

**Geethanjali College of Engineering & Technology**  
(UGC Autonomous Institution)  
**Department of Electronics and Communication Engineering**

**Division of marks in the evaluation of lab course – AR 22 Regulations**

For laboratory course(s), there shall be a Continuous Internal Evaluation (CIE) during the semester for 40 marks, and Semester End Examination (SEE) for 60 marks.

A detailed break up of 40 marks for CIE is given below:

1. A write-up on day-to-day experiment in the laboratory (in terms of aim, components/procedure, expected outcome) which shall be evaluated for 10 marks
2. 10 marks for viva-voce (or) tutorial (or) case study (or) application (or) poster presentation of the course concerned.  
Internal practical examination conducted by the laboratory teacher concerned shall be evaluated for 10 marks.
3. The remaining 10 marks are for Laboratory Project, which consists of the Design (or) Software / Hardware Model Presentation (or) App Development (or) Prototype Presentation submission which shall be evaluated after completion of laboratory course and before semester end practical examination.

**Rubrics for the Continuous Internal Evaluation (CIE) - 40 Marks**

Parameter	Rubric	Marks Allocated
Lab Record	Ability to make an effective report based on the experiments carried out on a regular basis	10
Viva-voce/ Tutorial/ Case study/ Poster Presentation	Ability to explain the theoretical concepts/ provide a case study/ make a poster presentation related to the laboratory course	10
Internal Practical Examination (Hardware based experiment)	Ability to conduct the given experiment as an individual right from drawing the circuit diagram, giving appropriate connections, record the experimental data, analyze the accuracy of the data (results) and effective presentation of the results	10
Internal Practical Examination (Software based experiment)	Ability to write the program with proper syntax and execute the program, after debugging (finding and fixing errors if any), analyze the accuracy of the results and effective presentation of the results	
Laboratory Project	Ability to apply the concepts of the laboratory course to design Software / Hardware Model/ Development of App/ Development of Prototype and the Presentation of the same	10

The Semester End Examination shall be conducted with an external examiner and the laboratory teacher. The external examiner shall be appointed from the other reputed colleges which will be decided/approved by the examination branch/Chief Controller of Examinations of the Institution.

In the Semester End Examination held for 3 hours, total 60 marks are divided and allocated as

shown below:

1. 10 marks for write-up
2. 15 for experiment/program
3. 15 for evaluation of results
4. 10 marks for presentation on another experiment/program in the same laboratory course and
5. 10 marks for viva-voce on concerned laboratory course

**Rubrics for the evaluation of a Hardware based laboratory - Semester End Exam - 60 Marks**

Parameter	Rubric	Marks Allocated
Circuit diagram	Ability to draw the required circuit diagram for conducting the given experiment	10
Procedure	Ability to write the procedural steps involved in conduct of the given experiment	
Conduct of Experiment	Ability to conduct experiment as an individual by giving appropriate connections and the required input(s)	15
Results and Presentation	Ability to record the experimental data, analyze the accuracy of the data (results) and effective presentation of the results	15
Presentation on another experiment in the same laboratory course	Ability to present the procedural steps involved in conduct of another experiment given; right from drawing the circuit diagram to presentation of the expected results.	10
Viva-voce	Ability to explain the theoretical concepts related to the experiment and/or related to other experiments of the laboratory course	10

**Rubrics for the evaluation of a Software based laboratory - Semester End Exam - 60 Marks**

Parameter	Rubric	Marks Allocated
Building Logic	Ability to apply related theoretical concepts to build necessary logic for solving of the given problem.	10
Write Program	Ability to write the program with proper syntax and debug (finding and fixing errors if any)	15
Results and Presentation	Ability to execute the program, analyze the accuracy of the results and effective presentation of the results	15
Presentation on another experiment in the same laboratory course	Ability to write the program with proper syntax, debug and present the steps involved in executing the program related to another experiment given.	10
Viva-voce	Ability to explain the theoretical concepts related to the experiment and/or related to other experiments of the laboratory course	10