BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024
2023 ADMISSIONS REGULAR
B.C.A SEMESTER III - CORE COURSE
BC3C06B23 - Software Engineering

Time : 3 Hours   Maximum Marks : 80

Part A

I. Answer any Ten questions. Each question carries 2 marks   (10x2=20)

1. Distinguish between s-type and p-type software.

2. Discuss process improvement. List few tools/techniques used for it.

3. Write the qualities of SRS.

4. Explain the use of State transition diagrams.

5. Explain the importance of Requirements elicitation stage.

6. Enumerate characteristics of design process.

7. Write a note on UI design.

8. Define data/class design.

9. Define white box testing.

10. What do you mean by Validation Testing?

11. What is Software Cost Estimation? Specify any 2 techniques used for finding cost estimation.

12. State the need for measuring the software project.

Part B

II. Answer any Six questions. Each question carries 5 marks   (6x5=30)

13. Discuss the evolution of software engineering over years.

14. Discuss Data dictionary and explain it with help of an example.

15. Explain in detail Structured analysis and different components used for it.

16. Explain the various activities involved in UI design.

17. Explain the key architectural components and models in architectural design.

18. Differentiate (i) Unit Testing and Integration Testing (ii) Alpha Testing and Beta Testing

19. Explain Grey box testing .How does it differ from black box testing?

20. Explain automated SCM repository.

21. Explain Earned Value Analysis. Why WBS created in a project?

Part C

III. Answer any Two questions. Each question carries 15 marks   (2x15=30)

22. Explain in detail about the different levels of Data Flow Diagrams with the help of a real time scenario.

23. Explain in detail the Real-time Software Design Process.

24. Discuss Integration testing. Explain different integration testing techniques with example.

25. Observe the importance of Software Maintenance in software development lifecycle.