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Reg. No.....

Name.....

M.Sc. (COMPUTER SCIENCE) DEGREE (C.S.S) EXAMINATION FEBRUARY 2025

Third Semester

MCS3C4—SOFTWARE ENGINEERING

(2018 Admissions—First Mercy Chance/ 2017 Admissions—Second Mercy Chance, 2016 Admissions—Third Mercy Chance and 2015 Admissions—Last and Final Special Mercy Chance)

Time : Three Hours Maximum Weight : 30

Part A (Short Answers)

Answer any **five** *questions.*

Each question carries a weight of 1.

1. List out the software myths.
2. Define software process.
3. List the principles of a software design.
4. What is software architecture ? What is its importance ?
5. What are the attributes of a good test ?
6. List down few process and product metrics.
7. List out the principles of project scheduling.
8. List the benefits of UML.

(5 × 1 = 5)

Part B (Short Essays)

Answer any **five** *questions.*

Each question carries a weight of 2.

9. Explain the principles of agile methods.
10. Describe the importance of requirement modeling.
11. Explain empirical estimation models.

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12. Describe the principles of component level design patterns.

13. Describe object-oriented software testing methods.

14. Briefly explain activities in software reengineering.

15. Explain core elements of UML diagrams.

16. Consider modeling a student information system. Consider the use case "student registers for a course". Draw a sequence diagram and explain briefly.

(5 × 2 = 10)

Part C (Long Essays)

Answer any **three** *questions.*
Each question carries a weight of 5.

17. What is the importance of models in software engineering ? Explain with examples of any three process models which are commonly used.

18. Describe the important principles and steps of user interface analysis and design.

19. What is cohesion ? Explain different types of cohesion.

20. Explain elaborately the various strategies and steps involved in risk management.

21. Elaborate on the series of tasks of a software configuration management process.

22. Prepare an activity diagram that elaborates the details of logging into an email system. Explain the steps with a neat diagram.

(3 × 5 = 15)