations (e.g., if they have filled their exam form for June 2017 exams then they may opt to appear in December 2017 exams instead of June 2017 exams).

4. Filling-up of Back and Improvement Examination Form: Conducting examination includes three sub-stages, viz., and learners appearing in main paper, back paper, and improvement paper examination. The exams are, further, classified into Theory Papers, Assignments, Practical's, Project Work, Field-Work and Viva-Voce. Learners, depending upon their requirements, they fill-in their examination forms. All the learners appearing afresh have to fill-in their choice of Examination City, as mentioned above in step II above. However, the learners who require to improve their performance in a theory subject only have a window of six months (up to the immediate next examination term, say if, a learner has qualified the June 2017 examination and wishes to appear for Improvement Exams, he/she can only appear in December 2017 exams) to apply by filling-in the examination form for Improvement Examination. Only such learners are allowed to appear for Improvement Examination who has qualified in all the papers of that particular term and it includes the learners who have passed with Grace (PWG). The next category of the learners who want to appear for back paper examination are provided a window of 15 days to one month to fill-in their back-paper exam forms and select the exam city of their choice to appear in the exam.

5. Preparation of Date-Sheet: After completion of filling-in of all the examination forms (main, back and improvement) and obtaining information from SIS about all the Courses the question papers required are ascertained and, the process of preparation of date-sheet is initiated. Digitization helps in identifying all the combinations of papers that are offered in a particular session (which varies in each session) and thus the date-sheet is prepared. Date-sheet so prepared is put on the website to allow various stakeholders to communicate their suggestions, if any. After getting all the suggestions, the required changes are introduced and the final scheme of examinations is published. The date-sheet is drafted in such a manner that the learners do not have any clashes of dates during their main papers. Utmost care is taken, so that, they do not have any clashes in their main, back paper examination, or two back paper exams. However, if any of such cases (less than 01%) appear than the learner is permitted to appear in any one the papers and the fees for the clashing paper is adjusted in their next immediate examination, so that, with the same examination fees of clashed paper they may appear in that particular paper too. The successfully drafted date-sheet is

able to conduct more than 750 theory papers within 22 working days and two shifts in a day (total 44 shifts).

6. **Withdrawal of Fees and Exam City Change:** This is the spirit of Examination process of UOU, because all the learners (for main and back papers) are given an opportunity to submit their requests for examinations modifications. They are provided with a time-frame of 10 to 15 days, in which they are permitted to change their Examination City (if required) and shift their fees from that particular examination to the immediate next examinations. This is the opportunity to the new learners who have filled in the choice of exam city at the time of enrollment or to the learners, who are having any other problems regarding their main and back paper examinations.

7. **Uploading Marks of Assignments:** While the learners are preparing for their examinations, the Learners Support Centers (LSCs) of the University are allowed to get the assignments evaluated (as prescribed by UOU) and upload their marks in the SIS. This process is continuously monitored by the Examination Section of UOU and a follow-up is always ensured to motivate the learners to submit their assignments for evaluation so that the marks could be uploaded. Apart from this, if the Examination Section observes any malpractice or improper evaluation of assignments, the University takes corrective measures suo-moto to rectify the issue.

8. **Uploading of the marks of practical, Projects, Field-Work and Viva Voce:** Along with the conduct of theory papers, the other important sub categories of a result are uploaded to facilitate the preparation of results. Therefore, it is essential that all the sub categories are completed simultaneously along with the theory marks for completion of a result. Later, various Exam Centers are identified and the learners are allotted to their closest exam-center to appear in practical, projects, field-work or viva voce. A blank award list is generated for the learners appearing in Main or Back paper examination, and the same are sent to the concerned Internal Examiner for conducting the examination. After successful completion of practical exams, they fill-in the award sheets duly signed by the external and internal examiners and submit it for being uploaded on SIS. This award sheets are Optical Mark Recognition (OMR) based and, therefore, the process of scanning of OMR is initiated. Upon successful completion of scanning, the values are uploaded in SIS for preparation of result.

9. **Maximum Marks for all the Question Papers are the same:** At various stages and based upon the nature of programme, variation in the marks of External Exam and Assignments marks (say, Theory: Assignment, 60:40, 70:30, 80:20, 100:00, 35:15, 40:10 and Grading system as well) does exist which sometimes creates difficulty for the learners. Therefore, for the ease of understanding and in order to bring unanimity, it was decided that all the question papers will be prepared as Maximum Marks 80

(for Full Unit papers) and Maximum Marks 40 (for Half Unit Papers). After compilation of marks out of a Maximum of 80/40 Marks, the obtained marks are converted proportionately to the maximum marks which actually exist for a particular paper, e.g., a learner has a paper of MM 70 but he is appearing in a paper of MM 80 and obtained 50/80 (62.5%) then the marks so obtained are proportionately converted to 62.5% of MM 70, i.e., Obtained Marks shall be 44/70.

10. Allotment of Exam Center and Hall-Ticket Generation: After filling-in of the exam form, exam city change (if required), transfer of fees (if required), and the allotment of exam center takes place. All the examinees are allotted a particular exam center in an exam city, they opted previously and the Hall-Tickets are generated for all the examinees. These hall-tickets are available online on UOU web-portal and the learners download these whenever and wherever required. These hall-tickets include all the details about the examination of a particular examinees, say the papers he/she has opted to appear in and the date & exam-shift applicable.

11. Preparation of OMR based Award Sheet: While the examination is taking place at various exam centers, the Examination Section of UOU starts preparing OMR based Award Sheets for recording marks and uploading these in the SIS. These OMR award-sheets are printed with all the details related to a particular exam and all the examinees of that examination.

12. Evaluation of Answer Sheets: The OMR award-sheets are sent to the evaluators along with the answer-sheets. Evaluators have to darken the ovals pertaining to the fields of marks obtained by the examinees.

13. Remuneration to the Evaluators: Method for the payment of remuneration to the Evaluators (for answer-sheets, project, viva-voce, field-work and practical) is also completely digitized. The evaluators have to fill-in the Online Remuneration Form provided by the Exam Section, indicating the main fields required for processing of payment. The sheets so generated are verified by the Controller of Examinations (COE) and forwarded to Accounts Section for further process and online payment.

14. Scanning of OMR Award-Sheets: The completely filled-in OMR Award sheets are collected from the evaluators along with the checked answer sheets. A primary checking is done on OMR Awards by verifying that all the required entries are filled-in by the evaluator. Beyond this stage, the entire process of preparation of result is digitized and there is no human intervention in-between. These filled-in OMR awards are forwarded for scanning using OMR Scanner and the process continuous.

15. Uploading Data in SIS: After scanning these filled-in OMR awards, the scanned values are uploaded in SIS of all the examinees with the help of customized programming on the computer-systems of examination section.

16. **Proportionate Conversion of Marks:** At this juncture, the conversion of marks also takes place for the various papers in which MM is other than 80/40. This conversion process is also digitized and conversion of marks is done by the SIS itself. These proportionately converted marks reflect in the results as Marks Obtained.

17. **Declaration of Results:** Once all the entries are done, a Tabulation Report (TR) is prepared to have a final check on the results so prepared. Thereafter, on the recommendation of the tabulation committee and after approval of the competent authority, the result is declared on the website of UOU.

18. **Online Availability of Mark-sheets:** Once the result is declared on the website, all the examinees are permitted to download their marks-sheets online. The mark-sheets of all the learners of UOU are available online so that they can download their marks-sheets whenever and wherever required. This marks-sheet (a color print-out) of the first year/ previous year is pre verified and authenticated and it has the same validity as for a mark-sheet issued by the University. These marks-sheets can be verified online from the website of UOU. However, marks-sheets of only the first year and the previous years can be downloaded online. The consolidated final year/semester Marks-sheet or Transcript is issued by the University and that it is not available online.

19. **Resolving the Queries:** After declaration of results, if any deficiency is formed either by the learner or it is noticed by the University, such deficiencies are converted into queries and assigned a unique ticket for their rectification. These tickets are forwards to the concerned section and rectified within a period of 10 to 15 days.

20. **Award of Transcripts:** After declaration of result, a Transcript/Detailed Marks-sheet (for final year/semester qualified learners only) is generated for all the examinees and the same are forwarded to their LSCs for distribution to concerned learners only.

21. **Award of Degrees:** With the announcement of Convocation, the process of preparation of degrees is initiated. At the time of admission, the learners are motivated to submit their degree-fees, so that, as soon as the Convocation is held for the particular session, the University is able to send the degrees of all the examinees to their given address. The examinees are allowed to change (only once) the address for receiving their degrees. In such case, they have to visit Apply for Degree link on UOU web-portal, and they are asked to proceed further only after verification of their record of using One Time Password (OTP) received on their registered e-mail i.e. with UOU. Upon verification, the system indicates whether degree fee has been paid or not, and if the degree fee is paid, the learner may proceed to apply for degree and update their address for correspondence. He/she can, further, check the entries to be printed on the degree, and if the fees are not paid then they are guided to payment

gateway for online payment of degree fee and thereafter they may proceed with the same process as enumerated earlier. After, receiving the entries (online and offline), the degree section of the Examination department initiates the process of preparation of degrees and its dispatch to the leaners. All the degrees are generated using SIS and then printed in-house as according to the requirements, standard pattern and with inbuilt security features.

22. Online Verification of Transcripts and Degrees: Our relationship with the learner does not conclude with the dispatch of degrees, since most of the time many of these degrees are sent to the University for Verification for different Job requirements. Therefore, UOU has started uploading the Degrees of the learners on the NAD Portal. Along with this, the Transcripts and Degrees of UOU have Bar-Code/ Quick Response Code (QR-Code) imbibed in these for immediate verification of these documents of learners.

CONDUCT OF TERM END EXAMINATION

This manual/ handbook for conduct of assignments and term-end examination elaborates the entire process of conducting the examination in Uttarakhand Open University (UOU). The process of term-end examination extends from the admission/ re-registration/ existing learners/ back-paper or improvement examination of any learner to the declaration of result.

ELIGIBILITY FOR PARTICIPATION IN EXAMINATION-

Examination implies to all those entrance and other examinations which are conducted by the University either annually or in semester mode. These may be written and oral for various programmes opted by the learners. Eligibility for appearing at the examination extends to each learner who is registered and has taken admission as per rule, i.e., who has been enrolled/ registered and has deposited the programme fee, examination fee, will be eligible for appearing in the examination. Students/examinees shall have to choose their exam city (mandatorily) at the time of admission. Examination form(s) shall not be filled separately, excluding back/improvement exams. Every learner will have to take examination in all those subjects which have been chosen by him/ her. If a learner does not appear in any paper, then s/he shall be deemed as absent in that paper or the entire examination (as the case may be). No marks shall be allotted to the absentee learner. If a learner remains absent in all the subjects, then s/he shall neither have to re-register in all the subjects for that year nor shall have to pay the entire admission related fee. However, the student will have to pay the back-paper examination fee along with the back paper examination form. At the same time s/he may also apply for the examination in next academic calendar. It is mandatory for the examinee to carry the admit card to the examination hall. The examinee also needs to carry his/her identity card (I. Card of the University, Voter ID, Driving License, PAN card etc.) with him /her.Following is the step-wise detail of the process of conduct of term-end examination of UOU:

1. Identification of Examination Cities: Before starting a session and enrollment of learners, the examination section of UOU identifies Examination Cities, considering the previous admission and examination pattern, such as Haldwani, Dehradun,

Haridwar, etc. At this stage only Examination Cities (not the exam centers) are identified and indicated in the Student Information System (SIS) & Admission form.

2. Establishing Contact with the Learners: A continuous contact is established with the learners to make them aware at every stage about their examinations. The contact is established via UOU web-portal, e-mail and SMS facility.

3. Enrollment of Learners and Filling-up of Examination Form: The process of enrollment in UOU is online (using UOU website) as well as off-line (Admission Form). In distance education system students are connected to the University via different modes of correspondence which they have. Therefore, the leaners have to compulsorily mention their choice of the particular city for examination (mentioned as Exam City in the form) while filling-in the admission form (eitheronline or offline). This also includes submitting required examination fees of the learners for the courses offered in that particular programme of learning. However, considering that, this is the Open and Distance Learning (ODL) system and the learners must have the liberty to opt when they want to appear for their examinations, they are provided with an additional facility through which, due to their inability to appear for the examination in that particular session, they may appear in the immediate next upcoming examinations (e.g., if they have filled their exam form for June 2017 exams then they may opt to appear in December 2017 exams instead of June 2017 exams).

4. Filling-up of Back-Paper and Improvement Examination Form: Conducting examination includes three sub-stages, viz., learners appearing in main paper, back paper, and improvement paper examination. The exams are, further, classified into Theory Papers, Assignments, Practical, Project-Work, Field-Work and Viva-Voce. Learners, depending upon their requirements, they fill-in their examination forms. All the learners appearing afresh have to fill-in their choice of Examination City, as mentioned above in step II above. However, the learners who require to improve their performance in a theory subject only have a window of six months (upto the immediate next examination term, say if, a learner has qualified the June 2017 examination and wishes to appear for Improvement Exams, he/she can only appear in December 2017 exams) to apply by filling-in the examination form for Improvement Examination. Only such learners are allowed to appear for Improvement Examination who have qualified in all the papers of that particular term and it includes the learners who have Passed with Grace (PWG). The next category of the learners who want to appear for back paper examination are provided a window of 15 days to one month to fill-in their back-paper exam forms and select the exam city of their choice to appear in the exam.

5.   Preparation of Date-Sheet: After completion of filling-in of all the examination forms (main, back and improvement) and obtaining information from SIS about all the Courses the question papers required are ascertained and, the process of preparation of date-sheet is initiated. Digitization helps in identifying all the combinations of papers that are offered in a particular session (which varies in each session) and thus the date-sheet is prepared. Date-sheet so prepared is uploaded on the website to allow various stakeholders to communicate their suggestions, if any. After getting all the suggestions, the required changes are introduced and the final scheme of examinations is published. The date-sheet is drafted in such a manner that the learners do not have any clashes of dates during their main papers. Utmost care is taken, so that, they do not have any clashes in their main, back paper examination, or two back paper exams. However, if any of such cases (less than 01%) appear than the learner is permitted to appear in any one the papers and the fees for the clashing paper is adjusted in their next immediate examination, so that, with the same examination fees of clashed paper they may appear in that particular paper too. The successfully drafted date-sheet is able to conduct more than 750 theory papers within 22 working days and two shifts in a day (total 44 shifts).

6.   Withdrawal of Fees and Exam City Change: This is the spirit of Examination process of UOU, because all the learners (for main and back papers) are given an opportunity to submit their requests for examinations modifications. They are provided with a time-frame of 20 to 30 days, in which they are permitted to change their Examination City (if required) and shift their fees from that particular examination to the immediate next examinations. This is the opportunity to the new leaners who have filled in the choice of exam city at the time of enrollment or to the learners, who are having any other problems regarding their main and back paper examinations.

7.   Uploading Marks of Assignments: While the learners are preparing for their examinations, the Learners Support Centers (LSCs)/ Online Assignments Cell of the University are allowed to get the assignments evaluated (online/ offline as prescribed by UOU) and upload their marks in the SIS. This process is continuously monitored by the Examination Section of UOU and a follow-up is always ensured to motivate the learners to submit their assignments online/ offline for evaluation so that the marks could be uploaded. Apart from this, if the Examination Section observes any malpractice or improper evaluation of assignments, the University takes corrective measures suo-moto to rectify the issue.

8.   Uploading of the marks of Practical, Projects, Field-Work and Viva-Voce: Along with the conduct of theory papers, the other important sub-categories of a result are uploaded to facilitate the preparation of results. Therefore, it is essential that all the sub categories are completed simultaneously along with the theory marks for

completion of a result. Later, various Exam Centers are identified and the learners are allotted to their closest exam-center to appear in practical, projects, field-work or viva-voce. A blank award list is generated for the learners appearing in Main or Back paper examination, and the same are sent to the concerned Internal Examiner for conducting the examination. After successful completion of practical exams, they fill-in the award sheets duly signed by the external and internal examiners and submit it for being uploaded on SIS. These award sheets are Optical Mark Recognition (OMR) based and, therefore, the process of scanning of OMR is initiated. Upon successful completion of scanning, the values are uploaded in SIS for preparation of result.

9. Maximum Marks for all the Question Papers are the same: At various stages and based upon the nature of programme, variation in the marks of External Exam and Assignments marks (say, Theory: Assignment, 60:40, 70:30, 80:20, 100:00, 35:15, 40:10 and Grading system as well) does exist which sometimes creates difficulty for the learners. Therefore, for the ease of understanding and in order to bring unanimity, it was decided that all the question papers will be prepared as Maximum Marks 80 (for Full Unit papers) and Maximum Marks 40 (for Half Unit Papers). After compilation of marks out of a Maximum of 80/40 Marks, the obtained marks are converted proportionately to the maximum marks which actually exist for a particular paper, e.g., a learner has a paper of MM 70 but he is appearing in a paper of MM 80 and obtained 50/80 (62.5%) then the marks so obtained are proportionately converted to 62.5% of MM 70, i.e., Obtained Marks shall be 44/70.

10. Entry of Date-sheet in SIS for generating Hall-Ticket: Upon finalization of date-sheet, all the entries related to paper code and their date and time is entered in the SIS so that the same can be inserted into the hall-ticket of the learners.

11. Allotment of Exam Center and Hall-Ticket Generation: After filling-in of the exam form, exam city change (if required), transfer of fees (if required), and the allotment of exam center takes place. All the examinees are allotted a particular exam center in an exam city, they opted previously and the Hall-Tickets are generated for all the examinees. These hall-tickets are available online on UOU web-portal and the learners download these whenever and wherever required. These hall-tickets include all the details about the examination of a particular examinees, say the papers he/she has opted to appear in and the date & exam-shift applicable.

12. Confidential/ Non-confidential material of Examination: After identification of the strengths of learners in all the examination centers, all the material required to conduct term-end examination is sent to the identified examinations centers. (Detailed description is confidential).

13. Creation of External Flying team/ Observer(s) at Examination Center: Before starting the term-end examinations Flying team/ observer(s) are nominated with the permission of Hon'ble Vice Chancellor of the UOU. The flying team works in a three-tier system, where Regional Directorate of all the Regional Centers are allowed to create a Flying team from their level to conduct surprise visits to all the examinations centers established in their regional center. At level two, flying-teams are identified with the objective of conducting regular and surprise visits to all the examinations centers, these teams have the objective to necessarily inspect and ensure the sanctity of the examinations, summits its report to COE. Apart from this a flying squad team is setup at exam center level reporting to center superintendent.In addition to this, whenever University identifies a new examination for the very first time, then an Observer(s) is appointed by the University in that particular examination center. The observer has the role to mentor the examination center for conducting examinations and acquaint them with all the nitty-gritty of the examinations.

14. Conduct of Term-End Examinations: During this phase the term-end-examinations are conduct with a continuous and direct support to all the examinations centers directly from university. All the examinations centers functions directly in contact with the Examination Section of UOU to resolve each and every query then and there, immediately.

15. Internal Flying team: Every examination center is directed by UOU to create and Internal Flying team consisting of at least two male and two female members. The role of this team is to frisk all the students before allowing them in the examination hall and to support the external flying team/ observer(s) in performing their duties efficiently.

16. Submission of report by Flying team/ Observer(s): Upon completion of the visits conducted by the Internal and External Flying teams (both regional and University level flying team)/ Observer(s) duty, a detailed report is submitted by them, indicating the level of satisfaction derived by the teams, with the performance of an examination centers. That report also indicated the list of the candidate, which are booked as Unfair Means by these teams.

17. Collection of Used Answer-Sheets from the examination center: Upon completion of examination of a day, the used answer-sheets upon packing and sealing are stored safely and securely in the strong room of the examination center. University, after every 7 to 10 days send a team to all the examinations centers to collect all the used answer-sheets and bring them to the University.

18. Preparation of OMR based Award Sheet: While the examination is taking place at various exam centers, the Examination Section of UOU starts preparing OMR based

Award Sheets for recording marks and uploading these in the SIS. These OMR award-sheets are printed with all the details related to a particular exam and all the examinees of that examination.

19. Evaluation of Answer Sheets: The OMR award-sheets are sent to the evaluators along with the answer-sheets. Evaluators have to darken the ovals pertaining to the fields of marks obtained by the examinees.

20. Remuneration to the Evaluators: Method for the payment of remuneration to the Evaluators (for answer-sheets, project, viva-voce, field-work and practical) is also completely digitized. The evaluators have to fill-in the Online Remuneration Form provided by the Exam Section, indicating the main fields required for processing of payment. The sheets so generated are verified by the Controller of Examinations (COE) and forwarded to Accounts Section for further process and online payment.

21. Scanning of OMR Award-Sheets: The completely filled-in OMR Award-sheets are collected from the evaluators along with the checked answer-sheets. A primary checking is done on OMR Awards by verifying that all the required entries are filled-in by the evaluator. Beyond this stage, the entire process of preparation of result is digitized and there is no human intervention in-between. These filled-in OMR awards are forwarded for scanning using OMR Scanner and the process continuous.

22. Uploading Data in SIS: After scanning these filled-in OMR awards, the scanned values are uploaded in SIS of all the examinees with the help of customized programming on the computer-systems of examination section.

23. Proportionate Conversion of Marks: At this juncture, the conversion of marks also takes place for the various papers in which MM is other than 80/40. This conversion process is also digitized and conversion of marks is done by the SIS itself. These proportionately converted marks reflect in the results as Marks Obtained.

24. Declaration of Results: Once all the entries are done, a Tabulation Report (TR) is prepared to have a final check on the results so prepared. Thereafter, on the recommendation of the tabulation committee and after approval of the competent authority, the result is declared on the website of UOU.

25. Examination related Grievances: Examinee can report his/ her exam related grievances online/ off line within a month of declaration of last result including obtaining photo copy of answer books/ sheets. Grievances get resolve at two levels. Level one, scrutiny which involves recounting of marks allotted and evaluation of unchecked answers. Level two, re-evaluation if challenged by examinee. The challenged answer book gets reviewed by subject expert other that first evaluator. In

possibilities of marks increment, re-evaluation   processes take place. Additional marks will be allotted in case of more than 10% increment.

26. Criteria for Passing Examination: A minimum of 35% marks in each paper will be mandatory for passing any examination. The learners need to pass separately in assignments/ laboratory examination/ Project Work as well as the written examination. If an examinee fails to secure 35% marks in any paper, s/he shall be declared fail in that paper and s/he will have to reappear in that paper the next year. However, a learner who has not been able to pass all the papers or some of the papers may take admission for the next academic year and take both the examinations simultaneously in the next academic calendar.

27. Change of Examination Centers:

[1] Students/examinees shall be provided a time frame/window to change/correct their respective exam center, two months prior to the commencement of exams, via change examination center link provided at University Website www.uou.ac.in after this period point no. 2 shall be applied.

[2] Any change in exam center other than the above window will be charged Rs.500/ only. This shall be applied to back examinee too.

28. Improvement Examination: Pass students (UG&PG) can opt for improvement examination, in the immediate next term exam (within six month). The applicant can apply for Improvement Exam as per guide lines set by UOU. Only those students who have been declared pass in all papers including pass with grace (PWG) in annual/ semester examination of the same session are eligible forImprovement Examination. Candidates those have passed exam with back paper are not eligible for Improvement Examination. The Improvement Examination will be conducted in theory papers only. The candidate will have to appear in Improvement Examination conducted immediately (within six month) after annual/ semester exams.

[1] The candidate can apply for Improvement Examination as stated below.

[2] Under graduate: Any two papers

[3] Post Graduate: Any one paper

[4] Certificate/ Diploma/ PG Diploma: Any one paper

NOTE: If the marks obtained in improvement exam are less than the previous attempt, best of the two (attempts) will be considered as final result.

29. Back Paper: If a learner fails in a programme of study selected by him / her, he/she may take the examination again by paying fee of back paper. A learner may avail this facility in all those subjects/ papers in which s/he has not been able to clear the exam.

This facility is available only up to the maximum time duration earmarked for the programme. The back paper and improvement examination will be conducted along with the main examination.

30. Scrutiny: Scrutiny implies to the addition of the left out marks in the answer script or evaluation of any question which is left unchecked. Learners may apply for scrutiny by paying Rs.100 per paper. An examinee can get a maximum of two papers scrutinized. If after scrutiny, the score of the candidate increases by 10%, the same will be reflected in the improvement mark-sheet. However, if marks are reduced then the previous marks will be retained. Students willing to opt for scrutiny can apply for scrutiny of the answer book within 1 month after the declaration of final result in any 2 papers by depositing the required amount of fee.

31. Photocopy of Answer-sheets: If a learner wishes to get a photocopy of the answer sheet related to him/her, s/he may get it by paying a fee. The photocopy of the answer sheet will be given within the period of six months of the declaration of result.

32. Division: The examination result is categorized in three divisions for passing in term-end examination, viz., First Division (60% or more), Second Division (Less than 60% and up to 45%) and Third Division (Less than 45% and up to 35%) for Graduate level programmes and First Division (60% or more), Second Division (Less than 60% and up to 48%) and Third Division (Less than 48% and up to 35%) for post-Graduate level programmes.

DIGITIZATION OF EXAMINATION

ABSTRACT

Education has always been the building block of a society and a nation, so is the effective evaluation of formal learning. Due to an increase in access to education and higher enrollment, timely evaluation and declaration of results is continuously affecting the governance of examination process and procedures of Uttarakhand Open University (UOU). Therefore, digitization, at various levels in the examination process, has been initiated as an appropriate solution for timely preparation and declaration of examination results of UOU. Digitization has been initiated right from enrolling a fresh or existing learner in an academic session, continuously monitoring and modifying the process, whenever required, till the declaration of result. This process is not a step-by-step process; rather it is a continuous process having various stages entwined with each other. This process has helped in reducing the time involved in examination process and declaration of results, which begins with preparation of date-sheet of examination in a precise & concise manner, and even converging three shifts of examinations to two shifts (i.e., noon and evening only). Digitization has helped in reducing the number of days of examination to 25 working days (44 shifts of exams for more than 1000 papers) and preparation and declaration of all the results within 45 days from the last day of examination. It has further implications in reducing the expenditure in conducting exams via reducing an entire shift for a period of 22 days.

INTRODUCTION

For any formal process of learning, evaluation is an important phase for measuring the effectiveness of learning amongst the learners. Therefore, Examination Section plays an important role in any educational institution. Similarly, in Uttarakhand Open University (UOU), since its inception, the examination section is continuously discharging its role, duties and responsibilities for the betterment of learners and the society. However, changing expectations of the stakeholders have also got reshaped over the period of time. Considering these new expectations and underlying changes, UOU has identified the need for upgrading the examination processes and digitize it to ensure speed, efficiency, accuracy, transparency, ease of record keeping, and quick retrieval of information and documents.

ABBREVIATIONS:

- UOU:Uttarakhand Open University
- SIS:Student Information System
- OMR:Optical Mark Recognition
- NAD:National Academic Depository
- ODL:Open and Distance Learning
- PWG:Pass with Grace
- OTP:One Time Password
- QR-Code:Quick Response Code

DESCRIPTION OF EXAMINATION AUTOMATION SYSTEM

The process of examination has been digitized right from enrolling a learner in a programme of study to award of degree and transcript, and even extending to verification of their documents later for any other purpose. After preparation of degree, the same is uploaded on the portal of National Academic Depository (NAD)/DIGI Locker. Following is the step-wise detail of the digitization of examination process at UOU:

1. Filling about examination form by the examinee: Every learner has to fill exam form online/ off line at the time of his/ her admission along with mentioning exam city of his/ her choice from given list. The learner is allowed to change exam city through online mode only one month before beginning of exam.

2. Identification of Examination Cities: Before starting a session and enrollment of learners, the examination section of UOU identifies Examination Cities, considering the previous admission and examination pattern, such as Haldwani, Dehradun, Haridwar, etc. Currently 57 cities are identified for UOU exam. At this stage only Examination Cities (not the exam centers) are identified and indicated in the SIS & Admission form.

3. Establishing Contact with the Learners: A continuous contact is established with the learners to make them aware at every stage about their examinations, particularly before online download of their hall tickets. The contact is established via UOU web-portal, e-mail and SMS facility.

4. Enrollment of Learners and Filling-up of Examination Form: Every learner fills examination form along with the admission form however, the learners of back paper and improvement will have to fill the separate exam form month before term exam.

5. The process of enrollment in UOU is online (using UOU website). In distance education system students are connected to the University via different modes of

correspondence which they have. Therefore, the learner's have to compulsorily mention their choice of the particular city for examination (mentioned as Exam City in the form) while filling-in the Admission form (either online). This also includes submitting required examination fees of the learners for the courses offered in that particular programme of learning. However, considering that, this is the Open and Distance Learning (ODL) system and the learners must have the liberty to opt when they want to appear for their examinations, they are provided with an additional facility through which, due to their inability to appear for the examination in that particular session, they may appear in the immediate next upcoming examinations (e.g., if they have filled their exam form for June 2021 exams then they may opt to appear in December 2021 exams instead of June 2021 exams).

6. Filling-up of Back and Improvement Examination Form: Conducting examination includes three sub-stages, viz., learners appearing in main paper, back paper, and improvement paper examination. The exams are, further, classified into Assignments, Theory Papers, Practical, Project- Work, Field-Work and Viva-Voce. Learners, depending upon their requirements, they fill-in their examination forms. All the learners appearing afresh have to fill-in their choice of Examination City, as mentioned above in step II. However, the learners who require to improve their performance in a theory subject only have a window of six months (upto the immediate next examination term, say if, a learner has qualified the June 2017 examination and wishes to appear for Improvement Exams, he/she can only appear in December 2017 exams) to apply by filling-in the examination form for Improvement Examination. Only such learners are allowed to appear for Improvement Examination who has qualified in all the papers of that particular term and it includes the learners who have Passed with Grace (PWG).The next category of the learners who could not clear previous exam, want to appear for back paper examination are provided a window of 15 days to one month to fill-in their back-paper exam forms and select the exam city of their choice to appear in the exam.

7. Exam Fee: Each learner, appearing in main paper, back paper, and improvement paper examinations has to submit a exam fee as mentioned below- (a) Undergraduate level, including Certificate and Diploma-: Rs. 200 per paper; (b) Post-graduate level, including PG Diploma: 250 each paper.

8. Preparation of Date-Sheet: After completion of filling-in of all the examination forms (main, back and improvement) and obtaining information from SIS about all the Courses the question papers required are ascertained and, the process of preparation of date-sheet is initiated. Digitization helps in identifying all the combinations of papers that are offered in a particular session (which varies in each session) and thus the date-sheet is prepared. Date-sheet so prepared is put on the website to allow

various stakeholders to communicate their suggestions, if any. After getting all the suggestions, the required changes are introduced and the final scheme of examinations is published. The date-sheet is drafted in such a manner that the learners do not have any clashes of dates during their main papers. Utmost care is taken, so that, they do not have any clashes in their main, paper examination, or two back paper exams. However, if any of such cases (less than 01%) appear than the learner is permitted to appear in any one the papers and the fees for the clashing paper is adjusted in their next immediate examination, so that, with the same examination fees of clashed paper they may appear in that particular paper too. The successfully drafted date-sheet is able to conduct more than 1000 theory papers within 25 working days and two shifts in a day (total 44 shifts).

9. Withdrawal of Fees and Exam City Change: This is the spirit of Examination process of UOU, because all the learners (for main, back and improvement papers) are given an opportunity tosubmit their request for examination city change. They are provided with a time-frame of 15 to 30 days, in which they are permitted to change their Examination City (if required) in online mode only permitted via an OTP. The examinees are also permitted to shift their fees from that particular examination to the immediate next examinations before release of admit cards. This is the opportunity to the new learners who have filled in the choice of exam city at the time of enrollment or to the learners, who are having any other problems regarding their main and back paper examinations.

10. Uploading Marks of Assignments: While the learners are preparing for their examinations, the Learners Support Centers (LSCs) of the University are allowed to get the assignments evaluated (as prescribed by UOU) and upload their marks in the SIS. This process is continuously monitored by the Examination Section of UOU and a follow-up is always ensured to motivate the learners to submit their assignments for evaluation so that the marks could be uploaded within time frame work. Apart from this, if the Examination Section observes any malpractice or improper evaluation of assignments, the University takes corrective measures suo-moto to rectify the issue.

11. Uploading of the marks of Practical, Projects/Dissertation, Field-Work and Viva-Voce: Along with the conduct of theory papers, the other important sub- categories of a result are uploaded to facilitate the preparation of results. Therefore, it is essential that all the sub categories are completed simultaneously along with the theory marks for completion of a result. Later, various Exam Centres are identified and the learners are allotted to their closest exam-center to appear in practical, projects/ dissertation, and field-work or viva- voce. A blank OMR based award list is generated for the learners appearing in Main or Back paper examination, and the same are sent to the concerned Internal Examiner for conducting the examination. After successful

completion of practical exams, they fill-in the award sheets duly signed by the external and internal examiners and submit it for being uploaded on SIS. These award sheets are Optical Mark Recognition (OMR) based and, therefore, the process of scanning of OMR is initiated. Upon successful completion of scanning, the values are uploaded in SIS for preparation of result.

12. Maximum Marks for all the Question Papers are the same: At various stages and based upon the nature of programme, variation in the maximum marks of External Exam and Assignments (say, Theory: 100:00, 80:20, 40:10 35:15, and Grading system as well) does exist which sometimes creates difficulty for the learners. Therefore, for the ease of understanding and in order to bring unanimity, it was decided that all the question papers will be prepared as Maximum Marks 80 (for Full Unit papers) and Maximum Marks 40 (for Half Unit Papers). After compilation of marks out of a Maximum of 80/40 Marks, the obtained marks are converted proportionately to the maximum marks which actually exist for a particular paper.

13. Allotment of Exam Center and Hall-Ticket Generation: After filling-in of the exam form, exam city change (if required), transfer of fees (if required), and the allotment of exam centre takes place based on number of examinees in a particular city. All the examinees are allotted a particular exam centre in an exam city, they opted previously and the Hall-Tickets are generated for all the examinees. These hall-tickets are available online on UOU web-portal and the learners download these whenever and wherever required. These hall-tickets include all the details about the examination of a particular examinees, say the papers he/she has opted to appear in and the date & exam-shift applicable.

14. Preparation of OMR based Award Sheet: While the examination is taking place at various exam centers, the Examination Section of UOU starts preparing OMR based Award Sheets for recording marks and uploading these in the SIS. These OMR award-sheets are printed with all the details related to a particular exam and all the examinees of an examination centre.

15. Evaluation of Answer Sheets: The OMR award-sheets are sent to the evaluators along with the answer-sheets. Evaluators have to darken the ovals pertaining to the fields of marks obtained by the examinees.

16. Remuneration to the Evaluators: Method for the payment of remuneration to the Evaluators (for answer-sheets, project, viva-voce, field-work and practical) is also completely digitized. The evaluators have to fill-in the Online Remuneration Form provided by the Exam Section, indicating the main fields required for processing of payment. The sheets so generated are verified by the Controller of Examinations (COE) and forwarded to Accounts Section for further process and online payment.

17. Scanning of OMR Award-Sheets: The completely filled-in OMR Award- sheets are collected from the evaluators along with the checked answer- sheets. A primary checking is done on OMR Awards by verifying that all the required entries are filled-in by the evaluator. Beyond this stage, the entire process of preparation of result is digitized and there is no human intervention in-between. These filled-in OMR awards are forwarded for scanning using OMR Scanner and the process continuous which is a in-house facility at UOU.

18. Uploading Data in SIS: After scanning these filled-in OMR awards, the scanned values are uploaded in SIS of all the examinees with the help of customized programming on the computer-systems via examination section.

19. Proportionate Conversion of Marks: At this juncture, the conversion of marks also takes place for the various papers in which MM is other than 80/40. This conversion process is also digitized and conversion of marks is done by the SIS itself. These proportionately converted marks reflect in the results as Marks Obtained.

20. Declaration of Results: Once all the entries are done, a Tabulation Report (TR) is generated to have a final check on the results so prepared. Thereafter, on the recommendation of the tabulation committee and after approval of the competent authority, the result is declared on the website of UOU.

21. Online Availability of Mark-sheets: Once the result is declared on the website, all the examinees are permitted to download their marks-sheets online. The mark-sheets of all the learners of UOU are available online so that they can download their marks-sheets whenever and wherever required. This marks-sheet (a color print-out) of the first year/ previous year is pre- verified and authenticated and it has the same validity as for a mark-sheet issued by the University. These marks-sheets can be verified online from the website of UOU. However, marks-sheets of only the first year and the previous years can be downloaded online. The consolidated final year/semester Marks-sheet and Transcript is issued by the University and that it is also available online.

22. Resolving the Queries: After declaration of results, if any deficiency is reported either by the learner or it is noticed by the University, such deficiencies are converted into queries and assigned a unique ticket for their rectification. These tickets are forwarded to the concerned section and rectified within a period of one week.

23. Award of Transcripts: After declaration of result, a Transcript/Detailed Marks-sheet (for final year/semester qualified learners only) is generated for all the examinees and the same are forwarded to their LSCs for distribution to concerned learner only.

24. Award of Degrees: With the announcement of Convocation, the process of preparation of degrees is initiated. At the time of admission, the learners are motivated to submit their degree-fees, so that, as soon as the Convocation is held for the particular session, the University is able to send the degrees of all the examinees to their given address by a registered post. The examinees are allowed to change (only once) the address for receiving their degrees. In such case, they have to visit Apply for Degree link on UOU web-portal, and they are asked to proceed further only after verification of their record of using One Time Password (OTP) received on their registered e-mail i.d. with UOU. Upon verification, the system indicates whether degree fee has been paid or not, and if the degree fee is paid, the learner may proceed to apply for degree and update their address for correspondence. He/she can, further, check the entries to be printed on the degree, and if the fee is not paid then they are guided to payment gateway for online payment of degree fee and thereafter they may proceed with the sameprocess as enumerated earlier. After, receiving the entries (online and offline), the degree section of the Examination department initiates the process of preparation of degrees and its dispatch to the learners. All the degrees are generated using SIS and then printed in-house as according to the requirements, standard pattern and with inbuilt security features.

25. Online Verification of Transcripts and Degrees: Our relationship with the learner does not conclude with the dispatch of degrees, since most of the time many of these degrees are sent to the University for verification for different Job requirements. Therefore, UOU has started uploading the Degrees of the learners on the NAD Portal. Along with this, the Transcripts and Degrees of UOU have Bar-Code/ Quick Response Code (QR-Code) imbibed in these for immediate verification of their documents.

STANDARD OPERATING PROCEDURE (SOP) REGARDING GRIEVANCES AND TERM-END EXAMINATION

Grievances related to term-end examinations relate to various stages and there exists a standard operating procedure to deal with the same. A brief detail of these grievances and the SOP related thereto is as follows:

1. Before finalising the schedule of term-end examinations, a tentative scheme of different papers is displayed on the website of the University and suggestions as well as objections are invited from different stakeholders including the learners. Based upon these suggestion/objections, the final scheme of examination is implemented.

2. Some learners, on account of their own specific problems, need to change their examinations centres and such examinees are allowed to submit their applications for change of examination centre and if found logical their examination centres are changed as per their requests.

3. The admit cards of the learners are made in such a way that the scheme of their relevant papers is printed on the back of the admit cards to keep them reminded about the datesand sessions of their respective examinations.

4. Once the examination is over, the examinees raise various grievances and these are settled as follows:

    [A] the learners may submit their grievances online or offline within the period of one month form the date of declaration of the last result;

    [B] they may request to obtain a copy of their answer sheets, in case they have any doubts about the evaluation. If the learners submit any grievance related to evaluation, it is sent to the Grievance Committee, constituted for the purpose and a satisfactory resolution is arrived at;

    [C] the learners may apply for a scrutiny of their answer sheet in case they feel that some parts of their answers are not evaluated or left out;

[D] the learners may challenge the evaluation process/standard and in such a case the matter is referred to Grievance Committee for arriving at a suitable resolution thereof;

[E] if the Grievance Committee is satisfied that the evaluation has not been proper, the answer book is sent for review to another subject expert for expert opinion and if required it is re-evaluated and the grievance is settled;

[F] Learners may apply for scrutiny or for obtaining the copy of their answer sheet by paying the requisite fee for the purpose. These days Rs. 200/- per paper for scrutiny or photocopy is charged;

[G] The standard operating procedure for scrutiny is as follows: (a) at bachelor's level application for scrutiny/photocopy can be submitted for a maximum of 2 papers, (b) at post-graduate level and in PGDCA application for scrutiny/photocopy can be submitted for a maximum of 1 paper only, (c) at diploma or certificate level application for scrutiny/photocopy can be submitted for a maximum of 2 papers

[H] if after the scrutiny, the marks of the examinee increase by 10 percent, the same will be reflected in the revised marks sheet and if the marks are reduced, the original marks obtained by the examinees are retained and their marks are not reduced;

[I] learners willing to apply for grievances may submit their grievances within 6 months from the date of declaration of the last result, whereas application for scrutiny and for obtaining the photocopy of their answer sheets can be submitted within the period of 1 month from the date declaration of the last result.

[J]Grievance Committee is a committee comprising of 4 to 5 persons appointed by the Hon'ble Vice Chancellor to take care of grievances of the learners.

Note- The standard operating procedure to deal with the other matters related to term-end examinations as below-

USE OF UNFAIR MEANS

Sometimes reports of the use of unfair means are received from various examination centres. If an examinee has been found using unfair means during the examination, appropriate action is taken and the extent of punishment is properly defined in the rules of the University. Use of the following is considered as unfair:

- Any paper, printed book, handwritten notes or any other unauthorized material related to the examination found with the examinee during the continuation of the examination at the examination centre.

- Copying with the help of mobile phones, other electronic devices like the smart watches, etc., even if found in switched-off mode (only the simple, i.e., non-scientific calculators are allowed).

- Anything related to examination found written on the desk or chair or scale or anything else amounting to the wrong intent of the examinee for copying during the examinations shall be counted as unfair means.

- Anything written or diagrams made or tables etc. related to examinations on the clothes or handkerchief, etc.

- Anything related to examination written on the question paper or the admit card.

- Attempt to receive help from the other examinees or any attempt to assist the other examinees in solving the question paper or obtaining help from outside sources during the continuation of the examination.

- Talking to other examinees or arguing with the room invigilator or with the examination team.

- Swallowing or attempt to swallow or to destroy the copying material.

- Impersonating any candidate or getting impersonated by any other person for taking examination.

- Trying to read the relevant notes or material in the toilets or in any other place during examination.

PUNISHMENT FOR USING UNFAIR MEANS

The cases related to use of unfair means are reported by the Centre Superintendent of the Examination Centre to the Controller of Examinations and all these reports are compiled during the continuance of the examination. After the examinations are over, a UFM Committee is constituted by the Hon'ble Vice Chancellor and these cases are placed before the UFM Committee for its consideration. The standard punishment to be given to the examinees using unfair means is as follows:

1. Cancellation of the examination of the particular course (Paper) in respect of which he/she is found guilty.
2. Cancellation of the entire examination of the particular semester for which the candidate was found guilty.
3. Any other punishment deemed suitable by the UFM Committee
4. Norms of Punishment:

a. if the behaviour of the examinee after being caught using UFM is unsatisfactory or if the candidate uses resistance/violence against the invigilator or any other person on duty and the said examinee continuously refuses to obey the instructions, such an examinee may be debarred from re-appearing at the examination for next 3 examinations.

b. if the examinee is found guilty of lesser offence, his/her particular examination will be cancelled but he/she shall be allowed to re-appear in the next term-end examinations.

c. if the copying material found with the examinee is of insignificant nature, he/she will be given a chance to re-appear in the next term-end examination.

d. if the examinee is proved to have copied from the copying material, the examination in the concerned paper shall be cancelled and he/she can re-appear in that particular paper during the next cycle of term-end examinations.

e. if the examinee is found talking in the examination room or outside the examination room and does not listen to the invigilator, his/her examination of that particular paper will be cancelled and he/she will be allowed to re-appear in the next term-end examination.

f. if the examinee is found reading the copying material in the toilets or in the other parts of the building or in the examination room, his/her examination of a particular paper or the whole examination may be cancelled depending upon the gravity of the situation.

g. if the examinee is found giving or receiving assistance to/from others in the examination room or outside, his/her examination of the particular paper or his/her entire examination may be cancelled.

h. if the examinee was found to possess the copying material relevant to the question paper but he/she has not copied from it, he/she may be given a warning and the case may be disposed-off, but it will depend on the circumstances of the particular case.

All these decisions of the UFM Committee are reported *post facti*on the meeting of the Examination Committee.

In case there is any change in the rules regarding standard operating procedure related to term-end examinations, it is placed in the meeting of the Examination Committee and later after its approval by the other Statutory Bodies of the University, it is published in the prospectus of the University and it is uploaded on the website of the University. After its wide circulation amongst the learners, it is made applicable from a certain future examination.