

22MCA2C8L

MCA II Semester (NEP) Degree Examination, Nov-2023

MATER OF COMPUTER APPLICATIONS

Paper: Software Engineering

Hours: 03

Max Marks: 70

Answer any Five of the following questions with Question No. 1 is Compulsory.

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| 1. a) | Define Software Engineering. Mention essential characteristics of good software. | 7 |
| b) | What is Agile Methodology? Explain the principles of Agile Methodology. | 7 |
| 2. a) | What is requirement engineering? Explain functional and non-functional requirements. | 7 |
| b) | What is the Use case model and how to make it? Discuss the four basic parts of Use case model. | 7 |
| 3. a) | Discuss on quality guidelines of Design Process. | 7 |
| b) | Explain in detail the Layered architecture with diagram. | 7 |
| 4. a) | Explain Equivalence Class Partitioning and Boundary Value Analysis with a suitable example. | 7 |
| b) | Explain the strategic issues of testing in detail. | 7 |
| 5. a) | Explain the cost of estimation COCOMO model with suitable example. | 7 |
| b) | Describe the expression of algorithmic cost modeling. | 7 |
| 6. a) | What is SRS Document? Explain the structure of SRS Document. | 7 |
| b) | Explain different Design concepts. | 7 |
| 7. a) | Explain various methods to calculate the cyclomatic complexity with an example. | 7 |
| b) | Briefly narrate how project duration is calculated. | 7 |
| 8. | Write a short note on the following: | 5+5+4 |
| a. | Scrum process model. | |
| b. | Coupling & Cohesion. | |
| c. | Golden rules for UI Design. | |