



**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

Paper Code : BCAC402 Software Engineering

UPID : 400087

/SEM-4/400087/2022-2023/1164

Time Allotted : 3 Hours

Full Marks : 70

*The Figures in the margin Indicate full marks.*

*Candidate are required to give their answers in their own words as far as practicable*

**Group-A (Very Short Answer Type Question)**

1. Answer any ten of the following :

[ 1 x 10 = 10 ]

- (I) What is full form of CRM?
- (II) A TPS is commonly known as
- (III) Name one dynamic UML diagram
- (IV) Alpha testing is done by?
- (V) What is full form of MRP?
- (VI) What is the full form of SDLC?
- (VII) Which component is used for storing data in DFD?
- (VIII) When the feasibility study is done?
- (IX) \_\_\_\_\_ testing is to check code.
- (X) In software engineering for quality assurance which ISO series is being used?
- (XI) A map of overall structure of a database is called as Table or Schema?
- (XII) After which phase of SDLC can white-box testing be started?

**Group-B (Short Answer Type Question)**

Answer any three of the following :

[ 5 x 3 = 15 ]

- 2. What are components of DFD, Explain each with diagram?
- 3. What is economic feasibility? Why is it also termed as Cost-Benefit analysis?
- 4. Explain the function of MIS, DSS, KBS
- 5. What is data dictionary? What is its another name? Describe its all fields
- 6. Compare and contrast top down and bottom up integration testing

**Group-C (Long Answer Type Question)**

Answer any three of the following :

[ 15 x 3 = 45 ]

- 7. Differentiate static UML diagram and dynamic UML diagram? Draw and explain any one static UML diagram? [ 5+5+5 ]  
Draw and explain any one dynamic UML diagram? <https://www.makaut.com>
- 8. What is test case? Distinguish Black box testing and white box testing? Discuss the two types of black box testing strategies [ 2+5+8 ]
- 9. What is CBIS? Describe TPS, OAS, MIS, DSS, KBS along with their application. [ 5+10 ]
- 10. What is a CASE tool? How are case tools useful in different aspects of software engineering projects? Also briefly state two disadvantages of case tool [ 3+8+4 ]
- 11. How verification and validation used in different phases of software development, explain briefly. [ 15 ]

\*\*\* END OF PAPER \*\*\*