**SPM Task 1: Lab Report**

Using software project management tools:

* Lab Sheet 1: Design and Construction of PERT for some scenario/problem.
* Lab Sheet 2: Design and Construction of CPM with critical path value for some scenario/problem.
* Lab Sheet 3: Design and Construction of PDM with critical path value for some scenario/problem.
* Lab Sheet 4: Design and Construction of Bubble Chart for some scenario/problem.
* Lab Sheet 5: Design and Construction of Gantt Chart for some scenario/problem.
* Lab Sheet 6: Design and Construction of Slip Line Chart for some scenario/problem.
* Lab Sheet 7: Cost Benefit Analysis including IRR, NPV etc. for some scenario/problem.
* Lab Sheet 8: Earned Value Analysis including SPI, CPI etc. for some scenario/problem.
* Lab Sheet 9: Z-Value Analysis for some scenario/problem.
* Lab Sheet 10: QA Activities (testing) using some automation test tools like selenium, postman, cypress, etc.
* Lab 11: Version Control using GIT or GitHub

*Note: Above mentioned lab activities should be done individually by the students with their own scenarios. The lab report should include the basic theories followed by the printed outputs for each sheet. There should be proof of work from the students with their name, roll numbers in the activities. The students and instructors are not limited to above mentioned activities, these are the basic guidelines. The activities can be revised as per the instructor plan.*

*Students are highly recommended to experience the tools like Trello, Jira, Slack, etc. in addition to basic CASE tools like Project Manager, Visio, Draw.io, etc.*

**SPM Task 2: Project Report**

Chapter 1: Introduction, Objectives, Problem Statement

Chapter 2: Background Study and Literature Review

Chapter 3: Project Management Activities

* Functional Requirement using use case diagram
* Should include project activity planning, scheduling and resource allocation (WBS, PERT, CPM, GANTT, etc.)
* Cost Benefit Analysis
* Earned Value Analysis
* Risk Analysis
* Quality Assurance Activities

Chapter 4: Conclusion

References

*Note: Above mentioned Project Report should be done on the groups. It is much better if students could do it for their 7th semester project. All the contents in the chapters should be contextualized with respect to the project. The chapter breakdown can be updated as per the requirement but the project management activities should be included in the report.*