B5.1-R4: SOFTWARE PROJECT MANAGEMENT

NOTE:

1. **Answer question 1 and any FOUR from questions 2 to 7.**
2. **Parts of the same question should be answered together and in the same sequence.**

Time: 3 Hours **Total Marks: 100**

1.

a) What are the features of good software?
b) Write a comment about software functional quality and structural quality.
c) What was software crisis in early years of software development? Explain reasons.
d) What are the disadvantages of the waterfall iterative model for software development?
e) Describe the specialty of spiral model.
f) Why requirement management is an important discipline?
g) Explain the need of computer aided software engineering and CASE tools.

(7x4)

2.

a) Explain the difference between software development process and the software product. Which one is more important?
b) Describe project planning. Why project planning is important throughout the software development life cycle?
c) Describe Gantt Chart with the help of an example.

(3x6)

3.

a) Explain principles of software project management, Project planning, monitoring and control.
b) Describe Change management and configuration management.
c) Explain project portfolio management.

(3x6)

4.

a) Describe different characteristics of object oriented methodology.
b) Explain project management for the software development of embedded systems.
c) How do we perform project tracking and monitoring?

(3x6)

5.

a) Discuss identifying and managing project risks. Explain risk mitigation.
b) Describe Pareto analysis and its steps to identify the important causes.
c) Differentiate between web based and desktop applications.

(3x6)

6.

a) Explain software quality process metrics and project metrics.
b) Describe work break down structure with the help of an example.
c) What is the role of closure analysis, what is project closure report?

(3x6)

7.

a) List the reasons for project failure. Explain any two reasons.
b) Describe round robin scheduling algorithm in detail with the help of an example.
c) Explain software component. Describe component based software engineering.

(3x6)