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Question Paper Code	12911
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B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2024

Third Semester

Computer Science and Business Systems
20CBPC303 - SOFTWARE ENGINEERING
 Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

	<i>Marks</i>	<i>K- Level</i>	<i>CO</i>
1. List out the goals of software engineering.	2	K1	CO1
2. Write any two characteristics of software as a product.	2	K1	CO1
3. State the benefits of feasibility study.	2	K1	CO2
4. Define Risk Mitigation.	2	K1	CO2
5. Define Traceability. What are the two types of traceability?	2	K1	CO3
6. Define use case.	2	K1	CO3
7. Differentiate black box testing and white box testing.	2	K2	CO4
8. What is transaction based testing?	2	K1	CO4
9. Differentiate product quality and process quality.	2	K2	CO5
10. State the four principles to achieve software quality.	2	K1	CO5

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) Explain Engineering approach to software development.	13	K2	CO1
OR			
b) Illustrate the basic steps involved in the life cycle models in detail.	13	K2	CO1
12. a) Explain in detail the measures of code and design quality.	13	K2	CO2
OR			
b) Summarize Software Cost Estimation Models and concepts of Software Engineering Economics.	13	K2	CO2
13. a) Explain in detail about Class Responsibility Collaborator (CRC) model.	13	K2	CO3
OR			
b) i) Summarize about class diagram with suitable examples.	7	K2	CO3
ii) Explain Sequence Diagram with an example.	6	K2	CO3

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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14. a) Explain in detail about faults and failures with its types. 13 K2 CO4
OR
b) Classify the various types of inspection with the help of any one example. 13 K2 CO4
15. a) Explain about External and internal qualities in detail. 13 K2 CO5
OR
b) Explain CMM, CMMI in detail. 13 K2 CO5

PART - C (1 × 15 = 15 Marks)

16. a) i) Identify the importance of Software Requirement Specification. 8 K3 CO3
Prepare an SRS document for Library Management System.
ii) Identify the importance of ISO-9126 with suitable examples. 7 K3 CO5
OR
b) i) Organize the basic steps involved in Design Patterns and explain it with the help of an example. 8 K3 CO3
ii) Identify the importance of McCall Quality Model. 7 K3 CO5