Reg. No ..... Name **24U436**

END SEMESTER EXAMINATION - MARCH 2024

SEMESTER 4 - INTEGRATED M.Sc. PROGRAMME COMPUTER SCIENCE

COURSE : **21UP4CRMCP12 - SOFTWARE ENGINEERING**

(For Regular 2022 Admission and Improvement / Supplementary - 2021 Admission)

Time : Three Hours Max. Weightage: 30

PART A

Answer any 8 Questions

1. Define Software Engineering in simple terms.
2. Define the process - staffing in software project management.
3. Define reuse domain in domain analysis.
4. Define the term slack time in an activity network.
5. State how can you evaluate a software design to be good, with respect to cohesion and coupling.
6. State the main goal of structured design.
7. State the objective of coding phase.
8. Define the term project risk.
9. State the reason behind saying that it is not possible to guarantee that a program or software is error free.
10. List any two drawbacks of command-based user interface.

(1 x 8 = 8 Weight)

PART B

Answer any 6 Questions

11. While developing the user interface for a software product, explain how can you accomodate users with different skill levels.
12. Discuss the problems that would gear up if a software development organization does not follow any SDLC model for development of large-sized software.
13. Discuss the need of designing test cases.
14. Explain the important causes of and remedies for high coupling between two software modules.
15. With a diagram, explain how a Gantt chart helps in project planning.
16. Differentiate between the activities - verification and validation.
17. Discuss the various items that should be designed and documented during the design phase.
18. Explain why every software system must undergo maintenance or progressively become less useful.

(2 x 6 = 12 Weight)

PART C

Answer any 2 Questions

19. Elaborate on the process of constructing a DFD for a software project.
20. Explain the code review techniques in detail.
21. Describe the V-model in detail. Also, list and explain its advantages and disadvantages.
22. Management of software projects is much more complex than management of many other types of projects. Discuss the major factors contributing to the complexity of managing a software product.

(5 x 2 = 10 Weight)