

Priyadarshini College of Engineering, Nagpur
Sessional Examination (2022-23) Odd Semester
B.Tech. Fifth Semester (Computer Technology) (C.B.C.S.)
Software Engineering and Project Management

P. Pages: 2

PCE/KW/22/BTCT503T

Time: Three Hours

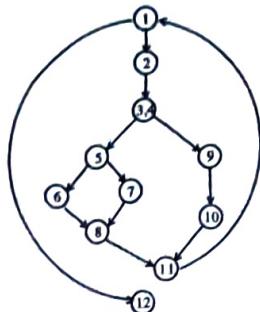
Max. Marks: 70

- Notes:
1. All questions carry marks as indicated.
 2. Solve Question 1 or Question 2.
 3. Solve Question 3 or Question 4.
 4. Solve Question 5 or Question 6.
 5. Solve Question 7 or Question 8.
 6. Solve Question 9 or Question 10.
 7. Due credit will be given to neatness and adequate dimensions.
 8. Assume suitable data wherever necessary.
 9. Illustrate your answers whenever necessary with the help of neat sketches.

Q. No.	Question	CO	B T	Ma rks
1. a)	Define software engineering and explain software Engineering-a layered technology.	CO1	II	7
b)	Illustrate unified process model for software development with neat diagram.	CO1	II	7
	OR			
2. a)	Compare Waterfall model with RAD model	CO1	II	7
b)	List and explain common process framework for software engineering in detail.	CO1	II	7
3.	a) What is an Agile Process ?State its principles and different methods of Agile. b) List and explain various system elements of computer - based system.	CO2	II	7
		CO2	II	7
	OR			
4. a)	Describe all the stages of Requirement Engineering in detail.	CO2	II	7
b)	What is SRS ? State significance of SRS.	CO2	I	3
c)	What is QFD ? What are various types of requirements defined in QFD ?	CO2	I	4
5. a)	Discuss Object Oriented Modeling in detail.	CO3	II	6
b)	Define following software design concepts : 1)Abstraction 2)Pattern 3)Modularity 4)Information Hiding	CO3	I	8
6. a)	What are the components of Analysis Modelling ? Discuss Scenario based modeling.	CO3	I	7
b)	Discuss E-R model with an example.	CO3	II	7
7. a)	What do you mean by cyclomatic complexity ? Calculate the cyclomatic	CO4	II	8

Q. No.	Question	CO	B T	Ma rks
		I		

complexity for the following graph.



- b) What are the different quality factors used to measure software quality ? Explain CO4 II 6

OR

8. a) Discuss following testing strategies. CO4 II 10

- i) Unit Testing
- ii) Integration Testing
- iii) Regression Testing
- iv) Smoke Testing
- v) System Testing

- b) Illustrate size oriented metric ? CO4 II 4

9. a) Discuss RMMM. CO5 II 4

- b) What is Change Management ? Discuss Software Configuration Management CO5 II 5

- c) What is Project Scheduling ? Explain the quality factors of project scheduling. CO5 II 5

OR

10. a) What are Risks in Software development ? Explain Risk Projection. CO5 II 6

- b) What are the Functions of an SCM Repository. CO5 II 4

- c) Explain with example, how FP based estimation is performed. CO5 II 4

*****8*****All the Best*****