

R.3 Instructions to the Examiners for Mid-Semester and End Semester Examinations

Examination of students after a stipulated portion of the syllabus is taught is one of the important parts of the teaching-learning process. Hence, it should be executed with due seriousness, confidentiality, and sanctity. An examination is conducted to evaluate the students with respect to the portion of syllabus taught and various components of the curriculum. Setting of question papers with confusing language, vague questions, factual errors, repetition of questions in successive examination lead to lowering of the morale of students, undermines the prestige of the Institution and sanctity of the examination system. In addition, in view of the 'AICTE Examination Reforms' document, guidelines have been given for setting of questions for Continuous Assessment, Mid-Semester and End-Semester Examinations.

- 1) The recall of factual knowledge is no longer relevant in the era of digitalization and information availability at fingertips. The assessment process must also test higher level skills viz. ability to apply knowledge, solve complex problems, analyze, synthesize, and design. Further, professional skills like the ability to communicate, work in teams, and lifelong learning have become important elements for the employability of the students. It is important that the examinations also give appropriate weightage to the assessment of these higher-level skills and professional competencies. AICTE Guidelines on Examination Reforms has recommended that at any evaluation no more than 40% weightage for knowledge oriented, K1 and K2 level questions). As per Blooms Taxonomy, the various cognitive levels and typical keywords appearing in questions in each level are as follows:

Level	Attribute	Sample Questions...
K1	Remembering (Recalling from memory of previously learned material)	<ol style="list-style-type: none"> 1. State 2. List the advantages of 3. Define the following terms..... 4. Describe the process of 5. What are the properties
K2	Understanding (Explaining ideas or concepts)	<ol style="list-style-type: none"> 1. Explain the importance of ... 2. Discuss the effects of 3. Summarize the importance of ... 4. What is the difference between 5. Differentiate between
K3	Applying (Using information in another situation)	<ol style="list-style-type: none"> 1. Calculate the ... 2. Develop a model for ... 3. Predict the behaviour of ... 4. Solve the following ... 5. Estimate the ...
K4	Analyzing (Breaking information into parts to explore understandings and relationships)	<ol style="list-style-type: none"> 1. Analyze the following ... 2. Select between the following ... 3. Justify the choice between ... 4. Make inferences from the following 5. Classify the given

K5	Evaluating (Justifying a decision or course of action)	<ol style="list-style-type: none"> 1. Recommend a 2. Propose various alternatives for... 3. Formulate a for ... 4. Compare among 5. Judge the applicability of
K6	Creating (Generating new ideas, products or new ways of viewing things)	<ol style="list-style-type: none"> 1. Design a 2. Propose a ... 3. Develop a system 4. Invent a 5. Formulate a ...

2) Accreditation of the courses requires Outcome Based Education. For each course the outcomes are defined in terms of Course Outcomes (CO). The Evaluations for each course, Continuous Assessment (CA), Mid-Semester (MS) and End-Semester (ES) Examinations have to ensure that the attainment of COs can be quantified based on the students' performance in all these evaluations. The questions asked in the examinations should not be just based on recall of information (K1 level). They are expected to go to test understanding (K2 level) and higher cognitive levels, K3 – K6.

3) Guidelines for Mid Semester Examinations:

- (i) The questions set should cover the syllabus and the Course Outcomes (COs) that have been covered up to the mid-semester examination.
- (ii) Questions should be worded with no ambiguity.
- (iii) Main questions and sub-questions shall be clearly listed out. Marks allotted to each main and sub-question should be indicated alongside the question. The course outcome being assessed by the question should be indicated next to the main question.
- (iv) Only integer marks shall be assigned to each sub-question.
- (v) The mid-semester examination may be conducted in open-book mode/computer based, depending upon the nature of the subject and the need felt by the examiner/paper setter.
- (vi) Before grading the answer books of the mid-semester examination, the teacher is expected to prepare model answers for the question paper, that will form the basis for grading.
- (vii) Graded answer books and the model answers should be shown to the students within **15 days** of conducting the examinations so that the students can learn from their mistakes and improve their knowledge level.
- (viii) Typical distribution of questions at different 'K' levels is expected to be following:

Level	Attribute	Level of Attainment	% of Marks allotted
K1	Remembering	Recalling from memory of previously learned material	Less than 20%
K2	Understanding	Explaining ideas or concepts	Less than 30%
K3	Applying	Using information in another familiar situation	

K4	Analyzing	Breaking information into parts to explore understandings and relationships	
K5	Evaluating	Justifying a decision or course of action	
K6	Creating	Generating new ideas, products or new ways of viewing things	

4) Guidelines for the End Semester Examination:

- (i) The questions set should cover the entire syllabus and all the Course Outcomes (COs) assigned for the subject.
- (ii) Question should be worded with no ambiguity.
- (iii) Main questions and sub-questions shall be clearly listed out. Marks allotted to each main and sub-question should be indicated alongside the question. The course outcome being assessed by the question should be indicated next to the main question. A reasonable number of options may be given to some of the questions.
- (iv) Only integer marks shall be assigned to each sub-question.
- (v) The End-semester examination may be conducted in computer-based mode depending upon the nature of the subject and the need felt by the examiner/paper setter.
- (vi) Before grading the answer books for the End-Semester examination, the examiner is expected to prepare model answers for the question paper, that will form the basis for grading.
- (vii) Graded answer books and the model answers should be shown to the students, **within 15 days** of conducting the End semester examinations so that the students can learn from their mistakes and improve their knowledge level.
- (viii) Typical distribution of questions at different 'K' levels is expected to be following:

Level	Attribute	Level of Attainment	% of Marks allotted
K1	Remembering	Recalling from memory of previously learned material	Less than 20%
K2	Understanding	Explaining ideas or concepts	Less than 30%
K3	Applying	Using information in another familiar situation	
K4	Analyzing	Breaking information into parts to explore understandings and relationships	
K5	Evaluating	Justifying a decision or course of action	
K6	Creating	Generating new ideas, products or new ways of viewing things	

- 5) The paper setters should avoid repetition of questions. Repetition of entire question paper or a Section of a question paper or a set of questions shall be viewed seriously, and suitable disciplinary action shall be taken.
- 6) Instructions to the Candidates should be given at the beginning of the question paper. These instructions should include instructions regarding the number of questions to be attempted for full credit in the paper.

- 7) When a paper is composed of more than one section, specific instructions should be given to that effect. Section Number should be written above the Question with which the respective Section begins.
- 8) The question numbers and sub-question numbers should be suitably written on the left-hand side, while the marks assigned to them should be written on the right hand side.
- 9) If there is an alternate question to an original question, the alternate question should be given the same question number and written below the original question and word “OR” should be written between them.
- 10) Whenever there is more than one paper setter for one subject head, one of them shall be designated as the Senior Paper Setter and it will be the duty of the Senior Paper Setter to put the entire paper in proper format and submit the paper to the office; provided it will be the joint responsibility of all the paper setters to prepare the question paper; provided further that the responsibility regarding the content of the questions shall rest on the actual person setting the respective questions.
- 11) The numerical data required should be given in the paper itself. Physical quantities shall be given in SI units only and only the standard abbreviations should be used.
- 12) Sketches, figures, tables, and other details which form part of the question paper should be submitted along with the question paper. The sketches and figures should be drawn in black ink only and should be easy for reproduction. Rough pencil sketches shall not be accepted.
- 13) The senior paper setter should inform the Controller of Examinations, in writing, of the specific requirements such as graph papers, drawing papers, etc.
- 14) Suggested format of Question Paper for Mid-Sem and End-Sem Examination is as follows:

Qn. No.		Marks Allotted	COs Covered	'K' level covered
1.				
2.				
3.				