

5.4 P-based Courses

The detailed information consisting of experiments, batch formations, experiment schedules, etc., will be displayed / informed to the student in the first week of the semester so that the student comes prepared for the lab sessions. Copies of the lab manual will be made available to the students along with the schedule. The lab manual will consist of the list of equipment's, detailed procedure to conduct the experiment, format for record writing, outcomes for each experiment and possible set of short questions to help students gain critical understanding. The courses like IT Tools & Cyber security, Engineering Graphics, Design Thinking & Engineering will also be treated as P-based courses.

5.4.1 Formative Assessment

During laboratory sessions, a brief viva-voce is conducted for each student on the experiment he/she is carrying out on that day. Some of the parameters that could be included in the Continuous Lab Practice Assessment (CLPA) are given in Table (4). The set of parameters may slightly differ from one laboratory to the other, and will be announced before the commencement of the lab session. These parameters are assessed for each laboratory session.

Table 4: Suggested parameters for Lab Practice Assessment (CLPA)

S. No	Component	Marks
1	Report of about 1 page on proposed experimental layout and background theory before the start of lab session	4
2	Viva and interaction to evaluate understanding of concepts	4
3	Experimentation and data collection	4
4	Analysis of experimental data and interpretation	4
5	Finalized report submitted in the next week	4
	Total	20

Each practice session is assessed for a total of 20 marks. The cumulative scores from all sessions will be **suitably mapped down** to a max. of 60 marks, with Module-1 contributing 25 marks and Module-2 contributing 35 marks toward the consolidated formative assessment.

5.4.2 Summative Assessment

End semester examination for each practical course is conducted jointly by two examiners. The end-semester examination for each practical course is conducted jointly by two examiners. The panel of examiners is constituted by the respective School Dean. The internal examiner is the faculty member who has conducted all practical sessions and associated activities throughout the semester. The external examiner is nominated from within the department and is familiar with the course's practical components but has not been directly involved in its delivery. The scheme of assessment may vary depending on the nature of the laboratory, which shall be shared with student by the laboratory in-charge. The summative assessment will be conducted for a max. marks of 40. The general scheme of assessment is given in Table (5).

Table 5: Suggested end-semester summative assessment pattern for P-based courses.

Component	Marks		
	Examiner 1	Examiner 2	Total
Objective & Procedure write up including outcomes	4	4	08
Experimentation and data collection	4	4	08
Computation of results	4	4	08
Analysis of results and Interpretation	4	4	08
Viva Voce	0	8	08
Total Marks	16	24	40

R25 B.Tech

4 YEAR**DEGREE
PROGRAMME**