



Roll No. _____

B.E (FT) END SEMESTER EXAMINATIONS – NOV / DEC 2024

Computer Science and Engineering

Semester - VII

CS6022 - Software Project Management

(Regulation 2018 - RUSA)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Distinguish between "Step – Wise – Refinement" and "Step – Wise Planning" for projects?
2. How is a project planned to forecast the time of expenditure and income?
3. Why is "Lines of Code" not an accurate measure for the Size estimation? Justify.
4. What are the major components of "Function Point Analysis"?
5. Why is "Task specification" important in Scheduling for the Critical path?
6. Why is measurement of risk difficult in Software Projects? Give any two reasons.
7. How does a quality framework help in monitoring the software development?
8. What is "Earned Value"? Why is it important?
9. Explain any two differences between a Virtual team and in-Person team?
10. Define any two Quality Factors for Software Development?

PART – B (8 x 8 = 64 marks)

(Answer any 8 questions)

11. Elaborate on the processes that lead to the successful deployment of a project? Explain any two associated activities?
12. Justify using an example both static and dynamic risk analysis?
13. Distinguish between the bottom – up and top – down effort estimate techniques.
14. Explain the Function Point Analysis in Albrecht's terminology? Illustrate the need for adjustment factors using a example.
15. How does the "task specification" specify the labor, time, cost and schedule for software development?
16. Construct the network and identify the critical path for the following project and its specification.

Task	Description	Duration	Precedence / [Dependency]
A	Hardware Selection	6	-
B	System Configuration	4	-
C	Install hardware	3	A
D	Data Migration	4	B
E	Draft Office Procedures	3	B
F	Recruit Staff	10	-
G	User Training	3	E,F
H	Install and Test	2	C,D

17. How is performance metrics used to monitor the project? Illustrate with an example.
18. How are "Job Roles" specified for Software projects? Explain any three "Job Roles".
19. How does the "Data Based" approach help monitor the progress? Specify two most important data that needs to be collected for the purpose.
20. Explain any seven core software project metrics with an example.
21. Explain how the People, Procedures and Resources are factored in Step Wise Project Planning?
22. Illustrate the factors in the COCOMO II model for cost estimation.

PART – C (2 x 8 = 16marks)

23. Why are Time and Cost Overruns dominant in Software Projects? Give any four important reasons.
24. How are Software Development Teams structured? Discuss any two team structures.

