

B3.1-R5 : 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.

Total Time : 3 Hours

Total Marks : 100

1. (a) Discuss the term "software scoping" in relation to project management.
(b) What do you understand by Gantt charts in project management ? Describe briefly using an example.
(c) What are Version Control Systems in relation to configuration management ? Discuss the importance and benefits of using a version control system in software projects.
(d) What do you understand by the term "Scrum" ? Discuss the different activities that are part of scrum.
(e) Briefly describe the clean room approach to software engineering.
(f) Briefly discuss the agile process of software development.
(g) What do you understand by configuration management process ? What are the different activities present in Configuration Management ? (7x4)

2. (a) What do you understand by plan-driven development ? Discuss project plans and its basic components.
(b) What do you understand by software process development models in software engineering ? Discuss the various desired characteristics software development processes. (10+8)

3. (a) What is the COCOMO II model for software project estimation ? Explain the steps used in the COCOMO II model.
(b) What is a burn down chart in relation to project monitoring ? Discuss the components, advantages & limitations of burn down charts. (8+10)

4. (a) Discuss the process of project scheduling for plan-driven projects. Differentiate between milestones and deliverables in relation to project schedules.
(b) Discuss risk reporting in relation to project management and monitoring. (8+10)

5. (a) What do you understand by risk management ? Discuss the three categories of risk commonly identified in software projects. Briefly explain the process of risk management. Discuss risk planning and risk monitoring in relation to risk management.
(b) Briefly discuss the CMMI standard in relation to software metrics. (12+6)

6. (a) Discuss the role of function points in software estimation process. Explain the process of calculation of function points to estimate software size.
(b) Discuss the basic project management functions of a project manager. (10+8)
7. (a) What is software quality ? Discuss the different attributes through which software quality is defined by ISO standard.
(b) What are quality reviews and inspections ? What is the purpose of quality reviews ? Discuss the quality review process briefly. Discuss the different faults or defects that may be found during quality reviews and inspections. (7+11)

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