

PRIYADARSHINI COLLEGE OF ENGINEERING, NAGPUR
DEPARTMENT OF COMPUTER TECHNOLOGY
SEESION (2022 -23) (ODD)
Question Bank for CAT-2

Subject: SEPM

Subject Teachers : Mrs.Rubana A.Khan

Unit : III, IV, V

Semester: V Sem (B)

Date of Display : 21/10/2022

Maximum Marks : 35

CO3	Explain, analyze and apply different analysis and design models in software development process.
CO4	Explain and compare different software testing strategies, types and their significance and to understand and apply the concept of Software Quality Assurance and estimation.
CO5	Estimate the quality metrics for process and product and to list and analyze different software risk management strategies, software quality management process and to understand Software Configuration Management

Questions		Marks	Mapping with COs
UNIT III			
1	A. What do you mean by data modeling? Explain. B. Define following software design concepts : 1) Abstraction 2) Pattern 3) Modularity 4) Information Hiding	5M 7M	CO3
2	A. Give & explain ten design principles in detail. B. Define following software design concepts : a. Refactoring b. Class & object c. Encapsulation	5M 7M	CO3
3	What is modularity? How to find moderate number of modules required with moderate cost of software?	8M	CO3
4	Explain data flow diagram in detail. Give the extension suggested by ward and mellor.	8M	CO3
UNIT IV			
1	A) What is Cyclomatic Complexity? Explain how it is computed? A. What are metrics, Measures and Indicators?	4M 8M	CO4
2	A. Explain Black Box Testing in detail. B. What are the different quality factors used to measure software quality.	5M 7M	CO4
3	A. Write a short note on Integration testing. B. Discuss different direct and indirect measures to measure quality of software.	4M 8M	CO4
4	A. Explain basic path testing method in detail. B. Discuss different Software Quality Measures.	5M 7M	CO4

5	A. What are the different types of System Testing? B. Write a note on Quality Function Deployment	8M 4M	CO4
6	A. Explain control testing in detail. Explain the metrics for testing and maintenance.	6M 7M	CO4
7	A. Explain White Box Testing in detail. . A. Explain Function points with an example.	6M 7M	CO4
8	A. Differentiate different testing strategies in detail. B. Explain the metrics for Design Modelling.	7M 5M	CO4
9	Discuss following testing strategies. i) Unit Testing ii) Integration Testing iii) Regression Testing iv) Smoke Testing v) Validation Testing vi) System Testing	12 M	CO4
UNIT V			
1	A. List and explain various types of s/w risks B. What is s/w reliability and s/w availability? Also explain measures. C. Write note on RMMM plan. D. Write a note on SCM.	4M 8M	CO5
2	A. Explain process metric in detail. B. Explain what is SCM? Why it is important? What are different steps involved for same.	5M 7M	CO5
3	A. Explain Project scheduling and project metrics. B. Discuss RMMM.	5M 7M	CO5
4	A. Discuss SCM Repository. B. Explain RMMM Plan. Also explain the concept of Risk Projection.	4M 8M	CO5

Mrs.Rubana A.Khan
Subject Teacher

Dr.(Mrs.) Nita Thakare
HOD [CT]