APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

EXAMINATION MANUAL-2022

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

THIRUVANANTHAPURAM

KERALA, INDIA-695016

Phone +91 471 2598122

Web: ktu.edu.in

Email: *university@ktu.edu.i*

TABLE OF CONTENTS

SECTION III– POST EXAMINATION PHASE

Annexure Forms:

EXAMINATION MANUAL

1.0 INTRODUCTION

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY (APJKTU) is empowered with conduct of Examination, valuation of answer scripts and publication of results of all programmes offered under the colleges/institutions affiliated to it. It is essential that the Examinations are to be conducted with utmost precision, fairness and objectivity to gain public credibility and esteem. In order to achieve this, all rules and procedures relating to the Examinations should be so well delineated as to leave nothing to chance and assumption. This Examination Manual is an effort in that direction. It defines the roles, responsibilities of the people involved, protocols, procedures to be followed and various steps that have to be taken at all the levels associated with the conduct of the Examinations. The University has an Examination Management System (EMS) headed by the Controller of Examinations (CoE).

1.1 OBJECTIVES

The objectives of the Examination Management System are:
- To conduct examinations as per the Examination Calendar of the University.
- To ensure systematic, precise and uniform procedure in conducting the examinations.
- To ensure prompt, smooth and hassle-free conduct of examinations and valuations.
- To complete the valuation process and publish the results as per the academic calendar.
- To ensure confidentiality, transparency and accountability in the conduct of examinations and valuations.

1.2 EXAMINATION PROCEDURE

The procedure for examination can be divided into three sections for its smooth and efficient conduct.

1.2.1 SECTION-I: PRE-EXAMINATION PHASE

This phase includes the activities starting from scheduling and publishing of examination calendar to the finalization of question papers, schemes and answer keys, preparation of eligibility list of candidates, planning of movement of answer scripts from colleges to valuation camps and uploading the required data for the same in the University portal.

1.2.2 SECTION-II: EXAMINATION PHASE

In this phase, the major focus is on the actual conduct of examination and related activities viz. preparation of materials required for the examination, arrangements for surveillance, hall/seating arrangements and posting of invigilators and observers. Activities of this examination phase include

collection, sorting, packing and dispatching of answer scripts. All the activities in this phase will be under the direct control of chief superintendent and deputy chief Superintendent of respective colleges.

1.2.3 SECTION-III: POST EXAMINATION PHASE

The activities of this phase include conduct of valuation camps, valuation of answer scripts, tabulation of marks, conduct of pass board meetings, publication of results,conduct of revaluation,publication of revaluation results, conduct of 'review' of answer scripts and publication of 'review' results.

The verification and scrutiny of bundles of answer scripts, posting of examiners, valuation of answer scripts and uploading of marks in the University portal are coordinated by the camp officers of the respective valuation centers, who are the authorized custodian of the answer scripts. The camp officer will be the officer in charge of all activities of this phase and will be reporting to theCoE,who in turn will hold the pass board meetings and declare the results. However, for programmes under the clusters (such as M.Tech.), the conduct of Pass board meetings rests with the Chairperson of respective clusters.

2.SECTION –I PRE-EXAMINATION PHASE

2.1 SCHEDULING OF EXAMINATIONS

All examinations will be scheduled as per the examination Calendar. However, under exceptional circumstances, the CoE may modify the examination calendar.

2.2 SETTING OF QUESTION PAPERS

The Academic section shall provide the list of all mapped faculty of each course to the CoE within one week of commencement of regular classes. The CoE shall tabulate it in the format of Table 1 and mail the list of mapped faculty members to the Chairperson of the respective Board of Studies (BoS). Faculty members selected as Question paper setters/scrutiny members shall be regular faculty with a minimum of three years' experience and a doctoral degree, or with 5 years' experience. However, for programmes offered in less than five colleges, the CoE shall mail the list of mapped faculty members having minimum three years' experience to the Chairperson,BoS. This communication shall take place within 2 weeks of commencement of regular classes.

On receiving the list from the CoE, the Chairperson, BoS in discussion with board members shall prepare a separate list of faculty members for question paper setting and question paper scrutiny. For question paper setting, the faculty members shall have a minimum 3 years of teaching experience [UG/ PG level in engineering] and the list shall contain 70% faculties from APJAKTU affiliated colleges and remaining 30% from other reputed educational institutions For example, from a list of10 faculty members of which 7 faculty members shall be from APJAKTU affiliated colleges (preferably three of which from Govt. Colleges, two from Govt. aided, one from Govt. Controlled Self

Financing and one from Private Self Financing Engineering Colleges) and the remaining 3 from other reputed educational institutions.

Table 1: LIST OF FACULTY MEMBERS AS QUESTION PAPER SETTERS/SCRUTINY MEMBERS

Programme   :
Course   :

Semester   :
Branch   :

Sl. No.	Name, Designation and highest qualification	Parent Institute of the Faculty	Type of the Institution (Govt./Aided, Govt. Controlled/Self-financing/Autonomous)	Experience (Teaching/Research/Industry/Professional)	Mobile number	Mail ID	Remarks

For programmes offered in less than 5 colleges, the list shall contain40% faculties from APJKTU affiliated colleges and remaining 60% from other reputed educational institutions. For example, from a list of 5 members of which 2 faculty members shall be from APJKTU affiliated colleges (preferably one from Govt. Colleges/Govt. aided, one from Govt. Controlled Self Financing/Private Self-Financing Engineering Colleges) and the remaining 3 from other educational Institutions. The format is given in Table 2. The scrutiny panel should contain a minimum of three experienced faculty members having a minimum of 5 years teaching/industry experience and be given in the format as in Table 3. The scrutiny panel shall contain preferably one expert from other reputed educational Institutions.

Table 2: LIST OF FACULTY MEMBERS AS QUESTION PAPER SETTERS

Programme   :
Course   :

Semester   :
Branch   :

Sl. No.	Name, Designation and highest qualification	Parent Institute of the Faculty	Type of the Institution (Govt./Aided, Govt. Controlled/Self-financing/Autonomous)	Experience (Teaching/Research/Industry/Professional)	Mobile number	Mail ID	Remarks

Table 3: LIST OF FACULTY MEMBERS AS SCRUTINY MEMBERS

Programme :   Semester :
Course :   Branch :

Sl. No.	Name, Designation and highest qualification	Parent Institute of the Faculty	Type of the Institution (Govt./Aided, Govt. Controlled/Self-financing/Autonomous)	Experience (Teaching/Research/Industry/Professional)	Mobile number	Mail ID	Remarks

The chairperson, BoS should mail the above lists to the CoE within 10 days of receipt of details from the CoE. However, it is not mandatory that the question paper setters and the board of scrutiny shall be appointed every year, if sufficient number of scrutinized and unused question paper sets (from previous years) for the same examination is available with the University.

The CoE will appoint a chairperson, (for a period of one year) having ten plus years of teaching experience, for each programme and year of study from the list of faculty members recommended by the BoS. No faculty members shall act as chairperson, question paper setter or member of board of scrutiny if his/her near relative (as defined by the University) is appearing in the corresponding examination. (A self-declaration form [**ANNEXURE-1**] in this regard shall be furnished from all faculties who handle question paper related works).

The chairperson will choose a list of 3 to 5 question paper setters including external experts from the list provided by the BoS and the question paper setters are appointed by the CoE. The question paper setters are faculty members who would be entrusted with setting of question papers and answer keys for the courses offered by the University for various programmes. However, the chairperson reserves the right to approve appointments as question paper setters waiving the above requirements in exceptional cases by the approval ofCoE. The University will forward the guidelines, format of question paper/scheme, syllabus and previous year question papers to the setters. Each setter shall prepare a minimum two sets of question papers along with the scheme of valuation and answer key. The question papers, scheme of valuations and the answer keys shall be submitted to the chairperson by the question paper setters.

The chairperson shall choose the scrutiny panel from the list provided by the BoS and the CoE will issue appointment orders to them for the scrutiny of the question papers and answer keys. The scrutiny meeting shall be scheduled by the University and will be conducted usually at the confidential section unless otherwise decided. The chairperson shall provide question papers, scheme of valuation and answer key to the members of the board of scrutiny. The board shall ascertain that the required standards have been maintained and whether the question papers are in conformity with the prescribed syllabus, scheme and pattern. All the question papers received from the question paper setters are subjected to scrutiny in order to validate its conformity with the prescribed syllabus, scheme and pattern. No question paper will be accepted without the scheme of valuation with detailed answer keys. The Question paper setter is eligible for remuneration, if the question paper together with the scheme of valuation/answer key has been accepted by the scrutiny board. The scrutiny board deserves the right to reject any question paper which is not in conformity with the stipulated guidelines. The board should also make sure that the scheme of valuation and answer key provided along with the question paper are adequate by all means and should be in conformity with the stipulated guidelines. The minutes of the meeting of the board shall be recorded by the chairperson and submitted to the CoE.

The CoE may cancel the appointment offered to any person as chairperson/question paper setter/ scrutiny board member in case the person is found to be inefficient or indulging in misconduct, malpractice, negligence, disobedience, production of incorrect undertaking regarding examiner ship. The CoE will report the names of such persons to the Vice Chancellor who may disqualify such persons.

The period of appointment of all question paper setters/scrutiny board members shall be limited to the date of publication of results of the examination for which he/she is appointed. However, they are eligible for reappointment in subsequent examinations.The convener, Cluster Level Graduate Program Committee (CGPC) shall be responsible for setting of question papers of M.Tech degree courses which come under the purview of CGPC and transferring them to the CoE as per the norms approved by the University.

2.2.1 Duties and Responsibilities of Chairperson [QUESTION PAPERSetting]

The duties and responsibilities of Chairperson are listed below:

2.2.1.a   To collect minimum 3 sets of question papers for each course sufficiently in advance to the commencement of the examination period.

2.2.1.b   To Coordinate the scrutiny of the question papers and its scheme for valuation/ answer keys, finalization of the scheme for valuation and to conduct pass board

2.2.2 Instructions to Question Paper Setters

Instructions to question paper setters while preparing the question paper are listed below:

2.2.2.a   The question paper setter shall take all the necessary precautions for the maintenance of confidentiality of his/ her appointment and the question paper(s) submitted by him/ her.

2.2.2.b   The question paper setter shall not delegate the task of setting the question paper partially or entirely to anyone else.

2.2.2.c   None of his/her relatives are appearing in the examination concerned.

2.2.2.d.   Each question paper must contain the name of the examination,branch, course title and code, duration, the maximum marks allotted to each question, choices, and maximum marks of the question paper.

2.2.2.e   The question paper setter shall ensure that the instructions for the use of mathematical and physical tables, IS Codes, charts, data or hand books etc. which are permitted to be used by the candidate are given in the question papers.

2.2.2.f   The question paper setter should prepare the question paper(s) following Bloom's Taxonomy.

2.2.2.g   The question paper setter should indicate the level and course outcomes mapped for each question in the question paper, in the checklist provided

2.2.2.h   The questions shall be distributed as per the syllabus and course plan, covering all course outcomes and not concentrated on any one or a few units/ portions only. No question or part thereof shall be out of the prescribed syllabus. Repetition of questions with the previous year question papers must be avoided.

2.2.2.i   All question papers & scheme of valuation/answer key shall be prepared in doc/docx. format. Question papers shall be typed in the format as: - Paper Size: A4; Font Style: Times New Roman; Font Size: 12; Line Spacing: 1.5. Header portion shall be in font size 14 with bold and capital letters.

2.2.2.j   The marks assigned to each question/sub-divisions of questions shall be noted to its right-hand side. Serial number of questions shall be given on the left-hand margin. When a question is divided into parts, the marks assigned to each part, shall be indicated on its right side.

2.2.2.k   The number of questions to be answered or the choice amongst them shall be specific, precise and free from ambiguity.

2.2.2.l   Every question shall be clear and definite in language as also in regard to the form and nature of the answer expected. The question shall not be vague, or far-fetched, or beyond the required standard. "Equation Editor" shall be used for typing equations in question paper.

2.2.2.m   The question paper shall be such that a student who is well prepared in the course, can reasonably complete it within the allotted time.

2.2.2.n   Abbreviations other than that usually given in the textbooks should not be used. Acronyms shall be expanded and special care should be taken in the delineation of mathematical signs of index figures.

2.2.2.o   Questions shall not be a mere reproduction from text books or other question papers and question paper once used/submitted earlier should not be resubmitted.

2.2.2.p   Question paper setters shall preserve the strictest secrecy with regard to copies of textbooks or notes or extracts used in setting question papers, and drafts of copies of question papers shall be kept with the same care and secrecy as question papers themselves. These papers shall be destroyed as soon as the final question papers prepared are sent to the chairperson.

2.2.2.q.   Detailed answer key with scheme for evaluation is mandatory for each question.

2.2.2.r.   The question paper setters should submit the scheme of valuation and answer key along with the question papers and the duly filled proforma to the chairperson

1.2.2.a.   No question paper setter shall undertake or shall have undertaken private tuition in the course for any candidate who appears for the examination in the course concerned during the academic year immediately preceding the examination for which he/she accepts the appointment.

2.3. QUESTION PAPER SCRUTINIZERS

The question paper scrutinizers, who are faculty members preferably with minimum five years of experience, are appointed from the board constituted by the CoE based on the recommendations of the chairperson. Question paper scrutinizers are appointed for the purpose of carefully examining the question papers for any errors, spelling mistakes, aberrations in pattern and syllabus, distribution of marks etc. or any other lapse and providing necessary corrections. Under no circumstances, the scrutiny board members shall accept their appointment if any of their near relatives is a student for that programme/course. The question paper scrutinizer shall be present at the scrutiny board room at the office of the CoE of the University on the assigned date and time to fulfill the given responsibility. He/ she shall express his/ her consent or otherwise to the CoE as soon as such an appointment of duty is received as suggested in the communication.

2.3.1. Duties and Responsibilities of Question Paper Scrutinizer

The duties and responsibilities of question paper scrutinizers are as follows:

2.3.1.a   Ensure that the question papers have been set strictly in accordance with the prescribed syllabi, scheme, pattern and the instructions of the University.

2.3.1.b   Ensure that the course outcomes and levels of Bloom's taxonomy are adequately addressed.

2.3.1.c Ensure that the questions cover the broad areas of the entire syllabus maintaining the prescribed standards and the course outcomes.

2.3.1.d Ensure that all the questions are from within the prescribed syllabus and are not getting repeated.

2.3.1.e Check and make sure that the name of the examination, course title and code, duration, the maximum marks allotted to each question, choices, and maximum marks of the question paper are as per the curriculum.

2.3.1.e. Scrutiny board members may modify the questions in conformity with the pattern prescribed in the syllabus. The answer key and the scheme of valuation also shall be modified accordingly.

2.3.1.f. Ensure that the questions are serially numbered.

2.3.1.e. Check and ensure that the abbreviations other than that usually given in the textbooks are not used and the acronyms are expanded. Errors in punctuation, grammar and spelling should also be corrected.

2.3.1.f The question paper shall not leave any ambiguity/confusion.

2.3.1.g Ensure that all questions can be answered within the prescribed time duration.

2.3.1.h Scrutiny board members shall ensure that after the scrutiny of the question papers, draft copies of the question papers are destroyed. Printouts taken, if any, of the draft copies of the question papers, are to be destroyed once scrutiny is completed. The members shall ensure the confidentiality of the scrutiny process in its entire seriousness as per the norms.

2.3.1.i. No scrutiny board members shall undertake/shall have undertaken private tuition in the course for any candidate. Faculty entrusted with the scrutiny have to submit the prescribed undertaking once the scrutiny is completed.

2.3.2. Guidelines for Preparing/Scrutiny of Question Papers

The guidelines for preparing/scrutiny of question papers are listed below:

2.3.2.a Questions are inclusive of diverse learning levels of candidates.

2.3.2.b The setting of the questions shall be primarily oriented, enabling the student to apply, analyze, and demonstrate the application of knowledge acquired during the course.

2.3.2.c The distribution of marks shall be in proportion to the difficulty level of the question and the time required to answer.

2.3.2.d Questions should be free from any errors/ambiguity/confusion, ensuring the credibility of the questions.

2.3.2.e Choices/pattern of question paper shall be in accordance with the prescribed curriculum.

2.3.2.f The distribution of questions shall cater to the different knowledge levels of the candidates.

2.3.2.g Innovative questions, promoting inquisitiveness, shall be encouraged.

2.3.2.h The questions should be answerable within the prescribed duration by an average student and the answers should be within the number of pages of the answer-book.

2.3.2.i All the pages of the question paper shall be numbered. While numbering the pages the total number of pages shall also be indicated e.g. 1/3, 2/3, 3/3 where 1,2 etc. are the numbers of pages and 3 is the total number of pages.

2.3.2.j The question paper should not have any ambiguous figures, units or statements.

2.3.2.k All the question papers shall be complete in respect of headings and directions to candidates, if any, and shall be in the form ready for uploading.

2.3.3. Instructions to QUESTION PAPER Setters/Scrutiny Board Members While Preparing/Scrutinizing the Scheme of Valuation/Answer Key

Instructions to question paper setters/ scrutiny board members while preparing /scrutinizing the scheme of valuation/answer key are listed below:

2.3.3.a The question paper setters/scrutiny board members shall ensure that the answer key and scheme of valuation are being prepared appropriately.

2.3.3.b The total marks allotted for each question and each part of a question should be shown in the scheme and must tally with the marks shown in the question paper.

2.3.3.c All marks should be positive, and as far as possible candidates should gain credit for valid answers.

2.3.3.d Allocate marks for each question and parts of a question, with a more detailed breakdown wherever necessary, based on the quality of answering, time required to answer and the difficulty level.

2.3.3.e Alternate methods/answers, if any, to a question, shall be specified in the answer key. Provisions may be given in the answer-key to give due weightage to alternate methods which result in correct answers.

2.3.3.f. Include as much details as possible (whichever is applicable) in the scheme/answer key such as,

  i. Steps involved.
  ii. Intermediate results.
  iii. Essential formulae/equations.
  iv. Diagram, graph with appropriate labels, flowcharts.
  v. Numerical answers.
  vi. Essential information/clues/techniques/methods to be applied.
  vii. Substitution of appropriate numerical values.
  viii. Units of parameters/results.
  ix. The mark allocation thereof to each.

2.3.4. Additional Guidelines/Instructions to Chairpersons/Question Paper Setters/Scrutiny Board Members

Additional guidelines to chairpersons/question paper setter/scrutiny board members while preparing /scrutinizing the scheme of valuation/answer key are as follows:

2.3.4.a   Extreme care shall be exercised in maintaining the confidentiality and security of the question papers.

2.3.4.b   The emails shall be logged out immediately after the email transfers.

2.3.4.c   The files corresponding to question papers and schemes shall be deleted permanently after sending the final edited question papers and schemes to the University.

2.3.4.d   The question papers are to be compared with the previous ones, so as to avoid repetition of questions over the years.

2.3.4.e   Any drafts or printed matters shall be scrapped/destroyed.

2.3.4.f   Do not share the materials through any media.

2.3.4.g   Maximize the number of sets of question papers and answer keys prepared,preferably, a minimum of five sets for core subjects and three sets for elective subjects.

2.4. ASSESSMENT BASED ON OUTCOME BASED EDUCATION (OBE)

Examination /student assessments play a very important role in deciding the quality of education. In the OBE framework, the educational outcomes of a program are clearly and unambiguously specified. It determines the curriculum content and its organization, the teaching methods and strategies and the assessment process. This policy has been framed to meet the expectations of an academically challenging environment, develop problem-solving skills by students, aligning with current global standards and to enrich the students' learning to make them self-enablers and/or match job requirements on successful completion of their degree. The performance-based new-age reforms in the examination will benefit each student for preparing him/ her for success in the knowledge society. This will create proper mapping between program outcomes and assessment tools that lead to the accurate and reliable measurement of attainment of outcomes of the students.The OBE framework is to be implemented in connecting curriculum components to the program outcomes and the examination questions/assessment tools to the course outcomes of each programme.

It is important to adopt reliable assessment methods and tools to ensure the attainment of objectives and program outcomes. The simple recall of memory, though essential in any examination, won't alone be sufficient for this purpose. There shall be questions that trigger interests in blooming engineers about the design, analysis and application of what they learned in classrooms. In other words, the assessment process shall test the higher-level skills too viz. ability to apply knowledge, solve complex problems, analyze, synthesize and design. Professional communication and interpersonal skills are also important for practicing engineers and professionals

which must be assessed through apt methods. Hence, the question paper shall be a perfect blend, as far as possible, to encompass this holistic approach of assessing the composite level of knowledge and skills. The approach will be clearer from the detailed view of different levels and key words given below.

Level	Descriptor	Level of attainment	Skill Demonstrated	Question Cues/Verbs for tests
1	Remembering	Recalling from the memory of the previously learned material	Ability to recall information like facts, definitions, jargon, categories, etc.	List, define, tell, describe, recite, recall, identify, show, label, tabulate, quote, name, who, when, where
			Ability to recall procedures, principles, theories etc.	
			Knowledge of dates, events, places	
			Mastery of subject matter	

Sample Questions:
1. State Ohm's law
2. List the arithmetic operators available in C in increasing order of precedence.
3. Define the purpose of a constructor.
4. Describe the process of galvanization and tinning
5. Write truth table and symbol of AND, OR, NOT, XNOR gates
6. What are the valid places for the keyword "break" to appear?

Level	Descriptor	Level of attainment	Skill Demonstrated	Question Cues/Verbs for tests
2	Understanding	Explaining ideas or concepts	Understanding information	describe, explain, restate, associate, contrast, summarize, differentiate interpret, discuss
			Translate knowledge into new context	
			Interpret facts, compare, contrast	
			Predict consequences	

Sample Questions:

1. Explain the importance of sustainability in engineering design
2. Describe the characteristics of SCR and transistor equivalent for a SCR
3. Explain the terms: Particle, Rigid body and Deformable body giving two examples for each.
4. Discuss the effect of the Make in India initiative on the Indian manufacturing Industry.
5. Summarize the importance of ethical code of conduct for engineering professionals
6. What is the meaning of base address of the array?
10. Differentiate between entry and exit controlled loops.
11. How is an array different from a linked list?

Level	Descriptor	Level of attainment	Skill Demonstrated	Question Cues/Verbs for tests
3	Applying	Using the information in another familiar situation	Use methods, concepts, laws, theories in new situations Solve problems using required skills or knowledge Demonstrating correct usage of a method or procedure	calculate, predict, apply, solve, illustrate, demonstrate, determine, model, experiment, show, examine, modify

Sample Questions:

1. Model and realize the following behaviors using diodes with minimum number of digital inputs.

(i) Turning on a burglar alarm only during night time when the locker door is opened.

(ii) Providing access to an account if either date of birth or registered mobile number or both are correct.

(iii) Updating the parking slot empty light in the basement of a shopping mall.

2. One of the resource persons needs to address a huge crowd (nearly 400 members) in the auditorium. A system is to be designed in such a way that everybody attending the session should be able to hear properly and clearly without any disturbance. Identify the suitable circuit to boost the voice signal and explain its functionality in brief.

3. A ladder 5.0 m long rests on a horizontal ground & leans against a smooth vertical wall at an angle 200 with the vertical. The weight of the ladder is 900 N and acts at its middle. The ladder is at the point of sliding, when a man weighing 750 N stands on a rung 1.5 m from the bottom of the ladder. Calculate the coefficient of friction between the ladder & the floor.

4. A single array A[1. MAXSIZE] is used to implement two stacks. The two stacks grow from opposite ends of the array. Variables top1 and top2 (topl< top2) point to the location of the topmost element in each of the stacks. What is the condition for "stack full", if the space is to be used efficiently.

6. Consider the following table of arrival time and burst time for three processes P0, P1 and P2. Process Arrival time Burst Time

    P0   0 ms 9 ms

    P1   1 ms 4 ms

    P2   2 ms 9 ms

The preemptive shortest job first scheduling algorithm is used. Scheduling is carried out only at arrival or completion of processes. What is the average waiting time for the three processes?

7. A CPU generates 32-bit virtual addresses. The page size is 4 KB. The processor has a translation look- aside buffer (TLB) which can hold a total of 128-page table entries and is 4-way set associative. What is the minimum size of the TLB tag?

Level	Descriptor	Level of attainment	Skill Demonstrated	Question Cues/Verbs for tests
4	Analyzing	Breaking information into the part to explore understandings and relationships	break down a complex problem into parts	classify, outline, break down, categorize, analyze, diagram, illustrate, infer, select
			Identify the relationships and interaction between the different parts of a complex problem	
			identify the missing information and the contradictory information, if any	

Sample Questions:

1. A class of 10 students consists of 5 males and 5 females. We intend to train a model based on their past scores to predict the future score. The average score of females is 60 whereas that of male is 80. The Overall average theclassis70.Give two ways of predicting the score and analyze them for fitting model.

2. Suppose that we want to select between two prediction models, M1 and M2. We have performed 10rounds of 10-fold cross-validation on each model, whereas the same data partitioning in round one is used for both M1 and M2. The error rates obtained for M1 are 30.5, 32.2, 20.7, 20.6, 31.0, 41.0, 27.7,26.0, 21.5, 26.0. The error rates for M2 are 22.4, 14.5, 22.4, 19.6, 20.7, 20.4, 22.1, 19.4, 16.2, 35.0. Comment on whether one model is significantly better than the other considering a significance level of1%.

3. Return statement can only be used to return a single value. Can multiple values be returned from a function? Justify your answer.

4. Bob wrote a program using functions to find the sum of two numbers whereas Alex wrote the statements to find the sum of two numbers in the main () function only. Which of the two methods is efficient in execution and why?

5. Davies working on a Campus Management Software but is unable to identify the maximum number of students per course. He decided to implement the same using arrays but discovered that there's memory wastage due to over-provisioning. Which method of memory storage should be used by Dave and how it can be implemented using C?

6. Albert is working on a 32-bit machine whereas Julie is working on a 64-bit machine. Both wrote the same code to find factorial of a number but Albert is unable to find factorial of a number till 9 whereas Julie is able to find the factorial of higher number. Identify the possible reason why Albert is unable to find the factorial. Suggest some changes to the code so that Albert can handle bigger inputs.

7. While writing a C code, the problem faced by the programmers is to find if the parenthesis are balanced or not. Write an algorithm to check if the parenthesis in C code is balanced. Initially your code should work for balanced {and} braces.

8. Swapping of the data in a linked list can be performed by swapping the contents in the linked list. Can the contents of a linked list be swapped without actually swapping the data?

Level	Descriptor	Level of attainment	Skill Demonstrated	Question Cues/Verbs for tests
5	Evaluating	Justifying a decision or course of action	Compare and discriminate between ideas	assess, decide, grade, test, defend, recommend, convince, judge, support, conclude, argue, justify, evaluate
			Assess value of theories, presentations	
			Make choices based on reasoned argument	
			verify value of evidence	
			use of definite criteria for judgments	
6	Creating	Generating new ideas, products or new ways of viewing things	use old ideas to create new ones	design, formulate, build, invent, create, compose, generate, derive, modify, develop, integrate
			Combine parts to make (new) whole	
			generalize from given facts	
			relate knowledge from several areas	
			predict, draw conclusions	

Both higher order cognitive skills 'Evaluate' and 'Create' are difficult to assess in time-limited examinations. These need to be assessed in a variety of student works like projects, open ended problem-solving exercises etc. Typical examples of problem statements or need statements which need higher orderabilitiestosolvearegivenbelow

Sample Problem/Need Statements:

1. An electric vehicle uses LIoN batteries. The batteries have to be charged and get discharged during use. The batteries require continuous monitoring during charging and discharging so that they remain healthy and yield along life.Design a system to monitor and manage the health of batteries.

2. A Biotech industry needs automation for filling its product into 20 ltr bottles. Design a system to meter the flow into the bottles so that each bottle has 20ltrofthe liquid.There will be more than one filling station and the system has to monitor all the filling stations as well as keep count of the total production on a daily basis.

3. Microwave Doppler radar with a range of 9m is available for motion detection. Design a surround view monitoring system for a 3-wheeler to detect human obstacles while the vehicle is in motion.

4. Design a system to assist the driver by using cameras to detect lane markers and pedestrians while the vehicle is inmotion.

5. Develop a small size USB 2.0 / 3.0 CMOS camera system which can be used for industrial inspection,medical applications, microscopy, etc. The system should be able to capture the image quickly and be able to process the captured image and then store it also.

While using Bloom's taxonomy in the assessment of student learning, following points may be noted:

Normally, the first three learning levels; remembering, understanding and applying and to some extent the fourth level analyzing are assessed in the continuous internal evaluation and end semester examinations, where students are given a limited amount of time. The analysis, evaluation and creation can be assessed in extended course works or in a variety of student works like course projects, mini/major projects, internships etc.

Question paper must consist of various difficulty levels to accommodate the different capabilities of students. Bloom's taxonomy framework helps the faculty to set question papers that are well balanced, testing the different cognitive skills without a tilt towards a tough or easy paper perception. Since the nature of every course is different, the weightage for different cognitive levels in the question papers can also vary from course to course.

The **question paper for series/internal test and end semester examination** shall be prepared in the following format as per the assessment plan mentioned in the respective course syllabus:

Question No.	Question	Marks	BL	CO
1	Explain the steps involved in solving a problem using computer	6	L2	CO1
2	Write a C programme to check whether the given integer is palindrome.	10	L3	CO3
3	Derive an expression for transient current in an RL circuit with a voltage V.	8	L2	CO1

BL: Bloom's Level (1, 2, 3, 4, 5 & 6)   CO: Course Outcomes PO: Programme Outcomes

2.5. HALL TICKET

The University will normally issue hall tickets to all the eligible candidates who successfully register to the University examination. However, the issuance of a hall ticket to a candidate does not guarantee his eligibility for writing the examination. The eligibility of a candidate to appear for an examination is subjected to the verification of qualifying certificates as per norms. If any candidate is found ineligible due to valid reasons such as attendance deficiency, pending disciplinary action etc., the hall ticket will not be issued. The hall ticket will contain information regarding the name of the candidate, register number, photograph, signature of the candidate, address and contact numbers, programme of study, Name of examination, department and the course code and course name in which he/ she is registered for the current examination. The University will send (in online manner)

the Hall Tickets to the concerned colleges at least three days before the commencement of the examination and the same will be available under student login. The college office shall distribute it to the concerned candidate after due verification. If any discrepancy or error is found in the hall ticket, it should be communicated to the CoE, with a proper recommendation by the Principal/Chief Superintendent. Hall tickets will not be issued to candidates who are reported to be under suspension or under pending disciplinary actions. It is the responsibility of the Principal/Head of the Institution to communicate the disciplinary action taken against any student at the institution to the Registrar and make relevant entries in the University portal.

2.6 GENERAL INSTRUCTIONS TO THE CANDIDATES

All candidates should bring the hall ticket issued by the University and ID card issued by the college. The candidates should produce the hall ticket on demand for inspection by the chief superintendent/ deputy superintendent, observer, and member of the squad or any other officer authorized by the University. Under no circumstances, the candidates will be permitted to write an examination without a valid hall ticket issued by the University. However, the Chief/Deputy Superintendent is eligible to issue provisional admission by imposing a fine specified by the University to a candidate for an examination, provided his/her name is included in the list of registered candidates and if student appears as eligible to write the exam as per regulations. Such candidates have to submit an application for provisional admission [Format is given in **ANNEXURE-2**]. It should be noted that a provisional admission is a one-time option and the candidate will not be permitted to attend the rest of the Examination with the same provisional Hall Ticket. A register has to be kept in the examination control room to record receipts and the amount may be utilized to meet miscellaneous expenses in the examination control room.

All candidates should enter the examination hall at least ten minutes before the time prescribed for the commencement of the examination. Candidates who are undoubtedly suffering from infectious diseases of any kind will not be admitted for the examination. Candidates writing the examination will be under the disciplinary control of the Chief Superintendent and bound to obey all the instructions issued by the institution and University. Under no circumstances, additional answer scripts will be provided (unless otherwise instructed by University) and the candidates have to limit their answers within the answer scripts supplied to them by the University.

In case a candidate disobeys the instructions given by the Chief Superintendent/Deputy Superintendent or any other officials appointed by the University or behaves insolently towards the invigilator/officials of the examination control room, he/she will not be allowed to write the examination and the matter will be reported to the respective authorities. Obstruction of the smooth conduct of the examination by laying siege in front of the control room, intimidating other candidates, tampering with the records of the examination or any such activity leading to the disruption of the examination will be seriously dealt with. Principal/ Chief Superintendent has the right to take legal actions against them and the students who indulge in such activities are liable to be suspended/expelled from the institution.

The candidates are permitted to carry the following items to the Examination Hall.

   a. Hall ticket.
   b. ID card issued by the college or any other valid ID card (as stated in 1.6.1.d)
   c. Drawing equipment and accessories for writing.
   d. Non-programmable calculator, if permitted for the particular examination.
   e. Other materials like IS codes/Data books/Tables/Hand Book etc. permitted by the University from time to time.

2.6.1. Important instructions to the candidates

2.6.1.a   The candidates should occupy their allotted seats in the examination Hall at least ten minutes before the commencement of the examination.

2.6.1.b   The candidates presenting themselves more than 30 minutes after the commencement of examination will not be admitted to the examination Hall.

2.6.1.c   The candidates who are suffering from infectious diseases of any kind will not be admitted for the examination.

2.6.1.d   The candidate should bring the hall ticket to the examination Hall on each day of examination. The candidate should also invariably bring any one of the photo affixed identity cards such as a college ID card or any other valid ID card to confirm his/her identity.

2.6.1.e   The candidates should read and follow the instructions given in the hall ticket and answer book carefully.

2.6.1.f   The candidates are prohibited from writing upon their hall tickets/ question papers. They are also prohibited from revealing identity in any form in the answer scripts and appealing for favorable consideration or mercy or mention statements offering money to evaluators on any part of the answer scripts.

2.6.1.g   No electronic gadgets, including mobile phones, tablets, iPads, electronic watches, programmable calculator, headset, earphones etc. are allowed in the examination hall.

2.6.1.h   The candidate is prohibited from bringing to the examination hall, any book or portions of the book, printed or manuscript and from communicating with any other candidates or any person outside the examination hall.

2.6.1.i   The candidates should bring their own IS codes/Data Book /Tables/Hand Book permitted by University, which is necessary for any particular examination and should not have any written material or additional sheets or scribbling in them.

2.6.1.j   No candidate will be allowed to leave the examination hall within one hour of commencing the examination and no candidate(s)will be allowed to return once he/she leaves the examination hall.

2.6.1.k   The candidate should return the question paper to the invigilator if he/she leaves the hall before the last half an hour of the stipulated period of examination.

2.6.1.l   Any candidate found violating any of the rules in the conduct of examination will be sent out of the hall immediately.

2.6.1.m   Resorting to malpractice will invite punitive measures as per University rules.

2.6.1.n   The candidates should hand over the answer book to the invigilator on completion of the Examination and should not leave the Hall, leaving the answer book in their seats

2.6.2. Use of Scribes

The use of scribes is allowed for blind candidates and the category of disabled candidates whose disability hinders the candidate from writing, based on the recommendations of a government medical officer not below the rank of a civil surgeon and the chief/deputy Superintendent. Candidates who are reported under medical emergency which hinders them from writing the examination, may also be permitted to use a scribe, subject to the recommendation of an approved government medical officer not below the rank of a civil surgeon and the chief/deputy superintendent. To avail the service of scribe, the candidate has to submit an application in the prescribed format mentioned in ANNEXURE–3, along with the declaration of the scribe. Completely filled up applications with necessary supporting documents should reach the office of the CoE before seven working days of commencement of examination. Details pertaining to engagement of scribe are mentioned 3.6.1

2.7. ANSWER SCRIPTS

The answer scripts will be supplied by the University and it should only be used for the Examination conducted by the University. The details of answer-scripts received should be entered in the Stock Register maintained for this purpose in each College. Entries in this Register should be current. The Stock Register should be made available to the Inspection Team/Observer of the University for Scrutiny.The answer-scripts will contain 32 pages, including cover pages and 30 pages can be used for answering the questions.Regarding examinations related to Graphics/drawing, a separate answer-book designed for the specific purpose will be used.

2.7.1. General Instructions to Chief/ Deputy Chief Superintendent

2.7.1.a.   The Name of the Examination center/College or the place of the Examination center should not be indicated anywhere in the answer scripts.

2.7.1.b.   The rubber stamp of the name and place of the Exam Center should not be affixed anywhere in the answer scripts.

2.7.1.c.   All the unused Answer Scripts should be kept under the custody of the Chief/ Deputy Chief Superintendent.

2.7.1.d.   The Chief Superintendent shall enter the details of the number of Answer Scripts 'received', 'used', 'defective' and 'balance' in the Stock Register every day once the Examination is over.

2.7.1.e.   The Chief Superintendent should retain the remaining unused Answer Scripts in his/her custody once the examinations are over. An entry, to this effect, may be made in the Stock Register of the Answer Scripts and the same may be used in the upcoming examinations

2.7.2. Instructions to Candidates on Answer Scripts

2.7.2.a. The candidate shall make entries on the cover page of the answer scripts.

2.7.2.b.   The candidates must NOT write their Register Numbers anywhere in the answer
scripts.

2.7.2.c. The candidates should not tear out any page or part thereof from the answer-scripts.

2.7.2.d.   The candidates must score out the answer, which they do not want to be valued by the examiner.

2.7.2.e. The candidates should neither write their Name nor make any identification marks on any part of the answer-scripts.

2.7.2.f. The candidates should not write on the reverse side of the front page. Both sides of the subsequent sheets in the answer-scripts can be used for answering.

2.7.2.g   The candidate should cancel the unused portions/pages of the answer-scripts by putting cross lines.

2.7.3. Printing and Delivery of Barcodes

University will make arrangements for the printing and delivery of the required number of barcodes to examination centers for each examination. Barcodes will be printed based on examination registration done in the portal and an additional number of spare barcodes will also be issued to exam centers to handle unexpected shortage of barcodes due to delay in delivery / damages etc. Exam centers should use a record of receipt and usage of barcodes including spare barcodes. Unused pre-assigned barcodes (due to absence / ineligibility of students etc.) should be retained for 6 months and may be disposed thereafter. Unused spare barcodes should be kept in the safe custody of Deputy Superintendent and may be used in forthcoming examinations wherever necessary.

In case of inability to read barcodes and identify false numbers, University shall generate additional false numbers in the portal and assign the same to answer scripts at valuation camps for the mark entry purpose.

2.7.4   Late Examination Registration

Students can request for examination registration after the last date, paying a fine fixed by the University per course.Requests for late registration, beyond the prescribed timelines, will not be entertained.

SECTION- II EXAMINATION PHASE

3. CONDUCT OF EXAMINATION

3.1. INTRODUCTION

Smooth and fair conduct of examinations is the key responsibility of all Institutions affiliated under APJKTU. The successful conduct of examinations depends greatly on the integrity, alertness and sincerity of all examination officials handling the system. These guidelines aim to set out uniform codes of conduct for each official engaged in connection with examinations held for various courses of APJKTU. University conducts various examinations at its affiliated colleges. The University provides answer scripts and bar codes to the colleges. Question papers are sent to the college using the online portal. Chief Superintendent/Deputy Chief Superintendent can download the question papers, print sufficient copies and distribute them in the examination hall. University will make available the list of candidates registered for an examination to the colleges at least two working days before the start of the examination. Colleges will prepare seating arrangements, post sufficient faculty members as invigilators, conduct the examination fairly, collect the answer scripts, pack it as per guidelines issued from the University and send the answer book bundles to an address specified by the University. This section details the standard operating procedure for the conduct of examination.

3.2. ROLES OF COLLEGE OFFICIALS

3.2.1. Chief Superintendent

The chief superintendent will be responsible for the proper and smooth conduct of examinations at his/her center. He/she shall take all necessary actions before, during and after the examination, as prescribed by the University, for the smooth conduct of the examination. No person shall act as chief superintendent if his/her near relative is appearing for the examination. Persons regarded as near relations are indicated in section 2.5 of this examination manual. Generally, the Principal/Head of the institution shall be the Chief Superintendent at each center. However, the Principal can nominate a senior faculty member as Chief Superintendent in special situations (numbers of candidates are too large, any near relative is appearing for Examination etc.). The Chief Superintendent will constitute the examination management committee for each academic year to assist him in the examination matters. The examination management committee should ensure that the examinations are conducted with utmost precision and fairness and all the rules and procedures relating to the examinations should be so well demarcated as to leave nothing to chance and assumptions. The composition of the examination management committee shall be as follows.
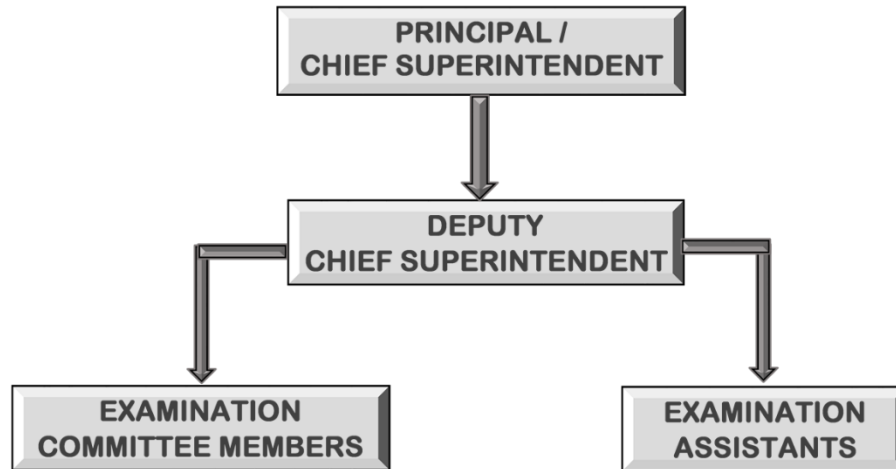
The Chief Superintendent will post the Deputy Chief Superintendent for Examinations of each academic year and intimate the same to the CoE of the University and should ensure that any near relative of the Deputy Chief Superintendent is not appearing for the particular examination session. The Deputy Chief Superintendent should be a senior faculty member of the college.

3.2.1.1. Duties and responsibilities of Chief Superintendent

The duties and responsibilities of the Chief Superintendent are summarized as follows:

3.2.1.1.a. Responsible for the proper and smooth conduct of examinations at his/her center.

3.2.1.1.b. Constitution of internalExamination Management Committee.

3.2.1.1.c. Appointment of deputy chief superintendent of examinations.

3.2.1.1.d. Appointment of the required number of examination committee members from among the faculty members of various departments.

3.2.1.1.e. Appointment of sufficient number of examination assistants from technical staff, clerical staff and office attendants for assisting the examination management committee in printing, distribution, collection and packing.

3.2.1.1.f. If any of the near relatives of the examination management committee members are appearing for a particular examination session, those members should not be assigned any duty during that session.

3.2.2. Deputy Chief Superintendent

The primary responsibility of the Deputy Chief Superintendent is to:

3.2.2.1. Coordinate the day-to-day activities related to examination like downloading and distribution of question papers, preparation of invigilation roster, allocation of examination halls, seating arrangements of candidates, collection, packing and dispatching of the answer scripts etc.

3.2.2.2. Upload the details of the members of the examination management committee in the KTU portal.

The Deputy Chief Superintendent is responsible for receiving blank answer scripts and all other examination related materials from the University. In addition to this, the Deputy Chief Superintendent should:

3.2.2.a.   Ensure that all the technical arrangements like internet connectivity, uninterrupted power supply, CCTV surveillance system, personal computers, high-speed printers etc., are functional as prescribed by the University from the day before the commencement of examinations.

3.2.2.b.   Present in the examination venue at least 90 minutes before the commencement of examination for each session.

3.2.2.c.   Ensure that utmost discipline is maintained throughout the conduct of examination.

3.2.2.d.   Ensure that the question paper packet for each hall is sealed and not tampered with before handing it over to the invigilators.

3.2.2.e.   Issue a provisional hall ticket if any candidate has lost the hall ticket. It should be one-session conditional permission after verifying his/ her identity and credentials in the candidate's list and receipt of an undertaking from the candidate.

3.2.2.f.   Ensure that all the answer scripts collected from the examination halls are packed in bundles and sealed in front of the observer (if any) appointed by the University.

3.2.2.g.   Ensure that the bundles containing the answer scripts are dispatched to the camps as per the directions from the University.

3.2.3. Institutional Level Examination Management Committee

Smooth conduct of examinations at the institution will be the collective responsibility of the institutional level examination management committee. At least two examination committee members (other than examination assistants) should be present in the examination control room for every examination session. The examination committee members should frequently visit examination halls and ascertain that the invigilators are doing their duties conscientiously.

The duties and responsibilities of the examination management committee are as follows:

3.2.3.a.   Make all necessary arrangements for the smooth conduct of examinations as required by the University.

3.2.3.b.   Ensure that all examination hall(s) have a clock, adequate light, ventilation, and sufficient furniture viz. desk, chairs, tables, benches. It should be clean and tidy.

3.2.3.c.   Prepare the list of candidates registered, day-wise and session-wise, based on the examination schedules.

3.2.3.d.   Appointment of invigilators for each session of the examination and issue appointment order well in advance.

3.2.3.e.   Depute the required number of invigilators to each examination hall. One hall can be allotted for every 30 candidates, or part thereof, as far as possible.

3.2.3.f. Make sure that as far as possible, invigilators are allotted to the examination halls at random and that no invigilator shall have prior information of the Hall to which he/she is posted.

3.2.3.g. Preparation of seating charts.

3.2.3.h. Display the Hall wise seating plan for the information of candidates at prominent places.

3.2.3.i. Downloading and printing of question papers.

3.2.3.j. Ensure that the examination halls are opened only 15 minutes before the commencement of examination and the candidates are permitted to enter the Hall 10 minutes before the commencement of examination.

3.2.3.k. Distribution of question papers and answer scripts.

3.2.3.l. Provide necessary facilities to the observer deputed by the University.

3.2.3.m. Issue of attendance certificates to observer/squad/ any other officials.

3.2.3.n. Updating examination related matters including absence entry, malpractice entry, spare barcode assignment, dispatch details etc. to the University portal.

3.2.3.o. Reporting of malpractice to the chief superintendent and uploading the malpractice details and the decisions to the University portal.

3.2.3.p. Ensure that all the answer-scripts confiscated in malpractice cases during the Examination session are packed separately in one bundle and marked "Malpractice Case" on the label.

3.2.3.q. Collect the answer scripts, check them, count them and tally with the attendance.

3.2.3.r. Send the answer-scripts to the University in sealed covers as per the prescribed instructions.

3.2.3.s. Display the instructions to the candidates in the notice board of the examination control room.

3.2.3.t. Safe custody of examination materials and stock register, invigilation duty register, observer/squad register, issue register, dispatch register filing of observer diary, packing details such as "consignment details" format, acknowledgement provided by postal department against each collection etc.

3.2.3.u. Uploading of consignment details and dispatch register details.

3.2.3.v. Any other examination related matters assigned by the chief superintendent.

3.2.4. Examination Assistants

The prime responsibility of the examination assistant is to assist the Deputy Chief Superintendent in all the activities related to the conduct of examination. The duties and responsibilities of examination assistant are listed below:

3.2.4.a   The examination assistants allotted for examination work should report to the Deputy Chief Superintendent of examination at least one hour before the commencement of examination.

3.2.4.b   He/ She should not be absent or abstain from examination duties without prior permission from the Deputy Chief Superintendent.

3.2.4.c   He/ She should ensure that all the rooms are cleaned and locked up on the previous day of examination and opened on the day of examination on time.

3.2.4.d   Keep ready the answer scripts according to the hall requirement before the commencement of the examination.

3.2.4.e   Collect and submit the attendance slips to the examination committee members after half an hour but before one hour from the start of examination.

3.2.4.f   Collect and return the unused answer scripts, seating charts and balance materials from the examination hall to the examination control room.

3.2.4.g   Assist in packing and sealing of answer scripts bundles after the examination.

3.3. EXAMINATION CONTROL ROOM

Each college should set up an examination control room with entry restrictions. The examination control room should have two partitioned sections: the printing room and distribution room. Access to the printing room will be exclusively for the members of the examination management committee observer or any other duly authorized person from the University. Usage of mobile phones is strictly prohibited inside the examination control room except for OTP purposes.

A CCTV camera with recording facility should be installed in the printing section and shall record all the activities. The Chief Superintendent is bound to hand over the recordings to the University if requested. The Deputy Chief Superintendent should ensure that the camera is working properly before the start of the downloading and printing of question papers. The CCTV recordings of an examination should be securely kept for a minimum 180 days. A copy of the recorded footage of the examination halls/rooms shall be made available to the CoE after the completion of each examination schedule, if requested.

The distribution section should also have a CCTV camera. The entry to the distribution section is restricted to the examination management committee members and invigilators for the particular examination. Under no circumstances, candidates will be allowed inside the examination control room. The examination control room should have the facility to keep examination material securely, using lock and key arrangement.

3.3.1. IT infrastructure at the Institutional Level Examination Control Room

The examination control room at each institution should have adequate computers, high-speed printers and scanners proportional to the student strength of the college. University will issue guidelines on the software and hardware to be installed/used at the examination office.

The computers and printers in the examination control room should be isolated from the college LAN. Under no circumstances, file sharing and screen-sharing software should be enabled on the computers. No unnecessary software should be installed and the exam committee members should exclusively use the computers kept in the examination control room to download and print question papers. Sharing the printer with other sections is also prohibited.

The examination control room should have a high-speed internet connection and a backup mobile/broadband/cable connection. The examination control room should have uninterrupted power and preferably a power outage contingency plan. University IT division will conduct IT audit of infrastructure and software used at the colleges periodically and issue proper guidelines for securely downloading and printing question papers.

For the smooth operation of the various activities of the examination control room, it is suggested to maintain a separate mobile number for examination purposes alone. This mobile number should be kept under the safe custody of the examination management committee and the details should be registered with the University.

3.4. CONDUCT OF END SEMESTER UNIVERSITY EXAMINATIONS

3.4.1. Seating Plan

The examination committee members should prepare the seating plan of the allotted Halls well in advance. The seating arrangement for each day of examination shall be different to avoid the allocation of the same seat for different examinations. The display notice indicating Hall allotment for each session shall be displayed 30 minutes before the commencement of Examination at prominent places where candidates can easily find out their allotted Halls; this may include the college web-site. The seating plan should be displayed in the Hall also. One hall (preferably near the examination control room) may be made available for managing the discrepancy in the seating arrangements. When dealing with such incidents, the Deputy Chief Superintendent should ensure that no disturbance/time-lapse for the candidate should happen. The Deputy Chief Superintendent should ensure satisfactory seating of candidates writing the examination and resolve any contingency issues that may arise in seating arrangement. He /she shall ensure that all candidates are treated equally without any discrimination. Sufficient space between the seating of two candidates of the same course needs to be ensured in the examination hall to prevent any possible malpractice. A candidate writing a different course may be permitted to seat between two candidates of the same course.

3.4.2. Downloading and Printing of Question Papers

The question papers will be made available by the University in the web portal approximately one hour before the commencement of the examination. An authorized person from the examination management committee will log on to the web portal to download the question paper. University will send two one-time passwords (OTP) to the registered mobile number of the college, one for downloading and another one for unzipping the question papers. If there is an inordinate delay, the

exam committee can request for OTP over registered email. The observer and at least two examination committee members must be present while downloading and printing the question papers. The question paper file in electronic format should not be sent over internet/ Bluetooth or copied to hard disks/pen drives or cloud services.

Under no circumstances, photographs of printed question papers should be taken and the Chief Superintendent and Deputy Chief Superintendent will be responsible for any violation.A physical attendance register with the signature of those present during downloading and printing should be maintained in the examination control room. The Deputy Chief Superintendent should duly countersign it every day. If the observer is present, he or she should also sign on this register. The examination committee members should pack the question papers required for each Hall into a cover and seal it properly. The question papers should be distributed to the hall five minutes before the commencement of the examination by the examination committee members themselves.

3.4.3. Attendance Sheet

The colleges shall prepare attendance sheets for each day of the examination. The format of the attendance sheet is given in **ANNEXURE-4**. The absentee statements are to be kept in the College under safe custody for future reference. After 30 minutes of the commencement of Examination, the Deputy Chief Superintendent has to consolidate the attendance statements and upload the absentee statement in the University web portal.

3.4.4 Academic Discipline and Malpractices in Examinations

Every student is required to observe discipline and decorous behavior in the examination hall. Any act of indiscipline, misbehavior and unfair practice in examinations shall be punishable according to nature of offense committed by the student. A consolidated details of punishments according to the nature of malpractice is listed below.

3.4.4.1 Recommended Punishment for Malpractices

Clause	Sub-Clause	Nature of malpractice	Recommended Punishment
1)	a)	Introduction and/or possession of any non-permissible material relevant to the examination, to the examination hall: Materials like bit(s) of papers, hall ticket with matter written on it, scribbling on hall ticket, and materials written on calculator, handkerchief, data book/hand book, instrument box, identity card, scales, clothing, chappals, socks, masks or in any part of the body. Such similar malpractices.	Debar for 1 chance, for the course concerned.
	b)	Writing on the question paper and passing the same to other student(s) in the examination Hall	

Clause	Sub-Clause	Nature of malpractice	Recommended Punishment
	c)	Copying from neighbor's answer scripts with mutual consent, by peeping into the other's answer-script.	
	d)	Purposefully sitting on a wrong seat with the intention of cheating in examinations.	
	e)	Threatening/requesting the neighbor to show the answer-script	
	f)	Helping neighbors to answer questions	
	g)	Writing register number, name, name of college or other identifying marks within the answer book	
	h)	Writing appeals to the examiners, in the answer-scripts	
	i)	Refusing to hand over question paper when leaving the hall during the examination hour.	
	j)	Using filthy language in the answer-scripts	
	k)	Passing of answers from outside	
	l)	Disobeying the invigilator/other officials or resistance to instruction from authority.	
2)	a)	Possessing two copies of hall tickets with written matter on one of them. Adding additional printed pages with materials, in the code/data book. Found texts written in answer-sheets verbatim from the textbook, Lot of Questions answered by the candidate were the same as those obtained from Google search.	
	b)	Possessing non-permissible materials in large quantities (more than 5 bits or sheets)	
	c)	Possession of non-permissible materials in the form of reduced photocopies	
	d)	Resisting to hand over non-permissible material brought to the examination hall to the invigilator	
	e)	Copying from any material and resisting the instructions or warnings of the invigilator.	
	f)	Purposefully tampering/overwriting barcodes and Alpha-Numeric Code of the answer sheets	Debar for 2 chances, for the course concerned.
	g)	Deliberately changing/replacing register numbers	
	h)	Purposefully tampering answer books, removing pages	
	i)	Inpossessionof Xeroxcopies,textbook,printed material,Xerox Copy Notes,or Notebook	
	j)	Possession of mobile phones, tab, pen camera, smart watch, Bluetooth or wired headsets or any such other electronic, communication or storage gadgets	
	k)	Copying from neighbor's answer scripts with mutual consent, by exchanging or handing over the answer-sheet to the neighbor	

Clause	Sub-Clause	Nature of malpractice	Recommended Punishment
	l)	Destroying the evidence of malpractice. i.e. Actions like tearing, mutilating the answer scripts, refusing to hand over the answer scripts or running away with the answer scripts from the examination hall	
3)	a)	Impersonation	
	b)	Manhandling or threatening the invigilator/ officers or any authority of the University	
	c)	Tampering with the answer books of other candidates	Permanent debarring, with the case referred to the police
	d)	Communicating answers from outside or sending question papers to outside through electronic media. Using any form of electronic or cyber media for cheating in examinations.	
	e)	Smuggling question papers or other examination materials	
4)		Copying from neighbor's answer scripts (more than 3 students involved).	Debar for minimum 2 chances. An enquiry regarding any involvement of the institution may be conducted. The issue will be dealt with as detailed in Section 4.
5)		Repeating malpractice - second time. One time earlier, any type of malpractice.	Debarring for (n+1) chances, where n is the debarred chances for the most recent malpractice, subject to a maximum of 3 chances.
6)		Repeating malpractice - third or more instance. Two times earlier, any type of malpractice.	Debarring for (n+2) chances, where n is the debarred chances for the most recent malpractice, subject to a maximum of 3 chances.
7)		Any type of malpractice, but students did not attend the EMC/DAC meeting	To give the student one more chance for appearing before EMC/DAC. If the student fails to attend the EMC/DAC again, appropriate recommendations can be proposed by the

Clause	Sub-Clause	Nature of malpractice	Recommended Punishment
			respective EMC/DAC by following the prescribed guidelines, assuming that the student has committed the alleged malpractice.
8)		Did not produce proper ID card	EMC shall check whether impersonation has occurred.
9)		Threatening/bribing invigilators, evaluators, officials and examiners in person or through the answer books.	Registration for the current examinations shall be canceled. Refer to Police
10)	a)	Disturbing the candidates by entering the examination hall from outside.	Registration for the current examination shall be canceled. Any such incidents should be reported to the police by the Chief Superintendent and a report should be submitted to the Controller of Examinations.
	b)	Disturbing the candidates from outside the examination hall	
	c)	Stealing answer books	
	d)	Breaking open the closed examination halls.	
11)		Purposefully tampering arrangements for conduct of examinations.	Registration for the current examination shall be canceled
12)	a)	All the above punitive actions are applicable for Practical Examinations also.	
	b)	Candidates shall have the option of filing appeals to the Examination Appeals Committee constituted by the University.	
	c)	If a candidate is caught for Malpractice, he/she may be permitted to attend the remaining examinations for all the courses listed in the Hall Ticket concerned. For the same course, a fresh answer-book will be issued for writing the examination during the remaining period.	

3.4.4.2 Committees for the Inspection of Malpractice Cases

a) Disciplinary Action Committee (DAC) of College

The Convener of DAC shall be a department head and shall have three other regular faculty members belonging to different departments as members. Faculty in charge of student affairs in the College shall be one of the members. DAC shall be constituted by the Principal in the beginning of every Academic year and it shall be reported to CoE. Replacements, if necessary, of any member in DAC shall also be reported to the CoE.

b) Zonal level Examination Management Committee (EMC)

Zonal level Examination Management Committee (EMC) is constituted by the University for taking appropriate disciplinary actions against students who were caught up malpractice through valuation camps and different centres. There will be 3 EMCs, viz. for Northern, Central and Southern regions. Each EMC consists of 3 senior faculty members not below the rank of Associate Professor. The EMC will be headed by a faculty from Govt./Govt. Aided College, not below the rank of Associate Professor.

c) Malpractice Inspection Committee (MIC) at the University

Malpractice Inspection Committee (MIC) is a Sub-Committee of the Syndicate Standing Committee on Examinations (SSC-E).It consists of 6 members with the Convener of SSC-E as Convener. IQAC coordinator, Convenerof SSC on student affairs, and CoE shall also be members of MIC.

The recommendation of EMC/DAC shall be placed before the MICfor scrutiny. The recommendations of the MIC shall be examined by the SSC-E. The recommendations of the SSC-E shall be placed before the Syndicate for a final decision.

3.4.4.3 Reporting of Malpractice Cases

a) Malpractices During Examinations

Malpractices in Examinations shall be viewed seriously and any such alleged incident observed or reported by a faculty member or an invigilator associated with the Examinations or any official deputed by University, viz. observer, District-wise Examination Squad (DES) shall be referred to the Principal who in turn shall forward to the Disciplinary Action Committee (DAC) of the college.

In case of such alleged malpractice, the student shall be provided with a fresh answer book to continue with the examination. Both the answer scripts and the other materials including electronic gadgets used for malpractice shall be kept under safe custody of the Chief Superintendent of the college. The same shall be reported to University by uploading the details of the malpractice in the portal on the same day itself. The hearing report of the student and invigilator, recommendations of DAC with details of punishment imposed, scanned copies of answer scripts and photographs of other materials including electronic gadgets used for malpractice shall be uploaded through the portal within 7 days of the malpractice case reported.

b) Malpractice reported from Valuation camps (reported by examiners)

The alleged malpractice cases reported from valuation camps will be examined by Zonal level Examination Management Committee (EMC) for appropriate recommendation on the matter after conducting a hearing of the students.

c) Malpractice reported from Colleges which is an examination centre opted by the student (Alleged malpractice reported by Invigilators/Squads/observers)

In case of alleged malpractice reported from an examination centre which is not the parent institute of the student, the student shall be provided with a fresh answer book to continue with the examination. Both the answer scripts and the other materials including electronic gadgets used for malpractice shall be kept under safe custody of the Chief Superintendent of the college. The alleged case of malpractice shall be reported to University by uploading the details of the malpractice in the portal on the same day itself. Later both the answer books along with evidence collected will be sent to University by including a report from the Principal, through the postal department within 7 days. Such malpractice cases will be examined by Zonal level Examination Management Committee (EMC) for appropriate recommendation on the matter, after conducting a hearing of the student concerned.

3.4.4.4 Management of Malpractice Cases

a) Processing of Malpractice Cases

Reports of DAC or EMC will be placed in the meeting of the Malpractice Inspection Committee (MIC) for scrutiny. Malpractice Inspection Committee (MIC) will ensure that the recommended punishments, if any, are in accordance with the Examination Manual and will make any suitable alterations accordingly. Further, the recommendation of MIC will be examined by the Syndicate Standing Committee on Examinations (SSC-E). The processes including the recommendations from the SSC-E shall be completed within a period of 45 days after the reporting of the malpractice case concerned. The recommendations of the SSC-E on the matter shall be placed before the Syndicate for a final decision.

b) Withholding the results until a decision is taken

If a student is reported for alleged malpractice, his/her result in the same course of the examination concerned will be withheld. Withheld results will be published subject to the final decision on the reported malpractice case.

c) Provision to appeal

A student shall appeal within 10 days, after the decision of the Syndicate through the portal. A subcommittee of the Syndicate formed for this purpose will act as the appeal committee. The appeal committee consists of 4 members viz. Pro-Vice Chancellor (Convenor), Convenor-SSC on Examinations, Convenor-SSC on Student Affairs, and CoE.

d) Disposal/Return of Evidences

All the evidence related to reported malpractice cases stored in College examination cell under the custody of Chief superintendent may be disposed/returned to party concerned (such as electronic gadgets) after 14 days of uploading the decision by the Syndicate in the portal. In case, a student submitted an appeal on decision of Syndicate, materials can be disposed/returned only after 14 days of taking a decision on the appeal and uploading the same in the portal. The CoE shall give an instruction to the Chief Superintend to dispose/return the materials.

3.4.4.5 Flowchart on the hierarchical order for malpractice decision approval process
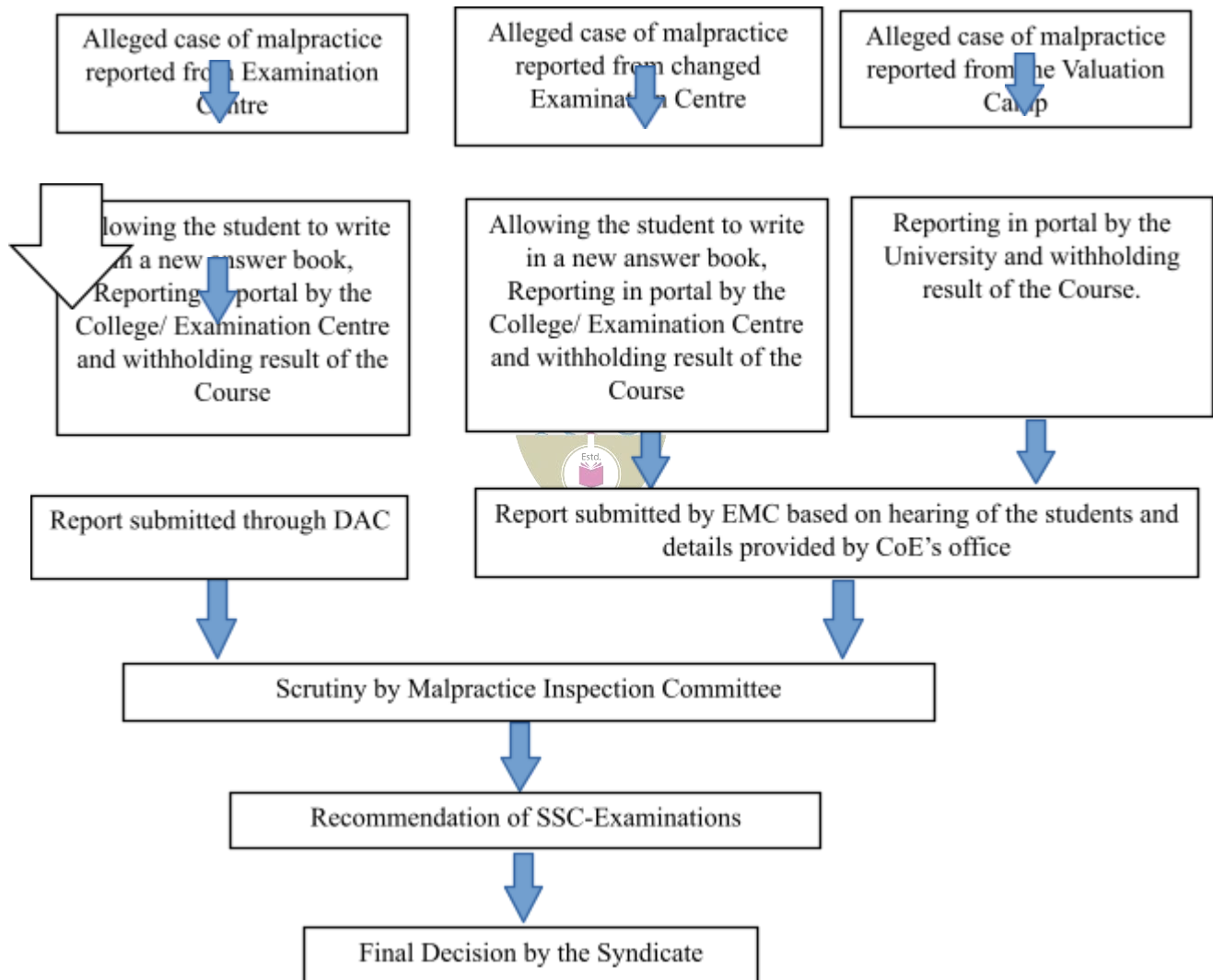
3.4.4.6 Mass Copying Cases

Mass copying should be considered separately from individual malpractice cases and the same should be reported to the Controller of Examinations.

Modes of the mass copying are categorized as:

a) Copying from the printed sheet circulated in the examination hall

b) Displaying/projecting the copying material on the blackboard/Screen

c) Use of loudspeakers from outside

d) Dictating answer by the Invigilators etc.

e) Any other evidence, which proves mass copying.

If more than three candidates are indulged in any sort of copying, with the same answers, it is considered as a mass copying case. Anenquiryregardingany involvement oftheinstitution may be conducted. Each case of mass copying will be investigated separately by the EMC. Report of EMC will be submitted to MIC and then to SSC-E. If necessary, SSC-E shall appoint a Committee to investigate the matter. Report of SSC-E will be considered by the Syndicate and the Syndicate will take appropriate decisions on a case-to-case basis.

Any incidence of mass copying shall have a punishment of debarring for minimum 2 chances for the course concerned; however, it can be a more severe punishment depending on the gravity of the malpractice modality. If the institution is involved in the incident, the punishment can be a hefty fine in addition to withdrawing the status of examination center or even the affiliation.

3.4.5 Invigilators

Invigilation is considered as the most important task required to be performed during the conduct of Examination. The invigilation duty should be performed impartially with utmost sincerity. The invigilators are appointed by the Deputy Chief Superintendent to perform invigilation work during the specified sessions of theory Examinations conducted by the University. Invigilators shall be appointed by the Deputy Chief Superintendent in a manner that their ratio to candidates does not exceed one invigilator to 30 candidates registered at any particular session and part thereof. The invigilator should not be absent or abstain from invigilation duty without prior permission from the Deputy Chief Superintendent. The teachers/academic staff members of the college appointed by the Chief/Deputy Superintendent shall perform as invigilators in different Halls/rooms. The Faculty in charge of physical education and technical staff [Trade instructors and above] with minimum 5 years of experience may also be engaged as an invigilator if required.

3.4.5.1 Duties and Responsibilities of Invigilator:

The sanctity of the Examination depends greatly on the conduct of an Invigilator. Any laxity on the part of an invigilator is likely to result in undesirable consequences affecting the reputation of the University. The duties and responsibilities of Invigilator can be summarized as follows:
The Invigilator should:

3.4.5.1.a   Remain in the Examination Hall during the entire duration of Examination.

3.4.5.1.b   Responsible for the maintenance of general discipline in the Examination Hall and inform the Chief/ Deputy Superintendent of Examinations of any inconvenience/ incidents/ difficulties encountered during the conduct of Examination.

3.4.5.1.c   Ensure that any undesired materials brought by the candidates are left outside the Examination Hall at his/her own risk.

3.4.5.1.d   Help the candidates to locate their seats and as soon as they are seated, warn the candidates about the possession of mobile phones, smart watch, programmable calculators/digital diary or any electronic devices or equipment of any other kind or scripts/notes in coded form/manuscripts or any other material from which answers could be copied.

3.4.5.1.e   Check whether each candidate has a valid college ID card and hall ticket issued by the University and admit only those who possess these items of evidence. Ensure that nothing is scribbled/ written on the hall ticket.

3.4.5.1.f   Distribute answer scripts 10 minutes before the scheduled start of the Examination.

3.4.5.1.g   Distribute the answer scripts only to those candidates who are seated in the examination hall and are not to be placed on the vacant seats.

3.4.5.1.h   Announce the candidates to:
   i.   Check the answer scripts and ensure that it contains 32 pages (2 cover pages + 30 writing pages) in good condition.
   ii. Do not write anything other than specified on the cover page of the Answer Scripts.
   iii. Do not write name or register number anywhere in the Answer Scripts.

3.4.5.1.i   Distribute the Question Papers to the candidates seated in the Examination Hall only when the commencement bell of the Examination is given.

3.4.5.1.j   Ensure that the candidate has written the correct alpha numeric code, course code, course name, branch/stream, name of Examination, semester etc., in relevant fields of the first page of the Answer Scripts.

3.4.5.1.k   Ensure that the candidate has written the Register number and Name in the space provided in the Question Paper and announce that nothing else should be scribbled down on the Question Paper.

3.4.5.1.l   Ensure that the IS codes/Data books/Tables/Hand books brought by the candidates do not contain any written material or scribbling or additional sheets in them. If found, report it as malpractice.

3.4.5.1.m   Inform the candidates that NO additional Answer Scripts will be provided and the candidates have to write their answers only in the Answer Scripts supplied to them by the University.

3.4.5.1.n   Ensure that Alpha numeric code on all the barcodes (pasted on attendance sheet as well as on Answer book) is the same and should take utmost care while pasting the barcodes.

3.4.5.1.o   Ensure that all the fields to be filled on the facing sheet of the answer book (such as question paper code, date of exam, alpha numeric code, name of exam, course code, course name etc.) are completely filled up without any mistakes by the student.

3.4.5.1.p   Ensure that the course code mentioned on question paper issued to a student is same as that mentioned in hall ticket and the same is written on the facing sheet of the answer book also by the student without any mistake.

3.4.5.1.q   Get the signature of the candidate on the space provided in the attendance sheet.

3.4.5.1.r   Mark the absentees only after the first 30 minutes of commencement of the examination and prepare the attendance and absentees list.

3.4.5.1.s   Ensure that no candidate will be allowed to enter the examination hall 30 minutes after the commencement of the examinations and leave within 60 minutes of the commencement of the examination.

3.4.5.1.t   Hand over attendance sheets, unused answer scripts and unused question papers to the examination control room through the examination assistants of the college after 30 minutes from the start of examination.

3.4.5.1.u   Collect the question paper from those candidates who leave the hall more than half an hour before the ending time of examination.

3.4.5.1.v   Remain alert in the examination hall and attend the candidates' requests for the graph sheets & other relevant materials.

3.4.5.1.w   Ensure that there will be no communication or exchange of materials like calculator, data book etc., among the candidates in the examinationhall and should not allow the candidates to use any unfair means in the examination hall.

3.4.5.1.x   Remain vigilant during the examination and report all cases of malpractice in writing to the chief/deputy superintendent of examinations, with supporting documents.

3.4.5.1.y   Announce, five minutes before the close of the examination, "last five minutes".

3.4.5.1.z   Inform the candidates to stop writing, strike off the unused pages of the answer scripts and put their pen down once the scheduled examination time is over.

3.4.5.1.aa Collect and arrange the answer scripts returned by the candidates at the end of the examination in the proper order for each course/subject and programme and tally the same with the attendance of the candidates.

3.4.5.1.bb Hand over the answer scripts to the designated staff in the examination control room and return the relevant materials of the examination session in his/her possession.

3.4.5.1.cc Hand over the answer scripts confiscated due to unfair and malpractice of the candidates separately, without mixing those with the regular answer scripts.

3.4.5.2. Instruction to Invigilators

Before Examination:

The Invigilators should report for duty at least 30 minutes before the commencement of the examination. The examination committee will allot an invigilator randomly to a hall. A register

showing allotments should be kept and the invigilator should sign the register mentioning the hall he/she is allotted. The examination committee members will provide seating charts, blank answer scripts and bar codes to the invigilator. The invigilator should ensure that he/she has received the exact number of answer scripts and bar codes for the allotted hall before proceeding to the hall.

During the Examination

The invigilator should reach the hall at least 15 minutes before the commencement of the exam and start the distribution of answer scripts to the candidates present. They should ensure that each candidate has a valid hall ticket or other authorization/identity proof.

The question papers should be supplied to the invigilator in sealed cover five minutes before the commencement of the examination. The invigilator should open the question paper packet and ensure that sufficient numbers of question papers are there before distributing it. The question paper should be distributed, two minutes before the commencement of the examination. the question papers should be distributed to the candidates personally. Under no circumstances, question paper bundles should be passed to candidates for distribution along a row of seats or candidates be asked to take their question paper individually. After completing the distribution of question papers, the invigilator should check the bar codes affixed on the answer sheets and take the attendance. The invigilators should put their initials in the hall ticket on each day of examination in the prescribed column.

Invigilators are prohibited from using mobile phones during the examination except for emergency contact with the examination control room. They are prohibited from photographing any examination material in the examination hall. Invigilators should not indulge in any other academic or non-academic work during invigilation and they should report malpractices to the Chief/Deputy Superintendent. the invigilator should not leave the examination hall during the period of examination without the prior permission of the Chief/Deputy Superintendent. In case of emergency, he/ she shall make arrangements for the proper conduct of examinations by entrusting the responsibility to an eligible member of faculty, and report the arrangements made to the Chief/Deputy Superintendent and obtain approval before leaving the examination hall.

Candidates are expected to enter the hall at least 15 minutes before the commencement of the examination. A bell/siren will be sounded to mark the entry time. A second bell/siren will be sounded to mark the commencement of the examination. The doors of the hall should be closed after the second bell. A grace period of 30 minutes is allowed for the candidates to compensate for unexpected emergencies. Latecomers/Latecomers who are availing grace period should be allowed to enter the hall only after the distribution of question papers. No one is allowed to enter the examination hall while the invigilator distributes question papers. After the distribution of question papers, the invigilator should open the door and admit the latecomers. A third bell/ siren is again sounded after 15 minutes to indicate the entry time to the halls is over. The invigilator should ensure that no candidate enters the hall after the stipulated time. Candidates without valid hall tickets should not be allowed to enter the hall unless there is written permission from the principal/Chief

Superintendent/ Deputy Superintendent. The invigilator should collect such additional authorizations and submit them to the examination control room at the end of the examination. Chief Superintendent/ Deputy Superintendent will issue temporary permissions in case of real emergencies and no candidate should be allowed to write more than one examination without a hall ticket unless permitted by the University.

Under no circumstances, candidates will be permitted to enter the hall after the expiry of the 30 minutes grace period. Candidates will be allowed to leave the hall only after one hour from the commencement of the examination and the question paper should be handed over to the invigilator before leaving the hall till the last half an hour of the stipulated period of the examination. A warning bell should be sounded 10 minutes before the end of the examination. A final bell/siren should be sounded to indicate the end of examinations in all halls. The invigilator should not give any clarification to the candidates regarding mistakes in the question paper, insufficient data, mode of answering etc. The invigilators should grant the compensatory time/extra time as sanctioned by the principal/Chief/Deputy Superintendent for all candidates with benchmark disability. Invigilators shall permit support of scribes for students based on the orders issued to them by the University.

If the invigilator notices that any candidate is indulging in copying or possessing a manuscript or answer scripts other than that of the candidate/ any written material on calculator/ geometry box/scale etc., he/she shall immediately take in his/her possession the candidate's answer scripts, question paper, and the materials which was used or intended to use for copying and should immediately report the same to the Principal/Chief/Deputy Superintendent. The Invigilator should give a new answer book to the candidate and permit him/her to continue the examination. Under any circumstances, the invigilator should not allow the candidate to leave the examination hall until the principal/Chief/Deputy Superintendent comes to the examination hall and takes over charge.

Malpractices should be recorded in the appropriate form along with a statement from the candidate in the presence of the Chief/Deputy Superintendent. The Chief/Deputy Superintendent should ensure that if a candidate is asked to give a statement in connection with suspected or proven malpractice or use of unfair means but is unwilling to do so, she/he shall not be forced to give the statement. The fact of his/her having refused to make a statement shall be recorded by the Chief Superintendent in the presence of the invigilator(s) on duty, at the time of occurrence or detection of the incident or immediately thereafter. If in an examination, a candidate voluntarily surrenders books or notes or papers in his possession to the invigilator or any other member of the supervisory staff before the question paper is distributed, no action may be taken against the candidate.

After the Examination

The invigilator shall arrange the written answer scripts returned by the candidates at the end of the examination in proper order for each subject/course and programme and tally the same with the attendance of the candidates. He/ she shall be responsible for the safe possession of all answer scripts until it is handed over to the staff,who are authorized to receive it in the examination control

room. The receiving staff shall receive the answer scripts after due verification and tally with the attendance sheet. the answer scripts confiscated due to unfair and malpractice of the candidates shall be handed over separately without mixing them with the regular answer scripts.

3.4.6. Affixing of Barcodes in the answer Scripts and Attendance Sheet

The University supplies "pre-assigned barcodes" for each candidate, for each examination, in each course. The barcode consists of an alpha numeric code. Example: BR-CS-A7C4, MR-Y68U9P, UR-MBA-EFT3 etc. Candidates and invigilators should take utmost care in examination halls while pasting the barcodes on attendance sheet and answer scripts. The details of barcodes provided and how it is to be affixed on the attendance sheet and answer scripts is described below:

3.4.6.1. Instructions to be followed while affixing the barcodes

3.4.6.1.a. Ensure that alpha numeric code on all the barcodes (pasted on attendance sheet as well as on answer book) is the same.

3.4.6.1.b. Each pre-assigned barcode-set provided for a candidate consists of five parts.

3.4.6.1.c. First part consists of Register number, Name of the candidate, Alpha numeric code and Course code. The second, third, fourth and fifth parts are identical in all respects.

3.4.6.1.d. The alphanumeric code appearing in the first part will be repeated in the other four parts.

3.4.6.1.e. First part is to be pasted on the attendance sheet on the column under the title: "Name and Register number of the Student".

3.4.6.1.f. Out of four identical parts, three are to be pasted on three specified spaces on the Answer Scripts of the candidate and one is to be pasted on the attendance sheet (on the column under the title: "Barcode"). Candidates can use spare barcodes in case of damage/non receipt of pre-assigned barcodes. In case of spare barcodes, the first part consists of only alphanumeric code, second, third, fourth and fifth parts are identical and carry the same alphanumeric code as in the first part. As mentioned above, the first part and one among the other four parts is to be pasted on the attendance sheet and the other 3 parts are to be pasted on the answer book.

3.4.7. Examination Session Timings

The general timing of the Examination will be, forenoon session of Examination from 9:30 am and afternoon session Examination from 1:30 pm (on Fridays, the AN session will start at 2:00 pm). The duration of the Examination will be three hours unless otherwise specified in the curriculum/syllabus of the respective programme/course. Any change in timing due to an unavoidable situation/condition will be notified well before the examination. The schedules for

practical Examinations to be conducted in the specified laboratories of the departments should be notified in the department notice board at least three days in advance. Watch/clock shall be provided in each examination roomand in the examination Control Room.

3.4.8. Packing and Dispatching of Answer Scripts

Once the examinations are over, the invigilator should count the used and unused answer scripts and tally them. The same should be returned to the examination control room. The invigilator should enter the details of the returned material in a register and sign it. The Chief/Deputy Superintendent should ensure that the stock of answer scripts is tallying. The answer scripts from the examination halls shall be received at the control room within 15 minutes after the end of examination in each session. The Chief/Deputy Superintendent should maintain a dispatch register [Format is given in ANNEXURE-6] containing the dispatch details of answer scripts to University / valuation Camp.

For packing and dispatching the answer scripts, the following procedure should be followed:

3.4.8.a. After submitting details of absence, malpractice and spare barcode details, Generate Packet codes in the portal and put answer scripts in packets as per the count shown against each packet. Write or paste a label showing Course code and Packet code along with count outside each packet.

3.4.8.b. There should *NOT* be any identification mark of the Examination center anywhere in the packet.

3.4.8.c. Packets of various courses of an examination having the same "To address code" (TAC) shall be bundled together to form a single 'Bundle' or 'Consignment'. All the Consignments dispatched from an exam centre to a valuation camp or University should mandatorily accompany a filled up "Consignment details" format as shown in**ANNEXURE-7**. This format should carry all packets placed inside a 'bundle' or 'consignment' along with details like Programme, C-ID No., To address code, course codes of packets, semester, count of answer scripts in each packet (count as in portal and physical count), total no. of packets and answer scripts in the bundle etc. If more than one format is required, each 'consignment details' format should be notated with 1 of 2, 2 of 2 etc. A copy (hard or soft form) should be filed / maintained in the exam centre and should be produced whenever required by the University.

3.4.8.d. Each bundle / consignment should be neatly packed and sealed with sealing wax. A C-ID No. should be pasted outside each bundle / consignment handed over to the Postal department. Format of label to be pasted outside each bundle is shown in **ANNEXURE-7**

3.4.8.e. The packed and sealed bundles should be kept in safe custody for delivery to the valuation center through the postal department.

3.4.8.f.   Maximum weight of a bundle / consignment shall be limited to 8 to 10 Kg for ease of handling.

The answer scripts related to malpractice/ misconduct should NOT be mixed or packed along with the regular answer scripts. In each case of malpractice, the answer scripts should be packed along with the confiscated incriminating material and report of the invigilator and Chief Superintendent.

Once the details of absentees, malpractice cases (if any) and spare bar code are uploaded in the portal, the University will provide the "To Address Code" [TAC]to dispatch the answer book bundles through the postal department. Each consignment / Bundle should carry a "Consignment ID" provided by the University. The format of the address tag that is to be pasted on each answer script bundle is given in **ANNEXURE-7**. The sealed bundles of answer scripts should be kept in the safe custody of the Deputy/ Chief Superintendent until the postal department collects them.

NOTE: The answer scripts of Examinations concerned are shifted from the Examination centres to valuation Camps with the assistance of the postal department. Similarly, the answer scripts for second and third valuation (wherever applicable) are also shifted from one Camp to another by the same method. The officials concerned are strictly instructed to follow the packing instructions. If the packing of answer scripts at the sending end seems to be improper, an appropriate fine will be imposed based on the severity of the damage.

3.4.9. Powers and Functions of Observer

The observer from the University plays a vital role in ensuring the smooth conduct of the examination. The observer is the representative of the University and the college authorities should ensure that the observer is treated well. The observer should be posted for all examinations, including internal and end semester examinations conducted by the University. The Chief/Deputy Superintendent should mark the attendance of the observer on the University portal within 15 minutes after the commencement of the examination.

The University should call for a list of observers from affiliated colleges. Each college has to assign a minimum of 10 percent of their faculty for observer duty. The observer should be a regular faculty with at least five years of experience. The University should inform the observers and their colleges about the duty, at least five days before the commencement of examination and if any of the faculty is unable to attend observer duty, they should inform the CoE in writing with reasons and a recommendation from the Principal/Chief Superintendent. Faculty having observer duty should not be posted for invigilation duty for the same day.

3.4.9.1. Duties and responsibilities of the Observers:

The duties and responsibilities of the observers before Examination, during the Examination and after the Examination are as follows:

Prior to Examination

3.4.9.1.a.   He /She should reach the college at least one hour before the commencement of the examination.

3.4.9.1.b.   He /She should not interfere in the examination procedure of the college in which duty is assigned.

3.4.9.1.c.   He /She should invariably display his college id card throughout the examination.

3.4.9.1.d.   The question papers for the examination shall be downloaded, printed and packed in the examination control room only. The question papers will be downloaded using a one-time password (OTP) sent to the principal at the scheduled time. The observer has to sign a declaration to the effect that the question paper was downloaded and packed in his/her presence.

3.4.9.1.e.   Verify that the question papers downloaded are meant for the date and session (FN/AN) of the exam.

3.4.9.1.f.   Assure that during the above process, strict confidentiality is maintained at examination control room and do not allow anybody other than the Chief/Deputy Superintendent to communicate over the phone or any other means

3.4.9.1.g.   He /She should be present during the printing and distribution of question papers.

During the Examination

The observer is permitted to enter all examination halls. In case of any malpractice, he/she should bring it to the attention of the invigilator. In addition to this, the observer should inform the Chief Superintendent in writing about the incident and it should be reported to the University. The college-level DAC should not give any relaxation to the candidates caught for malpractice by the observer.

3.4.9.1.h.   Ensure the compliance of examination timings.

3.4.9.1.i.   He /She should monitor the conduct of examination and report any breach of rules/malpractice to the University.

3.4.9.1.j.   During the examination time, frequently visit all the examination halls to check fair conduct of examination. If any unfair incident is noticed, report it to the Chief/Deputy Superintendent immediately, send a report to the University and upload the same in the portal.

3.4.9.1.k.   If any student is found involved in unfair means, report the case to the Chief /Deputy Superintendent and hand over all proof and evidence of unfair means and answer book in a separate sealed cover along with a brief report.

3.4.9.1.l.   After 30 minutes from the commencement of examination, see that attendance sheets and unused answer scripts are returned to the examination control room from the examination halls.

After the Examination

3.4.9.1.m.   Ensure that the packets containing answer scripts from all examination halls are handed over to the Chief/Deputy Superintendent by the invigilator within 15 minutes after the scheduled closing time of the examination and delay in the same should be reported.

3.4.9.1.n.   The observer should be present during the packing of the answer scripts and it is mandatory to sign the packets after sealing.

3.4.9.1.o.   Ensure that the packets are neatly packed, sealed and labeled for dispatching to the valuation centre.

3.4.9.1.p.   Verify the stationery register for the usage of the answer scripts and countersign the entries.

3.4.10. Powers and Functions of District Wise Examination/Invigilation Squad (DES) Team

The University will constitute 'District-wise Examination/Invigilation squads (DES) of faculty members for conducting surprise visits to the examination centres of all affiliated institutions to monitor all aspects related to the conduct of examinations and check malpractices of students. DES shall be formed preferably in all districts. However, squads may also be formed depending on the geographic proximity of nearby colleges of different districts too. Each DES shall have a convener and minimum two members. The convener shall be preferably an associate professor or above, having at least fifteen years of teaching experience. Each member of the DES shall have a minimum teaching experience of five years. Each member of DES shall carry their identity cards and appointment orders from the University during their visits to colleges.

The working procedure of these squads and their job responsibilities are listed below.

3.4.10.a.   Ensure the conduct of University examinations are as per the schedule and timings published by the University.

3.4.10.b.   Ensure a systematic, precise, uniform and seamless conduct of examinations in all colleges.

3.4.10.c.   Ensure transparency and accountability in the conduct of University examinations upholding the integrity and confidentiality of the examination system.

3.4.10.d.   Ensure that examinations are conducted in proper order and discipline without any malpractices.

3.4.10.e.   Inspect and invigilate with due diligence, all examination halls and students undertaking the examinations and accessories brought to the examination hall, to avoid malpractices.

3.4.10.f.   Inspect the registers maintained (such as stock register, invigilation duty register, students attendance statement, dispatch register etc.) in the examination control rooms and to report disparities or incompleteness, if any, to the University.

3.4.10.1. Duties and responsibilities of DES include:

The duties and responsibilities of DES are listed below:

3.4.10.1.a.   Each DES shall visit the Institutions in their allotted colleges/clusters and shall verify and ensure their level of preparedness for University examinations.

3.4.10.1.b.   DES will have the authority to inspect the colleges/clusters assigned to them and enter examination control room, examination halls etc., without the permission of college authorities and verify relevant documents/records relating to University Examinations. However, DES members shall show their official IDs and appointment orders to the Chief / Deputy Superintendent.

3.4.10.1.c.   Before entering any examination hall, members of DES must show their official ID to the invigilator. The convener may meet the Chief/Deputy Superintendent of Examination s, if necessary.

3.4.10.1.d.   DES shall ensure that every examination center has an examination control room with dedicated internet connection (without LAN connections), printer(s) and Photostat machine(s) dedicated to University Examinations within the examination control room. It shall be ensured that network printers are not connected to the system dedicated for the purpose of downloading and printing University examination question papers.

3.4.10.1.e.   DES shall check/verify and report whether the confidentiality of examinations could be assured in the examination control room for all related operations starting from the downloading of question papers to the dispatch of answer scripts.

3.4.10.1.f.   DES shall inspect:

   i. Seating arrangements and correctness of seating of students in the examination hall.

   ii. Presence of invigilators and their level of involvement in the invigilation duty.

   iii. Verification of hall tickets of candidates and their identification.

   iv. Checking the candidates for possession of any scribbling/bits of written materials/mobile phones/any other electronic gadgets or involvement in any malpractice.

3.4.10.1.g.   Verification of seized electronic devices, inspection of IS Codes/ Data book/ Datasheets/Tables or any accessories brought by students to examination hall.

3.4.10.1.h.   DES can record video/take photos/scan the images of any evidence obtained/retrieved from student/college related to the suspected case of malpractice(s).

3.4.10.1.i.   During the inspection of the examination halls, if a candidate is caught for attempting/involved in the case may be, and intimate the invigilator on duty to provide him/her with a new answer script to continue writing.

3.4.10.1.j.   After the inspection visit to a college, the DES convener shall consolidate the details of all students involved/caught for malpractice, and submit the same to the Chief /Deputy Superintendent of examinations at the earliest. The Chief/Deputy Superintendent of examinations shall sign in the relevant page of the prescribed form [**ANNEXURE-8**] and a copy of the same shall be mailed to: _squad@ktu.edu.in_. The Chief/Deputy Superintendent of examinations shall upload all details of these malpractice(s) in the KTU login and DAC shall recommend the level of punishment as is done at institutional level.

3.4.10.1.k.   DES shall inspect the 'Stock register' and 'Dispatch register' maintained in the examination control room and make sure that these are updated regularly. Ensure that the last updated page of 'stock register' is marked with consumption of Answer Scripts and plastic pouches on the last examination day and the 'dispatch register' is updated with the latest dispatch details.

3.4.10.1.l.   DES shall verify the storage of used Answer Scripts before its dispatch to valuation Camps, its security, packing, readiness to dispatch, storage of unused barcodes, register maintained for distributing answer scripts to invigilators etc. Accordingly, visit sheet [Refer ANNEXURE-9] isto be completed and a copy of the same shall be mailed to _squad@ktu.edu.in_on the same day of visit.

3.4.10.1.m.   In case of any emergency, the convener is entrusted with selecting a team member(s) to carry out the visit after intimating the matter to the CoE.

_3.4.10.1.n._   If the convener desires to inform any serious issue pertaining to the conduct of Examinations of a college/visit of DES, the same may be mailed to _controller@ktu.edu.in_with cc to _pvc@ktu.edu.in_

3.4.11. Handling of Technical Issues

It is quite possible that due to unforeseen incidents, sometimes the downloading and printing of question papers may be delayed. In such cases, the Chief/Deputy Superintendent should contact the University and ask for remedial action, such as sending the question paper by email. presently there is no provision to add a watermark while sending question paper through mail.

In case of a delay in printing, candidates should be asked to enter the hall at the designated time and complete the verification. If the printing and distribution are delayed by 'm' minutes, the Chief/Deputy Superintendent can extend the exam by 'm' minutes. However, the candidates should be admitted to the hall as per original timings and grace periods should be given. The bells should be sounded accordingly and the revised timings should be announced in all examination halls. The Chief/Deputy Superintendent should report such incidents to the observer and to the University via web portal with reasons for the delay and actual time of commencement.

3.5. NEAR RELATIVES

Father, mother, son, daughter, son-in-law, daughter-in-law, grandson, granddaughter, grandson-in-law, granddaughter-in-law, sister-in-law, brother-in-law, nephew, niece, brother, sister, uncle, aunt, wife, husband and such ones as may be indicated by the University from time to time, are regarded as near relations for the purposes of the examination manual.

3.6. GUIDELINES FOR CONDUCTING WRITTEN EXAMINATION FOR PERSONS WITH BENCHMARK DISABILITIES

In case of persons with benchmark disabilities in the category of blindness, locomotor disability (both arm affected-BA) and cerebral palsy, the facility of scribe shall be given, if so desired by the person. In case of other categories of persons with benchmark disabilities, the provision of scribe can be allowed on production of a certificate to the effect that the person concerned has physical limitation to write, and scribe is essential to write examination on his behalf, from the Chief Medical Officer/Civil. Surgeon/ Medical Superintendent of a Government health care institution as per Proforma at **ANNEXURE -3**

3.6.1. Granting Compensatory Time

All The candidates with benchmark disability not availing the facility of scribe may be allowed additional time of minimum of one hour for examination of 3hours (20 minutes per hour)duration. The CoE on the recommendations of a government medical officer not below the rank of a Civil Surgeon and the Chief /Deputy Superintendent has the power to grant extra time to differently-abled candidates for writing the Examinations. In case the duration of the examination is less than an hour, then the duration of additional time should be allowed on a pro-rata basis. Additional time should not be less than 5minutesandshouldbeinthe multiple of5.

3.6.2. Use of Scribes

The Controller of Examinations has the power to allow scribes for blind candidates and the category of disabled candidates whose disability hinders the candidate from writing, based on the recommendations of a government medical officer not below the rank of a Civil Surgeon. Such students shall be seated in a separate room. The maximum number of students belonging to the above categories allowable into an examination hall shall not exceed five. An invigilator shall be allotted to supervise them (Ratio 1:5).The persons with benchmark disabilities opting for their own scribe should submit details thescribeasperPerforma. The Compensatory time should not be less than 20 minutes per hour of examination for candidates who are allowed use of scribe.

3.6.3. Appointment of Scribes

In case of candidates who are eligible to avail the services of scribes, the University shall authorize the Chief /Deputy Superintendent to nominate scribes according to the following conditions.

3.6.3.a. The scribe shall not be an employee of the college/center where the Examination is conducted.

3.6.3.b. The scribe shall not be a relative of the candidate who is appearing for the Examination.

3.6.3.c. The scribe will not be eligible for any remuneration.

3.6.3.d. The educational level of the scribe should be lower than those of the candidate. [Preferably a Matriculate or above]. The scribe shall not be a graduate/student in the domain concerned or related domains. (eg: A Diploma/B.Voc holder in any branch of engineering shall not be permitted as a scribe for a B.Tech/M.Tech student).

3.6.3.e. An application with declaration in the format given in **ANNEXURE-3**should be obtained from the scribe.

3.6.3.f. The duly filled application form signed by the scribe should be forwarded to University for approval.

3.7. CONDUCT OF END SEMESTER PRACTICAL EXAMINATIONS

University shall conduct End Semester Examinations (ESE) every semester for all Laboratory courses as prescribed under the respective curriculum. The End Semester Examinations for the lab courses will be conducted before the ESE for theory courses. The University will divide colleges into groups such that each group comprises colleges offering a particular programme (maximum 25colleges per group).It is possible that one college can be included in different groups for different programmes. Two colleges (Govt./Aided/Govt. Controlled/Self Financing) in each group shall be identified as active for that programme. One senior faculty (in the level of Professor/Associate Professor) from the active colleges in the group will be appointed by the CoE as the Chairman for S5 to S8, and S1 to S4 for two semesters. The chairmanship will be changed year wise in seniority/rotations basis. On appointing as the chairman, the appointment order will be made available in their login credentials. The CoE will send the list of all mapped Faculty members (during course selection/mapping, two different faculties will be mapped to each batch for all labs/workshops) of that programme for the applicable laboratory/workshop courses to the Chairman.

Chairman is the authority to assign examiners and to prepare the end semester examination schedule for the laboratory courses. Chairman shall prepare the practical examination schedule (the number of candidates evaluated per day shall not exceed 25) along with the list of examiners for each college. This appointment along with the examination schedule will be communicated to the CoE by the Chairman who in turn will communicate to all colleges. The Institute shall publish the detailed schedule of examination. While appointing as examiners, the Chairman should ensure that one mapped faculty is assigned the role of internal examiner and the other mapped faculty as external examiner. The chairman can appoint one set of examiners (internal and external) from the mapped list for one batch. If an examiner is listed in multiple course mappings, he/she shall be posted as internal examiner for one course and as external examiner to the other course. If there are

two practical courses for a programme in a semester, the end semester examination shall be scheduled in parallel. The examiners assigned shall attend the duty as examiner as per the schedule. Schedule of the examination cannot be changed under any circumstance. Change of examiners is permitted only in most deserving cases. In case any examiner is unable to engage the duty, he/she shall inform the Chairman regarding the inconvenience with a substitute. The Chairman is authorized to change the examiner ship. The chairman shall inform such changes in examiners to CoE within one week.

Evaluation is to be conducted under the equal responsibility of both the Internal and External examiners. The marks for the end semester shall be uploaded in the University portal on the last day of the examination by the external examiner in the presence of the internal examiner. There shall be no scrutiny/revaluation for the end-semester practical examinations. All records pertaining to the examinations including question paper, answer books etc. shall be confidentially kept under safe custody of the Principal for a duration of six months.

3.7.1 General Instructions to be Followed While Conducting End Semester Practical Examinations

3.7.1.a   Evaluation is to be conducted under the equal responsibility of the internal and external examiners appointed by the University.

3.7.1.b   The assessment pattern gives equal weightage to CIE and ESE of 75 marks each, with total marks equal to 150.

3.7.1.c   The attendance of examiners shall be marked for each day by the respective college as in the case of an observer.

3.7.1.d   The number of candidates evaluated per day should not exceed 25. Candidates shall be allowed for the Examination only on submitting the duly certified laboratory record. The external examiner shall endorse the record.

3.7.1.e   The marks for the end semester shall be submitted to the University portal on the last day of the exam in the presence of both the internal and external examiners, if the University portal is open or on the date specified by the University by the external examiner. The final marks signed by both internal and external examiner should be kept in the safe custody of examiners.

3.7.1.f   The marks distribution pattern for the end semester Examination s should be strictly in accordance with the syllabus of the respective laboratory course.

SECTION- III POST-EXAMINATION PHASE

4. PREPARATION OF SCHEME AND ANSWER KEY

The quality of the valuation system mainly depends on the quality of question paper, scheme of valuation and answer key. On many instances, complaints regarding schemes of valuation have been obtained. One of the reasons for the difference of marks in different valuations is lack of clarity of the scheme of valuation.

If the question paper check mechanism is proper, there shall not be any errors in the question paper setting, Scheme of Valuation and Answer keys. Hence, the faculty members appointed as question paper setters should prepare a detailed answer key and Scheme of valuation. The role of Scrutiny members is also very important and as their degree of involvement directly affects the quality of Question papers and scheme of valuation. Maximum number of question papers that can be scrutinized by a scrutiny member is limited to 2-3 question papers (including shuffling of Questions) per day. The remuneration of question paper setters. All question paper setters & Scrutiny members have to sign a checklist. In addition, a scrutiny member has to submit the following declaration also.

Declaration Regarding the Quality of Question Paper and its Scheme of Valuation

I hereby certify the following.
1)   I understand that I will be personally responsible for any lapses in the setting of question papers and scheme of valuation.
2)   I have made sufficient changes in the question paper and scheme of valuation to ensure that the Question paper and scheme of valuation are proper.
3)   There are no questions which are out of syllabus or out of scope of the syllabus. Question paper conforms to the prescribed format specified in the syllabus.
4)   Scheme of valuation has been prepared with the following details.
   i)   In case of problem questions, the scheme contains each step of computation and the final answer.
   ii)   In case of descriptive questions, the detailed answers incorporating relevant block diagrams, figures, graphs, tables, etc. have been incorporated in the scheme.
   iii)   If there is more than one approach for answering a question, all the approaches have been included in the scheme of valuation.
   iv)   Step-wise distribution of marks has been included in the scheme for each question.

Name & Signature of the scrutinizer
Date:

4.0. FINALIZATION OF SCHEME FOR VALUATION AND ANSWER KEY

After the conduct of an examination, the University will forward the scheme and Answer key of the question paper used for the examination to all the faculty members who are in the course mapping list. Faculty members shall forward their Feedbacks / suggestions to the Chairperson, Board of question paper setter of the said course. The Chairperson will convene a meeting of faculty members and discuss all the feedback / suggestions received and will prepare a final scheme of evaluation and / or answer key. The scheme of evaluation and answer key approved by the

chairperson concerned will be final and all the examiners shall follow the same for the evaluation of answer scripts. The approved scheme and answer key will be uploaded / forwarded to all the valuation camps by the University.

4.1. VALUATION OF ANSWER SCRIPTS

The major activities involved during this phase includes the collection and verification of answer scripts, distribution of answer scripts to the examiners, valuation of answer scripts by various levels of examiners, providing necessary instructions and monitoring the valuation process, tabulation of the marks and returning the valued answer scripts to University for revaluation purpose. All the activities of this phase will be under the direct control of Camp Officer.

Faculty members who taught the course in a semester shall act as an evaluator / examiner in valuation camps. In case of absence of examiners, Head of the Institution / Principal shall depute a competent faculty to the valuation camp for the evaluation of answer scripts in valuation camp. In case of supplementary examinations and examinations of old schemes of various programmes, faculty members taught the course in any previous semesters can act as examiners.

A flow chart showing the workflow in a valuation Camp for UG Examination is given below.


```
            Commencement of
            Valuation Process
                   │
                   ▼
    Receiving Answer Script Bundles at CV Camp
                   │
                   ▼
        Inspection/Verification of Received
            Answer Scripts / Bundles
                   │
                   ▼
         Constituting Panel of Examiners
               by  Camp Officer
                   │
                   ▼
        Posting of Chairpersons by Camp Officer
                   │
                   ▼
       Assigning Chief/Additional Examiners from
          Panel of Examiners by Chairperson
                   │
                   ▼
      Distribution of Answer Scripts to Examiners
               by Camp Assistant
                   │
                   ▼
         Monitoring of Progress of Valuation
               by Chairperson
                   │
                   ▼
       Mark Entry on KTU Portal and Returning of
      Valued Answer Scripts by Additional Examiners
                   │
                   ▼
      Revaluation of Answer Scripts by Chief Examiner
                   │
                   ▼
       Receiving the revalued Answer Scripts and
            Mark Lists by Camp Assistant
                   │
                   ▼
            End of Valuation Process
```

4.2. VALUATION CENTERS

The valuation of answer scripts will be done at different centers, with each center comprising clusters of colleges/Institutions. However, the CoE has the privilege to conduct the valuation Camp at the University, on special circumstances. The Principal of the institution will be the responsible person for the valuation center in his/her institution and he/she should strictly ensure that the near relative of any candidate who has appeared in the examination concerned is not assigned any duties in connection with the valuation of the examination concerned. Hence a declaration from the Camp Officer will be collected by the Principal of the valuation center before the commencement of the valuation.

4.3. VALUATION CAMP

Each center will have a valuation Camp for all the programs offered in the cluster of colleges/Institutions. Camp Officer, preferably a senior professor of the college appointed by the CoE on recommendation by the Principal, will be the responsible person for the valuation Camp. The Camp Officer is responsible for arranging all facilities for the valuation Camp in consultation with the Principal. The Camp Officer shall oversee and monitor the valuation in his/her center.
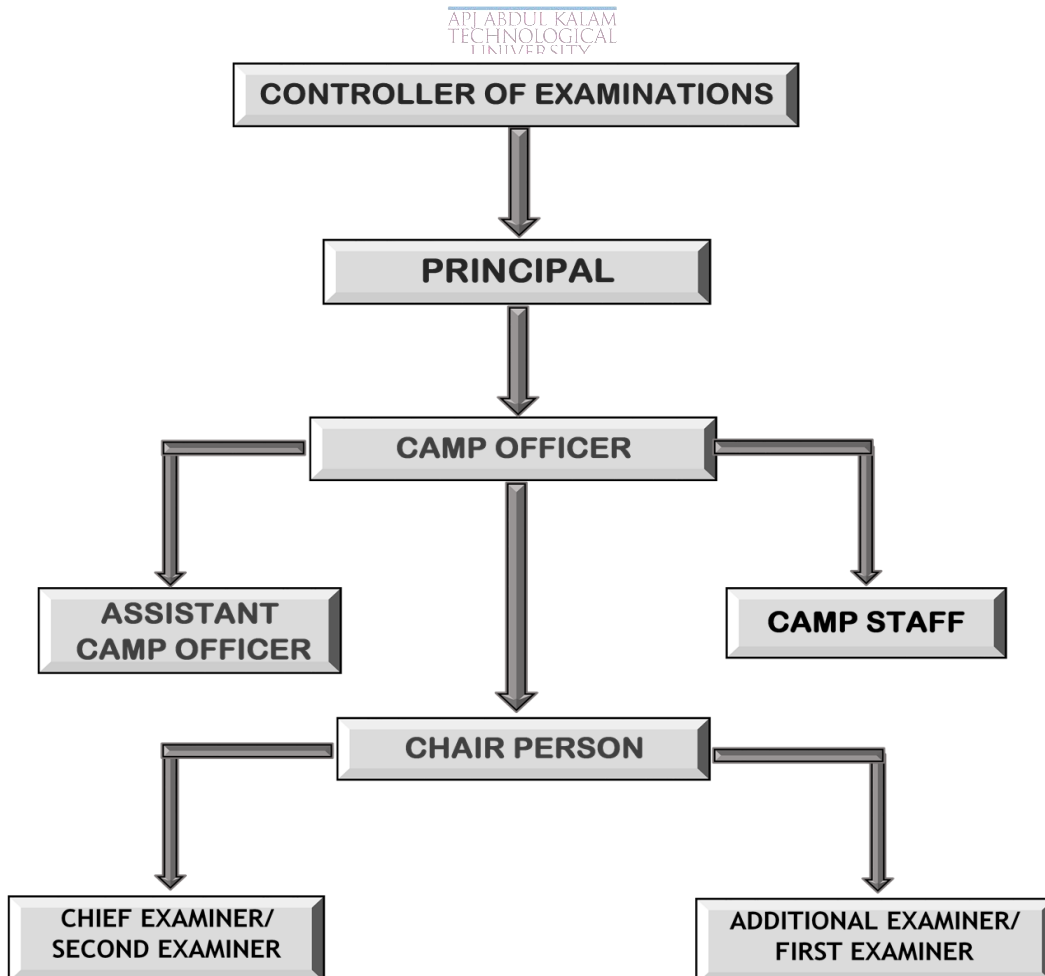
4.4. CAMP OFFICIALS

The smooth and fair conduct of the valuation Camp is the prime responsibility of all Camp officials appointed for the centralized valuation Camp. The details of the responsibilities of Camp officials are explained in the following section.

4.4.1. Principal

The Principal of the college/Institution, where centralized valuation Camp is conducted, is responsible for the smooth and fair conduct of the Camp.

4.4.1.1. Duties and responsibilities of Principal (of the CV Camp)

4.4.1.1.a   Propose faculty members as Camp Officer, Chairperson, Assistant Camp Officer etc.

4.4.1.1.b   Appoint Camp staff as per instructions from the CoE.

4.4.1.1.c   Provide infrastructure and support for the conduct of centralized valuation camp.

4.4.1.1.d   Convene meeting of Principals of all associated colleges to ensure smooth conduct of valuation and its timely completion.

4.4.1.1.e   Monitor progress of valuation and revaluation in concerned camp and ensure timely reporting to the University whenever required.

4.4.1.1.f   In charge of all registers and files maintained in valuation camp.

4.4.1.1.g   Forward all valuation/revaluation related communications (email/messages) from University to all concerned faculty members in time.

4.4.1.1.h   Custodian of all materials/equipment in the valuation camp.

4.4.1.1.i   All responsibilities mentioned in 3.4.2

4.4.1.2. Duties and responsibilities of Principal (of affiliated colleges)

4.4.1.2.a.   Depute faculty members for valuation and revaluation as per valuation schedule.

4.4.1.2.b.   Substitute suitable faculty members of the same stream/branch or discipline for valuation/revaluation in the absence of a course mapped faculty member/examiner posted.

4.4.1.2.c.   Convene meeting of faculty members to ensure the quality of valuation and to ensure cooperation and participation of all faculty members in the valuation process to complete valuation as per schedule.

4.4.1.2.d.   Forward all valuation/revaluation related communications (email/messages) from University to all concerned faculty members in time.

4.4.1.2.e.   Actively communicate with the Principal of the associated valuation camp and ensure timely completion of the valuation/revaluation in the camp.

4.4.1.2.f.　Granting of duty leave to faculty members attending valuation camps

4.4.1.2.g.　Attend the meeting convened by the Principal of the associated valuation camp as and when required and take steps to avoid any bottleneck in the valuation process.

4.4.2. Camp Officer

The Camp Officer will be responsible for the smooth conduct of all valuation camps of the college and it will be his/her duty to do all the preparatory works related to the conduct of valuation camp, the valuation of the answer scripts and all other contingent matters connected with the valuation camp. A Camp Officer will be a senior Professor of the College/Institution (where the camp is conducted) posted by the Controller of Examination on the recommendation of the Principal of the College/Institution. The Camp Officer shall constitute a panel of examiners from colleges associated with the valuation camp for each examination. All members of the panel of examiners will be responsible for the timely completion of valuation.

4.4.2.1. Duties and responsibilities of the Camp Officer

4.4.2.1.a.　Ensure all necessary infrastructure (Space, furniture, equipment etc.) for the conduct of the centralized valuation camp.

4.4.2.1.b.　Assist Principal to propose Assistant Camp Officer for the smooth conduct of the valuation camp.

4.4.2.1.c.　Assist Principal to appoint Camp staff as per the instructions from the CoE.

4.4.2.1.d.　Constitute "Panel of examiners" by including examiners appointed for valuing the answer scripts of a particular Examination.

4.4.2.1.e.　Receive answer scripts at the Camp, inspect and ensure the correctness in terms of packet code, count etc., with the help of the Camp staff, report any mismatches through the portal/mail to the CoE /University.

4.4.2.1.f.　Inform details of wrongly arrived answer scripts/packets to University within one day of its receipt.

4.4.2.1.g.　Inform details of answer scripts/packets not received at the Camp in time through portal/mail to the University.

4.4.2.1.h.　Depute faculty members for valuation and revaluation as per valuation schedule.

4.4.2.1.i.　Substitute suitable faculty members of the same stream/branch or discipline for valuation / revaluation in the absence of a course mapped faculty member/examiner posted.

4.4.2.1.j.　Convene meeting of faculty members to ensure the quality of valuation and cooperation and participation of all faculty members in the valuation process and to complete valuation as per schedule.

4.4.2.1.k.　Hand over the correct scheme, answer key and Question Paper to examiners (in the absence of Chairperson) or ensure the correctness of the same when they are

brought to valuation Camp by faculty members when downloaded through their own login.

4.4.2.1.l. Convene the meeting of Chief examiner(s) and additional examiner(s) on the very first day of commencement of valuation of a particular course (in the absence of Chairperson).

4.4.2.1.m. Manage absence of examiners (call/mail/report to Principal of parent institute of the examiner) with the help of Chairperson.

4.4.2.1.n. Report absence of faculty members in valuation Camp through portal/ mail as required by the University.

4.4.2.1.o. Granting of duty leave to faculty members attending valuation Camps (for actual days of duty).

4.4.2.1.p. Monitor the activities of Camp assistants/Camp clerk/data entry operator in valuation Camp and ensure the correctness in discharging their duties and report the issues (if any) to the Principal or to the University through the Principal.

4.4.2.1.q. Receive reports from examiners on suspected cases of malpractice (copying/exact copy from textbooks /inappropriate words in answer scripts /barcode tampering/different handwriting, revealing identity, missing answer book pages etc.), forward to University, and follow the procedure as per the instructions from the University.

4.4.2.1.r. Ensure sufficient space (halls, classrooms etc.) for examiners in valuation Camp to conduct the valuation in a peaceful ambience.

4.4.2.1.s. Ensure sufficient space within camp to store answer scripts of a different category (like not prepared/prepared not distributed/distributed and returned after first valuation/returned after second valuation/return marked etc.) in a segregated manner to manage them efficiently etc.

4.4.2.1.t. Ensure availability of sufficient number of computers, barcode readers to enter the marks for examiners and for camp staff to manage packets.

4.4.2.1.u. Ensure that registers used in valuation camps (stock register, inward register, dispatch register, issue register or any other registers as instructed by the University) are maintained in the correct format and are updated in time.

4.4.2.1.v. Timely updation of files maintained in the Camp that includes documents like: posting order produced by examiners, copies of Question Paper, scheme and answer key after use (to be used later for revaluation), copies of duty certificates issued etc.

4.4.3. Assistant Camp Officer

Assistant Camp Officer shall be an associate/assistant professor with minimum 5 years' experience of the college/Institution (where the Camp is conducted) posted by the Principal of the college/Institution. Assistant Camp Officers shall assist the Camp Officer in all his/her duties and take

over the charges of the Camp Officer in his/her absence with the permission of the Camp Officer / Principal.

4.4.3.1. Duties and responsibilities of Assistant Camp Officer

4.4.3.1.a.   Assist the Camp Officer for all the day-to-day activities of the valuation Camp.

4.4.3.1.b.   Assist the Camp Officer in arranging the facilities for centralized valuation Camp.

4.4.3.1.c.   Supervise the verification process of the answer scripts received from the University.

4.4.3.1.d.   Update the progress of valuation to the Camp Officer.

4.4.3.1.e.   Follow up the valuation process with examiners.

4.4.4. Camp Staff

The following officials are designated as Camp staff for the smooth conduct of the valuation Camp.

4.4.4.1. Camp Assistant

The Camp assistant will be appointed by the respective college Principal where the Camp is conducted as per the directions from the University. The duties and responsibilities of the Camp assistant are listed below:

4.4.4.1.a.   Receive answer scripts at the Camp, update inward register, inspect and ensure the correctness in terms of packet code, count etc. and report any mismatches through to Camp Officer.

4.4.4.1.b.   Inform details of wrongly arrived Answer Scripts/packets to Camp Officer within one day of its receipt.

4.4.4.1.c.   Inform details of answer scripts/packets that have not reached the Camp on time to the Camp Officer.

4.4.4.1.d.   When answer scripts are required to be moved to another Camp (or to University) for valuation/revaluation, pack them, handover to the University as instructed by the CoE, update the dispatch register and collect the signature of the receiving staff.

4.4.4.1.e.   Prepare the packets in the portal and ensure that all the Answer Scripts in a packet are of the same course. Report mismatch, if any to University.

4.4.4.1.f.   Distribute Answer Scripts to examiners, update issue register at the time of distribution, collect the signature of the examiner, enter distribution status in the portal, update issue register at the time of receiving Answer Scripts/packets, cross verify the count of Answer Scripts and put signature in the register, enter packet reception in the portal and prepare "Box" in the portal.

4.4.4.1.g.   Store Answer Scripts of different categories (Answer Scripts of different categories like: not prepared/prepared not distributed/distributed and returned after first

valuation/returned after second valuation/returned marked etc.)in a segregated manner to manage them efficiently.

4.4.4.1.h.   Assist Camp Officer and Assistant Camp Officer in updating the files maintained in Camp.

4.4.4.1.i.   Assist Camp Officer and Assistant Camp Officer to update the stock registers.

4.4.4.1.j.   Assist Camp Officer and Assistant Camp Officer in reporting the absence of examiners to the University.

4.4.4.1.k.   Scan the Answer Scripts (against requests received after result declaration) and handover to Camp Officer for uploading/sending to University through the postal department as per instructions.

4.4.4.1.l.   Identify revaluation requested Answer Scripts against requests received after the declaration of results, scan the barcodes of Answer Scripts in the portal, generate packet codes, remove first valuation tabulation sheet and pack Answer Scripts to be moved to another Camp as per the instructions provided by University.

4.4.4.1.m.   Make any other editing or entries in the portal as per the instructions from the University to facilitate tracking of Answer Scripts/packets.

4.4.4.1.n.   Any other duties connected to the valuation process, as entrusted by the Camp Officer

4.4.4.2. Data Entry Operator

4.4.4.2.a.   The data entry operator will be appointed by the respective Principal of the college where the Camp is conducted as per the directions from University. The duties and responsibilities of the Data entry operator are given below:

4.4.4.2.b.   Assist Camp Officer and Assistant Camp Officer in setting up of computers, barcode readers, scanners etc. at the beginning of a valuation session.

4.4.4.2.c.   Maintenance of electronic equipment used in valuation Camp.

4.4.4.2.d.   Take over the charge of Camp assistant in case of absence as per the direction of Camp Officer/Assistant Camp Officer.

4.4.4.2.e.   Any other duties connected to the valuation process, as entrusted by the Camp Officer.

4.4.4.3. Camp Clerk

The Camp clerk will be appointed by the Principal of the college where the Camp is conducted as per the directions from University. The duties and responsibilities of the Camp clerk are given below:

4.4.4.3.a   Assist Camp Officer and Assistant Camp Officer in setting up of Camp in the beginning of a valuation session.

4.4.4.3.b   Take over the charge of Camp assistant in case of absence as per the direction of Camp Officer/Assistant Camp Officer.

4.4.4.3.c   Assist Camp Officer and Assistant Camp Officer in updating the files maintained in the Camp.

4.4.4.3.d   Assist Camp Officer and assistant Camp Officer in updating the stock register.

4.4.4.3.e   Any other duties connected to the valuation process, as entrusted by the Camp Officer.

4.5. VERIFICATION OF ANSWER SCRIPTS

On receipt of answer book bundles from the Examination centers, the supporting staff shall inspect that the packing of the answer book bundles are as per the instructions issued by the University and the seals are intact. If any tampering of the seals or any other abnormality is noticed, it shall be brought to the notice of the Camp Officer immediately. The supporting staff should also ensure that the concerned Examination center puts no identification marks on the answer book packets and the candidates have used the prescribed answer scripts issued by the University. If any discrepancy is found in the total number of answer scripts received, the same should be intimated by the Camp Officer to the CoE.

4.5.1   Verification Process

4.5.1.a   All the consignments / bundles received in valuation camps from exam centres will carry a filled up "Consignment details" format which will hold details of all the packets placed inside the bundle. Camp staff who opens the bundle should verify the packets and count of answer scripts in each packet with respect to the data shown in 'consignment details' format received. Any disparity should be notified to the University on the same day itself without fail.

4.5.1.b   Following are the various disparity which should be reported to University without Delay:

   i.   If filled up 'consignment details' format is not available in the bundle
   ii.   If a packet mentioned in 'consignment details' format is not physically available in the bundle.
   iii. If a packet not mentioned in 'consignment details' format is available in the bundle.
   iv.   If the physical count of answer scripts mentioned in the 'consignment details' format against a packet is less than or more than the actual received answer book count.
   v.   If any packet contains an answer book of a wrong course or any additional answer book not mentioned in 'consignment details' format is present in the bundle.

4.5.1.c   'Consignment details' format received from bundles should be filed in the valuation Camp for future reference.

4.5.1.d   All valuation camps should maintain an 'Inward register' which will record details of all answer scripts received from the University / exam centre.

4.5.1.e   Even if a packet received in camp is not intended for the camp (a wrongly receivedPacket), the same should be recorded in 'Inward register' and when sent to another camp that details also should be entered in 'Dispatch register'.

4.5.1.f   Details of wrongly delivered answer scripts should be reported to University within1 day of receipt of the same. University will take steps to re-route the same to the correct destination.

4.6. CHAIRPERSON

The Camp Officer shall nominate a senior faculty member not below the rank of an associate professor of the department concerned, as the Chairperson of the board of valuation for each course or a group of courses/common courses, of each semester for all branches in each valuation center. He/she can be from the college where the Camp is conducted or from an associated college of the valuation Camp. However, this may be waived by the Camp Officer in special cases for each branch of study. For the first-year courses, there shall be one Chairperson for each course. In case of common courses in higher semesters (like Business economics / Life skills etc.), there shall be one Chairperson for each course. In case of supplementary Examinations, there shall be one Chairperson only for all courses of a semester. The Chairperson should appoint Chief examiner(s) and additional examiner(s) for each course. The Chief examiner should be a senior faculty member who has handled that course and additional examiner(s) should have a minimum two years of teaching experience in that course. The Chairperson should give guidelines to the Chief examiners/ second examiners regarding valuation and monitor the progress of valuation. He/she shall recommend alternative examiners in case the appointed examiner does not turn up for duty. The Chairperson has the right to select the appropriate valuation system ie. either the first examiner and second examiner system or Chief and additional examiner system, for the smooth conduct of the valuation of answer scripts.

4.6.1. Duties and Responsibilities of the Chairperson.

4.6.1.a.   Assign Chief examiner(s)/second examiner(s) and additional examiner(s)/first examiner(s) for each course in consultation with the Camp Officer.

4.6.1.b.   Coordinate preparatory meetings of Chief examiner(s)/second examiner(s) and additional examiner(s)/first examiner(s) prior to the commencement of valuation of a particular course and convey the importance of maintaining quality and consistency of valuation. Meeting of Chief and additional examiners shall be conducted in offline/online mode.

4.6.1.c.   Ensure that the minutes of the preparatory meeting and its proof have been sent by the Chief examiner(s) with cc to mail ID of Camp Officer to*valuation@ktu.edu.in*, immediately after the meeting.

4.6.1.d. Ensure that the Chief/second examiner(s) and additional examiner(s)/first examiner(s) have discussed the scheme of valuation and answer key, provided by the Question Paper setter, in a common sitting before the first day of valuation of the course.

4.6.1.e. Communicate any error or correction suggested/reported by the Chief examiner to the Chairperson of the Scrutiny Board and the correction should be uniformly informed to all the Camps simultaneously by the Chairperson of the Scrutiny Board. No change in answer key/scheme will be allowed after the first day of valuation. It is the pertinent responsibility of the chairman, Scrutiny Board to ensure that the valuation of a course takes place with a single scheme/answer key throughout all the valuation Camps in the state.

4.6.1.f. Ensure that the valuation of all courses in his/her discipline in the Camp is going on as per valuation schedule.

4.6.1.g. Report the absence of any faculty member in his/her discipline in the Camp to the concerned principal.

4.6.1.h. Report the absence of faculty members to the Camp Officer so that Camp Officer can consolidate information received from all Chairpersons and report/send the details to the University.

4.6.1.i. Receive reports from examiners on suspected cases of malpractice (similar answers in multiple Answer Scripts/exact copy from textbooks/inappropriate words in Answer Scripts /barcode tampering/different handwriting, revealing identity, missing answer book pages etc.) and forward the same to the Camp Officer.

4.7. CHIEF EXAMINERS

The Camp Officer shall appoint a senior faculty member as the Chief examiner for each course who shall be a mapped faculty member to that course during the current semester or previous semesters. There may be more than one Chief examiner for a course depending on the number of answer scripts to be valued. The ratio between Chief examiner to additional examiner shall be preferably 1:3.

The Chief examiner shall sit together with the additional examiners and discuss the answer key and scheme of valuation on the first day of valuation, before starting the valuation. There will be one Chief examiner and up to three additional examiners in a team for a course in a Camp. If the number of answer scripts is large and sufficient additional examiners are available in the Camp, there may be more than one Chief examiner for a course in a Camp. In such a case, all Chief examiners and additional examiners assigned to a course shall sit together and discuss the answer key and scheme of valuation.

4.7.1. Duties and Responsibilities of the Chief Examiner

4.7.1.a. Convene preparatory meeting of additional examiner(s)/first examiner(s) of a particular course at least one week before the commencement of the Examination

and convey the importance of maintaining quality and consistency of valuation. Meeting of additional examiners shall be conducted in offline/online mode.

4.7.1.b.   Forward the minutes of the preparatory meeting and the proof of meeting (photo/google meet screenshot etc.) to the email ID:*valuation@ktu.edu.in*, immediately after the meeting with cc to mail ID of Camp officer. [Format is given in ANNEXURE-10].

4.7.1.c.   Give guidelines to the additional examiners to ensure uniform valuation among different examiners.

4.7.1.d.   Report any error in the answer key or scheme of valuation to the Chairperson.

4.7.1.e.   Inspect rigorously, all the answer scripts valued by additional examiners on the first day of valuation, for any deviation from the scheme of valuation, variation in marks, inconsistency if any, incompleteness, error in awarding marks, error in addition etc. and give feedback to additional examiners.

4.7.1.f.   Revalue a minimum of 20% of answer scripts selected at random, valued by each assistant examiner and enter the marks in the portal. Revalue all answer scripts with marks awarded between 30 and 40 % for the B Tech 2019 scheme and 35 to 45% for previous schemes. (Generally the answer scripts with marks awarded between (N-1)% and (N-10)% are revalued (including both marks), where N is minimum percentage of mark required for a pass in end semester Examination)

4.7.1.g.   Scrutinize all the valued answer scripts to ensure that:

    i.   Marks are awarded to all the answered questions, even if the mark is zero.

    ii. Addition of marks are correct.

    iii. Marks for redundant questions are not counted, if choice (either …. or)

    Questions are also answered by the candidate.

4.7.1.h.   Approve and forward marks awarded by the additional examiners after making corrections, if any.

4.7.1.i.   Report any malpractice or copying of answers identified during valuation to the Chairperson/Camp Officer.

4.8. ADDITIONAL EXAMINERS

The Camp Officer shall appoint additional examiners for each Course who shall be a mapped faculty member to that course during the current semester or previous semesters. The additional examiner for a course shall be a faculty member who taught the course in the current semester or previous semesters. In the absence of an additional examiner or Chief examiner from a college, Principal of the college shall depute a competent faculty member from the same or relevant discipline as a substitute. Additional examiners appointed by the Camp Officer, should report to the respective Chief Examiner with a print out of the appointment letter for valuation. Additional examiners shall start valuation only after receiving the approved key and scheme for the course. The valuation must be done with utmost care and secrecy. Minor mistakes from the side of candidates such as the omission of question number or incorrect question number may be overlooked judiciously. Any

negligence or lack of seriousness on the part of the examiner will be viewed seriously and appropriate action, including fine will be imposed on the examiner.

4.8.1. Duties and Responsibilities of the Additional Examiner

4.8.1.a. Discuss the answer key and scheme of valuation with the Chief examiner and other additional examiners before the commencement of valuation. Additional examiner should not start valuation without discussion of answer key and scheme of valuation with the Chief examiner (except for answer scripts for which single valuation is allowed)

4.8.1.b. Report any error or discrepancy of answer key or scheme of valuation to the Chief examiner on the first day of valuation itself.

4.8.1.c. Write packet code and packet serial number on all Answer Scripts received in specified space.

4.8.1.d. Conduct the valuation with utmost care and secrecy. It must be done according to the guidelines given by the Chief examiner and as per the answer key and scheme of valuation such that it will not vary on valuation by another examiner.

4.8.1.e. Award marks to all attended questions, even if it is zero. No answer should be left unvalued.

4.8.1.f. Ensure that there is no error in addition and marks for redundant questions are excluded.

4.8.1.g. Enter marks only in the specified space provided in the front sheet of the answer book. No marking, crossing and writing are permitted in the answer book in any space other than the space for entering marks by examiners.

4.8.1.h. Round off the grand total of the marks to the next higher whole number in case the decimal portion is equal to or greater than $0.5\left(\frac{1}{2}\right)$ and to the nearest lower whole number if the decimal portion is less than 0.50 (Eg.25.50 shall be rounded off to 26 and $25.25\left(\frac{1}{4}\right)$ shall be rounded off to 25.00). No rounding of marks shall be permitted for subtotals if any in the score sheet.

4.8.1.i. Report any type of malpractice or copying of answers identified during valuation to the Chief examiner.

4.8.1.j. Conduct the scrutiny of marks meticulously.

4.8.1.k. Enter all the marks into the e-portal with utmost care and secrecy.

4.8.1.l. Cross-check thoroughly before submitting final marks in the e-portal.

4.8.1.m. Collect the receipt of valuation from Camp Officer and keep it for a minimum period of six months as proof of returned Answer Scripts and produce it at any time as and when University demands it.

The number of Answer scripts to be valued is shown below.

Name of the Programme	Day 1	Day 2 onwards
UG	10	25
PG	5	20

When the number of Answer Scripts of a course in a Camp is less than or equal to 25 or when there is only one mapped faculty in the Camp for a course, a single level valuation should be conducted. It will be applicable to all UG programmes such as B.Tech, B.Arch, BHMCT, B.Des etc. In such cases, a second examiner as Chief examiner is not required to complete valuation.

4.9. DISTRIBUTION OF ANSWER KEY

In order to improve the transparency of the valuation process, the Chairperson should take initiatives to distribute the scheme of evaluation and answer keys prepared by Question Paper setters to the evaluators well in advance.

4.9.1. Instructions for Valuation of Answer Scripts

The guidelines to be followed by examiners while valuing the answer scripts are listed below:

4.9.1.a.   The examiners should be relieved from all other duties during valuation.

4.9.1.b.   On the first day, before assigning papers to additional examiners, the Chief examiner should convene the preparatory meeting (Online or offline) following the prescribed procedure. The minutes/report of the meeting and proof of the meeting (photo/google meet screenshot etc) in the prescribed format [ANNEXURE-10] should be send to *valuation@ktu.edu.in*

4.9.1.c.   In the beginning, additional examiners should submit one or two-valued answer sheets (or send a scanned copy by mail) to the Chief examiners and the Chief examiner should verify the same. The valuation should be continued only after getting approval from the Chief examiner.

4.9.1.d.   From the second day onwards, 15 papers should be valued during the morning session and 10 papers should be valued in the afternoon session.

4.9.1.e.   The Evaluator shall be solely held responsible for any wrong entry in the portal.

4.9.1.f.   During CV Camp, the paper valuation must be conducted within the Camp itself and answer papers should not be taken out of the Camp.

4.9.1.g.   The Chief examiners must scrutinize all the papers and at least 20% of the papers must be compulsorily revalued by him/her.

Proforma for appointing Board of examiners is shown below.

Sl No.	Details of Examiner	Name of faculty member	Department	Name of College	Signature
1.	Additional Examiners/First Examiner				
2.					
1.	Chief Examiner /Second Examiner				
2.					

4.10. VALUATION PROCEDURE FOR PG EXAMINATIONS

The valuation of answer scripts of M.Tech Examinations should be done at the CGPC centers. The answer papers of M.Tech Examinations should be valued by two examiners. The two examiners will preferably be from two different colleges in the cluster. The average of marks obtained in the two valuations will be taken for grading. If the difference in marks obtained in two valuations exceeds 15% of the maximum marks for the course, it will be evaluated by a third examiner and the average of the closest two marks to the advantage of the candidate shall be considered for grading.

4.10.1. Chairperson

A Chairperson will be posted at each center for each branch. The Chairperson will be Professors/associate professors of colleges affiliated with the University with more than 10 years of experience. The Chairperson has to give guidelines to the examiners regarding valuation and monitor the progress of valuation. He/she shall recommend alternative examiners for third valuation in case it is needed.

4.11. SCANNING OF ANSWER SCRIPTS AT VALUATION CAMP

If no faculty member is available to assign for valuation and if number of Answer Scripts to be valued are less than or equal to 25, Camp Officer can scan the Answer Scripts at valuation Camp and send to another Camp or to University in soft- form for valuation, revaluation or third valuation.

4.12. KEEPING OF ANSWER SCRIPTS AFTER VALUATION

The answer scripts after valuation are to be bundled, properly recorded and kept in safe custody for easy retrieval at the centers for 180 days from the date of publication of results. The Camp Officer should hand over the valued answer paper for the purpose of revaluation or other purposes to the

University official on demand in the minimum time. The valued answer sheets should be collected from each Camp by the University at regular intervals.

4.13. NORMS FOR CONDUCTING PASS BOARD MEETING AND AWARDING MODERATION

4.13.1 Conduct of Pass Board Meeting

The procedure for conducting the Pass Board meeting is given below:

4.13.1.a Pass Board meetings in respect of each programme shall be convened for finalizing the results of examinations.

4.13.1.b Meetings shall be convened once the valuation completion status of all courses offered under the programme reaches 80% and above.

4.13.1.c There will be a Pass Board for examinations of each semester of a programme. Eg. There will be different Pass Boards for Sixth Semester Examinations and Eighth Semester Examinations of B.Tech. Mechanical Engg. The Structure of PassBoard will be as follows:

I. Chairperson of the Question Paper setters of the Examination concerned. He/she will also be the Chairperson of the Pass Board.

II. One of the members who have scrutinized one of the question papers of the examination concerned.

III. One of the Chief Examiners of any course in the particular semester.

IV. Two of the Additional Examiners of any course(s) in the particular semester.

V. A faculty, preferably from a different branch of study at the level of Associate Professor or Professor, nominated by the CoE.

VI. Presence of the members specified as I,II&V are compulsory for the Passing Board. However, the quorum of the Passing Board shall be 4 members.

4.13.1.d Usually, the venue of the Pass Board meeting will be the Confidential Section of the University unless otherwise decided.

4.13.1.e The norms of awarding moderation are detailed in the next section.

4.13.1.f Minutes of the meeting shall be recorded in the prescribed format and the minutes duly filled and signed by the members of the pass board shall be submitted to the CoE for approval.

4.13.1.g The minutes of the Pass Board shall be put up for the approval of the Controller of Examination. The modifications approved by the CoE shall be incorporated in the tabulated results.

4.13.1.h The members of the pass board shall take utmost care to keep the confidentiality of result projection, minutes of meeting and other proceedings of the meeting.

4.13.2. Norms for Awarding Moderations in University Examinations

.

4.13.2.a   The programme of study refers to the name of the degree. Branch of Study is the Specialization of the degree. Eg. In case of B.Tech. Electronics & Communication Engg, B.Tech. is the Programme of Study and Electronics & Communication Engg. is the Branch of Study. Courses refer to the subjects the student studies for a programme of study. As an example, in third semester B.Tech. Electrical & Electronics Engg., as per the curriculum there are 8 subjects, numbered as MAT201, EET201, EET203, etc. In this case, MAT201, EET201 are some of the courses of B.Tech. Electrical & Electronics Engg.

4.13.2.b   Moderation of marks is a process to assess and refine the evaluation scheme of courses and formulate a common understanding of expected standards and outcomes in each programme offered by the University. It is expected to align the awarded marks/grades well with the expected standards of all the courses in the programme of study to ensure greater consistency in the process of evaluation. Moderation is thus a process/procedure adopted by the University to ensure that the outcome of an evaluation, entrusted by the University, is reasonable, legitimate and consistent. University needs to make sure that there is greater level of consistency in the criteria of evaluation, and that the differences, if any, could be examined and addressed well before finalizing the marks/grades of students.

4.13.2.c   Moderation of marks is in no way, a legitimate right of students.

4.13.2.d   Moderation of marks shall be awarded to students, based on the recommendations of the respective Pass Board appointed by the University for the purpose, subject to the approval of the statutory officer(s) concerned.

4.13.2.e   In order to recommend moderation of marks and distribution of moderation, the CoE shall present detailed statistics of marks with all relevant information to the respective Passing Board. Details such as additional number of students who would secure pass on awarding moderation ranging from 0 to 5% of the total maximum marks of the end-semester examinations of all the theory courses, and the modified semester pass percentage shall be provided to the Pass Board.

4.13.2.f   Based on the feedback from additional examiners and Chief Examiners, the Chairperson of Examinations may forward complaints, if any, related with question papers to the CoE. Faculty members also can submit complaints, if any, related with question papers to the CoE, with specific remarks, through the Head of the Institution. The CoE shall present all such complaints to the Passing Board. The Passing Board is authorized to decide upon any considerations to be given based on the complaints.

4.13.2.g   Moderation shall be awarded to enable a student just to secure a pass in theory courses/subjects registered by him. The total marks recommended by the Pass Board shall be distributed among all the theory courses registered by the student, for enabling the student to pass all the registered theory courses. In case a student got FE

grade for any course in a semester, he will not be eligible for moderation in the particular semester. There will be no moderation of marks for B.Tech Hons., B.Tech. Minor, Contact course exam and Ph.D course work.

4.13.2.h In case the student does not pass all the registered theory courses, after distributing the total moderation among the registered theory courses, no moderation shall be given to any course. It means, moderation of marks can be given only if the student clears all his failed registered theory courses in the semester, through the award of total moderation subject to clauses 4.13.2.k,i. - iv.

4.13.2.i For students who are eligible for grace marks under arts/sports category, moderation of marks will be applied after awarding the grace marks.

4.13.2.j If a student has applied for revaluation or review and his/her marks get modified by revaluation/review, the process of awarding moderation will be applied afresh to the student, for the particular semester.

4.13.2.k Limits of moderation of marks will be as follows:

   i. Moderation can be awarded to students, subject to a maximum of 5% of the total maximum marks of the End Semester University Examinations of all the theory courses registered by the student in the particular semester.

   ii. In case of students who have not registered for all the theory courses in a semester, maximum moderation of marks will be proportional to the number of courses registered. Eg. Assume that the Passing Board decides to award a maximum moderation of 24 marks in a semester which has 6 theory courses. If a student has registered for only 2 courses in the particular semester, the maximum moderation he/she can get is only 24 x 2/6 = 8 marks.

   iii. For a course, the maximum moderation that can be awarded shall be limited to 10% of the maximum marks of End Semester University Examination of the course.

   iv. If a student fails in a single theory course in the semester and passes all the other courses including practical courses of the semester, the limit of moderation can be enhanced to 15% of the total marks of the End Semester Examination of the course concerned. This clause is applicable only if the student has registered for all the theory courses; the clause is not applicable to supplementary examinations.

4.13.2.l All details pertaining to moderation shall be treated as strictly confidential.

4.13.2.m The CoE shall have the right to approve the recommendations of the Pass Board. In case of any disagreement, the CoE shall refer the matter to the Syndicate Standing Committee on Examinations for a review or advice.

The results will be published on the University website. The students can login to the University web portal and download his/her grade card. The colleges can download the consolidated results from the website using their username and password.

4.14. PUBLISHING OF RESULTS

The internal marks and attendance shortage are to be uploaded in the University website by the Principal(s) as per the academic calendar published. The internal mark uploaded by the college Principal(s) and the end semester/trimester Examination mark uploaded by the examiners will be added to arrive at the total marks secured by a candidate for each course. The grades and grade points of a course will be allotted based on this total marks as per the ordinance/regulation for the programme.

4.15. ANSWER SCRIPT COPY REQUEST/SCRUTINY

After publication of the results, candidates can apply for Answer Script copy and revaluation, by registering on the portal by paying the prescribed fee. Candidates can submit their requests through Student login and can make payment through payment gateway in online mode. Late requests for answer script copy or revaluation received within 1 month after the last date will be accepted after a payment of superfine by the student. Fine will be exempted, if the delay was due to technical issues in the portal.

4.15.1 Scrutiny of Answer Scripts

Students who obtained a copy of their answer book through the portal after registering and paying the necessary fee through the portal for a copy of the answer book can do scrutiny of their answer book with the help of faculty members. After scrutiny, complaints having following nature will only be considered for necessary action:

(i)   If certain answers are not valued by the examiner(s)

(ii)   If there is an adding mistake in tabulation sheet

(iii)   Mistake in mark entry in portal (a higher mark written on answer book, but a lower mark is entered in portal)

Complaints on these matters recommended by faculty members of the student's College can be sent to the University. In all the three cases mentioned above, the University will contact the examiner who made a mistake in valuation and will direct the examiner for an error free evaluation and to send a revised mark / tabulation sheet to the University. If there is a revision in mark, the University will make necessary corrections in the mark awarded to students and the result will be republished.

If a student is not satisfied with the low mark awarded by an examiner for any question, it cannot be revised. In such cases, students who are not satisfied with their marks can apply for revaluation.
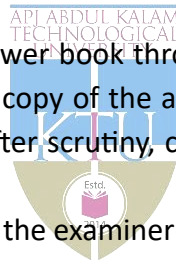
4.16. REVALUATION OF ANSWER SCRIPTS [For UG Examination only]

1) Revaluation is applicable only for theory courses and not for other Examinations such as Practical/Seminar/Thesis/Dissertation etc. A candidate, who is not satisfied with the marks obtained, may apply for revaluation of answer-script of the specific course, subject to the following conditions:

   a) The application for revaluation shall be submitted through the students' portal in the prescribed form.

   b) The application shall be submitted within the time prescribed in the notification publishing the result of the subject.

   c) The application fee will be refunded in full if the marks obtained after revaluation is more than 25% of the maximum end semester marks for the subject and the fee forfeited in case the marks obtained after revaluation is equal to or less than 25% of the maximum end semester marks.

2) Revaluation shall be done by a mapped faculty in the subject notified by the University in the portal. The mapped faculty allotted for revaluation shall be known as 'the revaluer'. In case the answer-script has to be again valued for reasons contained in the Regulations, another mapped faculty other than the 1st examiner, Chief examiner or revaluer of the answer script shall again value the answer script. Such mapped faculty shall be known as 2nd revaluer.

3) Manner of arriving at final marks after revaluation is as follows:-

   a. Where the marks awarded by the revaluer after revaluation is higher by 15% or less of the maximum end semester marks, the average of the marks obtained in the 1st valuation and revaluation shall be the final marks after revaluation.

   b. Where the difference in marks awarded by the revaluer after revaluation and the marks obtained in the first valuation is more than 15% of the maximum end semester marks, the answer script shall be valued again by a 2nd revaluer. However, in the case of B.Des degree, the answer-script will be valued again by a 2nd revaluer, if the difference in marks awarded by the revaluer and in the original valuation is more than 25% of the maximum marks. In such situations where answer-scripts are valued by a 2nd revaluer, the final marks after revaluation shall be arrived at in the following manner:

      i. Assume that the first valuation mark is 10, revaluation mark is 26, and 2nd revaluation mark is 20. In such a case the average of the marks between which the difference is lesser would be the final marks after revaluation. In this case, the marks having lesser difference are 20 & 26. Therefore, the final marks after revaluation will be the average of 20 & 26, which will be 23.

      ii. Assume that the first valuation mark is 10, revaluation mark is 30, and 2nd revaluation mark is 20. Since, the difference between any two of the marks is the same i.e. 10, the final marks after revaluation will be the average of the two

higher marks. In this case, 30 & 20 are higher than 10. Therefore, the final marks after revaluation will be the average of 30 & 20, which will be 25.

   c. Where the mark obtained in the 1st valuation is higher than the marks arrived at in the revaluation then the marks obtained in the 1st valuation would be the final marks after revaluation.

   d. Where the marks arrived at after revaluation is higher than the marks obtained in the 1st valuation, then the final marks arrived at in the revaluation would be the final marks after revaluation.

4) The Controller of Examination shall examine such cases where there is variation of marks above 15% (25% for B.Des.) among first valuation and subsequent revaluations and conduct proper enquiry to see whether any of the examiners are inadvertently responsible for negligent valuation of answer-scripts, and recommend the same for suitable action.

4.17. REVIEW OF ANSWER SCRIPTS

Answer-scripts of various courses of undergraduate/postgraduate/doctoral programmes affiliated to the University, for which examinations have been conducted by the University, can be reviewed as per request by the student concerned who wrote the respective examination. Review applies for improvement of marks and improvement of grade.

4.17.1 Any student may apply for review of answer script subject to the following conditions:

   a. The application for review shall be submitted through the students' portal in the prescribed format provided in the portal.

   b. The application shall contain a copy of the answer script, with recommendation of the faculty of the department under which the subject is dealt with.

   c. Application for review for UG programmes should be submitted within 10 days after the date of publishing revaluation results if the student already holds copy of the answer-script obtained through portal, or within 10 days after obtaining copy of the answer-script after revaluation. A student applying for copy of answer script through portal after revaluation should apply for the same within 10 days of publishing the revaluation result. In the case of PG and Ph.D. programmes, students who wish to apply for review shall make an application for review within 10 days after obtaining the scanned copy of the answer-script through portal.

   d. The application for copy of answer script shall be in the prescribed format and after remitting the prescribed fee provided in the students' portal.

   e. 60% of the application fee shall be refunded in case there is change of grade in the subject after review and fee forfeited in case there is no change in grade in the subject after review.

4.17.2 Procedure to apply for Review

      Review shall be done by a mapped faculty appointed by the Controller of Examinations of the University. Such mapped faculty shall have more than 5 years teaching experience in the subject and recognized as such by the University. The mapped faculty

allotted for review shall be known as 'the reviewer'. The reviewer shall be a mapped faculty other than the 1st examiner, Chief examiner or revaluer or 2ndrevaluer. In case there is no faculty in a particular subject having more than 5 years teaching experience in the subject, the Controller of Examinations may appoint any other faculty in the subject having less than 5 years teaching experience with the approval of the Vice Chancellor.

4.17.3 Manner of arriving at final marks after review shall be as follows:

a) For UG programmes, where the marks obtained in the 1st valuation, arrived at after revaluation and obtained after review are different, the average of the marks with lesser difference shall be the marks arrived at after review.

    i. Assume that the first valuation mark is 10, marks arrived after revaluation mark is 26, and review mark is 20. In such a case the average of the marks of which the difference is lesser would be the final marks after review. In this case, the marks having lesser difference are 20 & 26. Therefore, the final marks after review will be the average of 20 & 26, which will be 23.

    ii. Assume that the first valuation mark is 10, marks arrived after revaluation mark is 30, and review mark is 20. Since, the difference between any two of the marks is the same i.e. 10, the final marks after review will be the average of the two higher marks. In this case, 30 & 20 are higher than 10. Therefore, the final marks after review will be the average of 30 & 20, which will be 25.

    iii. For PG programmes, there is no revaluation. Instead, there is first, second and third (if applicable) valuations. Further, there is a defined procedure to obtain the final mark as per Regulations. This mark may be denoted as the Regular mark of the student in the subject. Hence the final mark after Review, will be the average of the Regular mark and the Review mark. Same procedure is applicable for PhD programmes too.

b) Where the marks obtained in the 1st valuation or marks arrived after revaluation is higher than the marks arrived after review then the higher marks obtained in the 1st valuation or marks arrived after revaluation whichever is higher as the case may be, would be the final marks after review.

c) The result after review shall be final and no appeal shall be entertained thereafter.

d) Late requests for review received within 2 months after the last date will be accepted after a payment of superfine which will be non-refundable even if grade is changed.

4.17.4 Review under Special Circumstances

Special circumstances of conducting review suo moto by the University: The University may **suo moto** review the answer scripts of particular group of students from a particular Institution in a particular subject of a particular examination of a particular course held by the University subject to the following conditions:

4.17.4.1.   More than 30% of the students of a batch failed in a particular subject in a particular examination in a particular Institution. However, these students shall have passed all the subjects of the previous end semester examinations of the concerned course conducted by the University.

4.17.4.2.   More than 40% of the students in the batch should have passed all the end semester examinations previous to the examination in which students have failed.

4.18. PROCEDURE FOR OBTAINING VARIOUS CERTIFICATES FROM EXAMINATION SECTION

The procedure for obtaining various certificates from Examination section of university is explained below:

Name of Certificate	Procedure
Degree Certificate for UG and PG	Students who have degree eligibility and no fee dues can request for their degree certificate through the portal after providing the necessary details in the portal. The University can view the request, approve the request and generate the certificate. Each status of the request can be viewed by the student – such as Request Approved, Certificate Dispatched etc. The eligible students have the option for applying Degree Certificates in three different modes, i.e. Normal, Fast track and Express Mode.
Degree Certificate for through Fast Track/ Express /Normal Mode	Requests for receipt of Degree Certificate through Fast Track can be registered online through the student's login (https://app.ktu.edu.in/) after payment of fees (e-payment). It will be disbursed within 10 working days and Express will be disbursed within 3 working days. This facility will be available for UG and PG Programme on the basis of priority of the request number. Each status of the request can be viewed by the student – such as Request Approved, Certificate Dispatched etc. The students can apply for Degree Certificate through Normal mode by paying prescribed fee after the publication of the result. It will be dispatched within a maximum of 45 calendar days after making payment through the Portal.
Official Transcript UG/PG	Official Transcript can be requested from the student login itself with the fee applicable and this is based on the priority of the request. Once the University approves the request, the certificate shall be issued.

Digitally signed Provisional Certificate & Consolidated Grade Card for UG/PG	Students who have degree eligibility and no fee dues can request for their Provisional degree certificate through the student login page by remitting prescribed fee and download the digitally signed Provisional Certificates through student login page of the portal. Similarly, digitally signed Consolidated Grade Card can also be downloaded through the student log in by remitting prescribed fee. Digitally signed Provisional Certificate and Consolidated Grade Card is available to download to students through the student login page within a day after the publication of results.
CGC/ODC Duplicate	If the original certificate is lost or damaged, students can request with prescribed fee for duplicate certificates from their login only after publication of an advertisement and the certificate will be highlighted as "Duplicate". Only students to whom original certificates were issued earlier are eligible for Duplicate Certificates. Copy of the full page of the newspaper containing the advertisement about the loss of the document in the prescribed format, evidence for payment of prescribed fees and an affidavit detailing the circumstances in which the loss occurred, duly attested by a Notary Public shall be produced along with the application for the issue of the duplicate. Duplicate Certificate shall be issued only after the expiry of a period of two weeks from the date of advertisement regarding loss. The applicant for issue of duplicate shall also undertake in his/her affidavit that he/she would return the duplicate to the University for cancellation if the original happened to be recovered subsequently. In the case of partially damaged certificates and the remnants available there is no need for newspaper advertisement and certification by Notary Public. In such cases remnants of damaged certificate along with required fee shall be submitted along with the application for Duplicate Certificate.
Semester cards attestation for Scholarships	Attested semester cards are issued on direct submission of application at the section concerned or on receipt of application through post.
Semester cards for failed students UG	Semester cards for failed candidates will be issued on direct submission of application at the section concerned or on receipt of application through post.

Medium of Instruction/ CGPA to percentage conversion certificate/ Bonafide Certificate/ Certificate Explaining Grading System/ other certificates	These certificates are issued on direct submission of application at the section concerned or on receipt of application through post.
Position Certificate	Position Certificates of B.TechProgramme for 2015 & 2016 batch will be issued to one among the 2% of total number of students who attended the final examination as on the first day of issue of UG Degree Certificate with no payment of fees. Requests for receipt of Position Certificate can be registered online through the student's login (https://app.ktu.edu.in/) notified above. This facility will be available only for B.TechProgramme. Requests for certificates will be processed, on the basis of priority of the request number.
Attestation of documents	On payment of prescribed fee
Genuineness Verification of documents forwarded by outside Agencies	On payment of prescribed fee
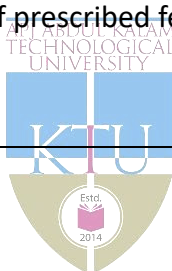
ANNEXURE-1

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Sᴇʟꜰ-Dᴇᴄʟᴀʀᴀᴛɪᴏɴ ꜰᴏʀᴍ ꜰᴏʀ Cʜᴀɪʀᴘᴇʀꜱᴏɴ/Qᴜᴇꜱᴛɪᴏɴ Pᴀᴘᴇʀ Sᴇᴛᴛᴇʀ/ Mᴇᴍʙᴇʀ ᴏꜰ Sᴄʀᴜᴛɪɴʏ Bᴏᴀʀᴅ/ Mᴇᴍʙᴇʀ ᴏꜰ Pᴀꜱꜱ Bᴏᴀʀᴅ/Aᴅᴅɪᴛɪᴏɴᴀʟ/ ᴄʜɪᴇꜰ ᴇxᴀᴍɪɴᴇʀ

DECLARATION

I .... hereby declare that,

1.   None of my near relatives, such as son, daughter, son-in-law, daughter-in-law, grandson, granddaughter, grandson-in-law, grand daughter-in-law, sister-in-law, brother-in-law, nephew, niece, brother, sister, uncle, aunt, wife, husband, is appearing for the **{Name of the Examination}**to which I have been appointed as the Chairperson/Question Paper Setter/ Member of Scrutiny Board/ Member of Pass Board/Additional Examiner/ Chief Examiner.

2.   I will keep the appointment confidential and perform the responsibilities with utmost honesty and will not be influenced by any person or circumstances.

3.   I have not undertaken private tuition in the subject for any candidate who is appearing for the examination in the subject concerned during the academic year immediately preceding the examination for which I accept the appointment.

4.   I will keep confidential any classified information about any aspect of the question papers and will not divulge such information to any person at any time.

Name   :   **KTU ID:**

Designation   :   **Signature:**

                                                                   Date:

ANNEXURE-2

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

APPLICATION FOR PROVISIONAL HALL TICKET

1. Name of candidate [in capital letters]   :

2. Register number   :

3. Center of Examination   :

4. Name of Examination   :

5. Semester   :

6. Course Code   :

7. Course [Subject] Name

8. Branch/Stream   :

9. Date of Examination   :

10. Specimen signature of the Candidate   :
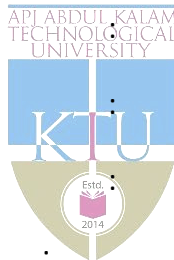
DECLARATION

I hereby declare that the information furnished above is true and correct to my knowledge. I am aware that the permission granted is provisional and I will not use this Hall Ticket for writing any other examinations.

Place: Signature of Candidate:

Date: Countersigned by the Chief/Deputy Chief Superintendent/HoD:

- -

PROVISIONAL HALL TICKET

NAME OF CANDIDATE																			
REGISTER NUMBER								SEMESTER											
NAME OF EXAMINATION																			
COURSE CODE												Affix centre seal here						
COURSE /SUBJECT NAME																			
BRANCH/STREAM																			
DATE OF EXAMINATION																			
SPECIMEN SIGNATURE	STUDENT																		
	DEPUTY CHIEF SUPERINTENDENT																		
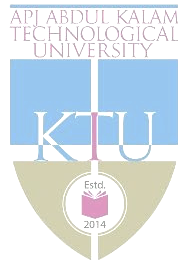
ANNEXURE-3

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

APPLICATION FORM TO AVAIL THE SERVICE OF SCRIBE

1. Name of the candidate [in capital letters]:

2. Register Number   :

3. Programme   :

4. Semester   :

5. Branch   :

6. Course[s]/Subject[s] for which the service :

   of scribe is needed

   (i)
   (ii)
   (iii)
   (iv)
   (v)
   (vi)

Affix recent passport size/stamp size photo here
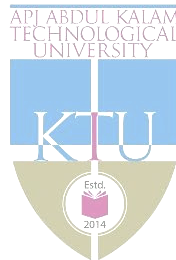
DECLARATION

I hereby declare that the information furnished above is true and correct.

Place:
Date: Signature of Candidate:

Countersigned by the Chief/Deputy Chief Superintendent:

DECLARATION FORM FOR SCRIBES

1. Name and Address of the scribe [in capital letters] :

2. Date of Birth   :

<div style="border:1px dashed;">Affix recent passport size/stamp size photo here</div>

3. Details of educational qualifications/ examinations appeared:
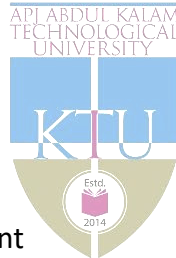
4. Name and Register No. of the student
   for whom the scribe is appearing   :

5. Specimen signature of the scribe   :

DECLARATION

I hereby declare that the information furnished above is true and that I have not qualified/appeared for any examinations other than those mentioned in the Appointment of Scribes under section 2.6.3of the Examination Manual.

Place:
Date: Signature of Scribe:

Countersigned by the Chief/Deputy Chief Superintendent:

ANNEXURE-4

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

ATTENDANCE SHEET				
Name of the Institute:			**Hall No:**	
Semester		**Programme**		
Day :	**Date**		**Session**	**FN/AN**
	Name of the Course/Subject			
Sl No	**Student Name**	**Register No**	**Barcode**	**Signature**
1				
2				
3				
4				
5				
6				
7				

Declaration

I do hereby certify that I have examined the answer scripts of all the students in this exam hall and found all the entries in the facing page are correct. Also the barcodes pasted on this attendance sheet against a student and on his/her answer book are the same and are corresponding to the concerned student.

Total No. of students		Name & Signature of Invigilator 1:
No. of Students present		
No. of absentees		Name & Signature of Invigilator2:

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Dispatch Register - Dispatch details of Answer scripts to University / valuation camp															
Sl. No	Consignment Number- C-ID No.	To Address Code-TAC	Name of Examination	Date of Examination	Time	Course code	Course Name	Packet Codes with physical count	Answer book Count shown in Portal	No of Packets	Weight	Scheduled Date of Dispatch & Day	Actual Date of Dispatch & Day	Mode of Dispatch	Remarks & Signature (Deputy Chief Superintendent)
1	88845	P-574	B.Tech S1,S2 (S) Exam Sept 2020 (2015 Sch)	29/09/2020 (Tuesday)	1:30 - 4:30 PM	PH100	ENGINEERING PHYSICS	EEP-1 (25),EEP-2(25), EEP-3 (25)	75	3						
2	99283	P-756		01/10/2020 (Thursday)	1:30 - 4:30 PM	CY100	ENGINEERING CHEMISTRY	ZRP-1 (25), ZRP-2 (12)	38	2						
3	99283	P-756		05/10/2020 (Monday)	1:30 - 4:30 PM	BE100	ENGINEERING MECHANICS	ZRP-3 (25), ZRP-4 (25), ZRP-5 (17)	67	3						

ANNEXURE-6

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FORMAT OF ADDRESS TAG TO BE USED WHILE DISPATCHING THE ANSWER BOOK BUNDLES

APJ Abdul Kalam Technological University
Speed Post Insured for Rs.100/- under BNPL code: KL-04-TV(N)

	C-ID No.
Programme:	
Semester:	**TAC:**
Date of Dispatch:	

CONSIGNMENT DETAILS

Programme:			
C-ID No:		**To address code / address[TAC]:**	

No.	Course code	Semester	Packet code	Answer book Count as shown in Portal	Actual count of Answer scripts	Remarks (if any)

Total number of Packets in this consignment (bundle):	

Total number of Answer scripts in this consignment (actual count):	

ANNEXURE-7

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

DISTRICT LEVEL EXAMINATION/INVIGILATION SQUAD [DES] MALPRACTICE CASE DIARY

Name of the Institution:

Date of the Examination:

No	Name and Register Number of Candidates	Programme	Course code	Time of reporting	Details of malpractice

Signature, Name and Designation of DES members:

Signature of Chief/Deputy ChiefSuperintendent:

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

DISTRICT LEVEL EXAMINATION/INVIGILATION SQUAD [DES] VISIT SHEET

Name of Institute & District:

Date of Visit: Time of arrival:

Number of students booked for malpractice by DES (as in Annexure 8):

Report on the various functionaries of the examination system:

No.	Area	Remarks (use additional sheets if necessary)
1.	Availability of Examination Halls	
2.	Promptness of Invigilation	
3.	Seating arrangements	
4.	Hall Tickets	
5.	Control Room, Facility for QUESTION PAPER download and printing/copying within the room.	
6.	CCTV, Backup data	
7.	Stock Register	
8.	Dispatch Register	
9.	File: Student's attendance sheet	
10.	File: Observer's Diary	
11.	File: Acknowledgement provided by Postal Department	
12.	Storage of used answer scripts, security, packing, readiness to dispatch	
13.	Register recording distribution of answer scripts to invigilator	
14.	Storage of unused barcodes	
15.	Any other matter	

Time of Leaving the Institute:

Name and Signature of DES members:
1.

2.

(scanned copy to be sent to University on the day of visit)

ANNEXURE-9

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

MINUTES OF THE PREPARATORY MEETING PRIOR TO THE COMMENCEMENT OF VALUATION

Name of Camp with Code   :

Date & Time of meeting   :

Mode: Online/Offline   :

1. **Details of Examination:**

Programme	Semester	Branch	Month/Year	Name of the Course/Subject

2. **Details of Chairperson:**

Name	Designation	KTU ID	Mobile No.	Email	Institution

3. **Details of Chief Examiner(s):**

Name	Designation	KTU ID	Mobile No.	Email	Institution

4. **Details of Additional Examiner(s):**

Name	Designation	KTU ID	Mobile No.	Email	Institution

5. Course code and Name of Course:

6. Number of answer scripts allotted to the camp for the subject/course:

7. a) Whether the Scheme of Valuation was obtained from the camp?

   b) If Yes, state whether the scheme of valuation has:

   ➢ Answers to all problems with steps of computation?

   ➢ Answers to all descriptive questions with key points?

   ➢ Relevant equations, block diagrams and figures for all the questions?

   ➢ Detailed Mark distribution of all questions?

   ➢ State whether the Scheme of Valuation is Satisfactory/Good/Excellent

8. If answer to any question in 7b) is 'No':

Have you taken measures to correct the Scheme of Valuation with sufficient details?

9. Are there any questions which are to be treated as '**out of syllabus**' or '**out of scope**' ? If so, please specify details of such question(s):

10. If answer to question 9 is 'Yes',

    a) Whether details of **out of syllabus** or **out of scope** questions are specified in the

scheme of valuation?

b) Whether suitable consideration was given in the scheme of valuation, to questions, which are **out of syllabus** or **out of scope**? Please specify the details.

11. Date of Commencement of valuation:

12. Stipulated date of completion of valuation:

13. Name and details of examiner(s) absent in the meeting

Name	Designation	KTU ID	Mobile No.	Email	Institution

Certified that the original/modified (please tick) Scheme of Valuation has sufficient details to carry out proper valuation. Further, the Scheme of Valuation has answers to all problems with steps of computation, answers to all questions with key points, relevant equations, block diagrams and figures, and detailed Mark distribution of all questions. The Scheme of Valuation was discussed in detail in the preparatory meeting and is satisfied to proceed with the valuation.

Name and dated Signature of Chief Examiner(s):

Name and dated Signature of all Additional Examiners:

Name and dated Signature of Chairperson:

Note: Please send the preparatory meeting report and the Proof of meeting (photo/google meet screenshot) etc. to valuation@ktu.edu.in

ANNEXURE-10

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

APPLICATION FORM FOR REVIEW (UG)

Name of Student   :

Register Number   :

Programme   :

Mobile No   :

Name of Exam (as in portal)   :

Course code: Course Name:

Name of Institute: Branch :

Email ID   :

Date of publication of Revaluation result   :

Alpha numeric code of the Answer book   :

Account details of student

Account No. Name of bank   :

IFSC   :

Branch   :

Declaration

I am aware that in case of no grade change after the review, I will not be eligible for refund of the fee paid and also that there will not be an option for a valuation / re-evaluation after review.

Date: Signature and Name of Student:

Recommendation by Faculty member

I hereby certify that I have evaluated the answer book of Sri./Smt………………………..with Register No.of (Course name and code) bearing barcode:(alpha numeric code) and based on my evaluation I recommend that (s)he is eligible to get marks sufficient for a pass / for a change of grade *(strike out which is not applicable)*. Tabulation sheet after my evaluation is attached herewith.

Recommended by:

Signature, Name, KTU ID

Endorsement by HoD:

PRINCIPAL

(College seal)

Checklist:
O Application for review (completely filled up and signed)
O Recommendation by faculty member (completely filled up and signed)
O Tabulation sheet for review (completely filled up and signed)
O Proof of fee paid

TABULATION SHEET FOR FACULTY WHO RECOMMENDS FOR REVIEW

Name of Student: Register Number

Course code: Course Name:

Alpha Numeric code:

Name of faculty: KTU ID:

Question No.		Evaluation by recommending faculty		to be filled in by Recommending faculty
		Maximum Marks	Mark to be awarded	Remarks

Signature:

Total mark :(in words: ....

Signature, Name, KTU ID & Designation

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

APPLICATION FORM FOR REVIEW **[PG]**

Name of Student   :

Register Number   :

Programme   :

Mobile No   :

Name of Exam (as in portal)   :

Course code: Course Name   :

Name of Institute: Branch   :

Email ID   :

Date of publication of Revaluation result   :

Alpha numeric code of the Answer book   :

Account details of student

Account No. Name of bank   :

IFSC   :

Branch   :

<div align="center">Declaration</div>

I am aware that in case of no grade change after the review, I will not be eligible for refund of the fee paid and also that there will not be an option for a valuation / re-evaluation after review.

Date: Signature and Name of Student:

<u>Recommendation by Faculty member</u>

I hereby certify that I have evaluated the answer book of Sri./Smt……………………………….. with Register No.of (Course name and code) bearing barcode:(alpha numeric code) and based on my evaluation I recommend that (s)he is eligible to get marks sufficient for a pass / for a change of grade *(strike out which is not applicable)*. Tabulation sheet after my evaluation is attached herewith.

Recommended by:

Signature, Name, KTU ID

Endorsement by HoD:

PRINCIPAL

(College seal)

Checklist:

O Application for review (completely filled up and signed)
O Recommendation by faculty member (completely filled up and signed)
O Tabulation sheet for review (completely filled up and signed)
O Proof of fee paid

APJ Abdul Kalam Technological University
Thiruvananthapuram

Abstract

APJKTU-Approval of Examination Manual 2022 - Implementation of the resolution of the 16th meeting of the Board of Governors held on 24.03.2022 vide Item No. GB-016-024—Orders Issued

EXAMINATION

U.O.No. 979/2022/KTU   Thiruvananthapuram, Dated: 28.04.2022

Read:-1. Chapter 2 Clause 79 of the first Statutes of the University
2. University Order No.379/2021 dtd.01.03.2021
3. Resolutions of agenda item S13.4.01 of the 13th meeting of the Academic Council dated 31.08.2021
4. Resolutions of agenda item S8.1.001 of the 8th (Spl) meeting of the Academic Council dated 12.01.2022
5. Resolutions of the 24th meeting of the Standing Committee on Examinations dated 01.02.2022 vide item No.2022-24-01.
6. Resolution of the 30th Special meeting of the Syndicate dated 04.02.2022 vide item No.S-030-001.
7. Minutes of the 16th Board of Governors held on 24.03.2022, Item No.GB-016-024

ORDER

Vide paper read (1), according to the Chapter 2 Clause 79 of the First Statues of the University, an Examination Manual has to be prepared by the Controller of Examinations as per the suggestions of the Academic Council and shall be approved by the Syndicate.

Vide paper read (2), the University has constituted an expert committee for the preparation of a draft Examination Manual. The draft Examination Manual proposed by the Expert Committee was approved by the Controller examinations after incorporating the suggestions from different stakeholders.

The Examination Manual was then placed before the meetings of the 13th and 8th (Spl) Academic Council. The Academic Council held detailed discussions on the draft Examination Manual proposed by the Controller of Examinations. After detailed deliberations, the Academic Council approved the Examination Manual after incorporating many modifications. Accordingly, the meeting of the 24th Syndicate Standing Committee on Examinations recommended to place the Examination Manual before the Syndicate for approval.

The 30th Meeting of the Syndicate held on 04.02.2022 vide item No. S-030-001, upon the recommendations of the Academic Council, resolved to approve the Examination Manual and resolved to place it before the Board of Governors for final approval. Subsequently, vide paper read (5) above, meeting of the 16th Board of Governors held on 24.03.2022, vide item No.GB-016-024, approved the Examination Manual as per the recommendations of the Academic Council and Syndicate.

Therefore, sanction has been accorded by the Hon. Vice Chancellor for implementing the above decision of the Board of Governors.

Orders are issued accordingly.

Sd/-

Dr. Ananda Resmi S *
Controller of Examinations

Copy to:-
1. AR, Exam-I
2. AD Exam, AD EX III
3. Section Officers concerned
4. PS to VC/PVC
5. PA to Registrar
6. Dean Academics/Research
7. AD IT
8. PRO

* This is a computer system (Digital File) generated letter. Hence there is no need for a physical signature.