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Name :	

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024

2023 ADMISSIONS REGULAR

SEMESTER III - CORE COURSE COM - APPNS

CA3C07B23 - System Analysis and Software Engineering

Time: 3 Hours Maximum Marks: 80

Part A

I. Answer any Ten questions. Each question carries 2 marks

(10x2=20)

- 1. What is the significance of Feedback in a system?
- 2. Explain Business Information Systems
- 3. Define System Analysis
- 4. If user participation is available, which Software life cycle model is to be chosen?Why?
- 5. Differentiate between product and process
- 6. List out the most important feature of Spiral Model
- 7. Define LOC
- 8. Give the project size of embedded mode of Basic COCOMO
- Name three software product aspects addressed by McCall's software quality factors
- 10. Define pseudocode
- 11. Define Software Testing
- 12. Define Scrum

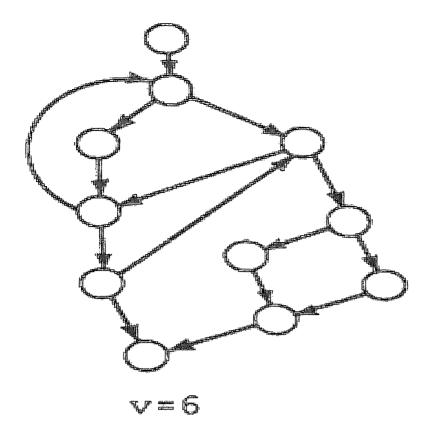
Part B

II. Answer any Six questions. Each question carries 5 marks

(6x5=30)

- 13. Explain the essential skills required for a system analyst
- 14. Define feasibility study. What are the different types of Feasibility studies?
- 15. Explain four phases of RAD model
- 16. What do you mean by SRS?
- 17. Consider a project with the following functional units: No of user inputs = 20 No of user outputs = 30 No of user enquiries = 35 No of user files = 05 No of external interfaces = 03 Assume all complexity adjustment factors and weighting factors are average. Compute the function points for the project. [Weighting Factors for EI 4, EO 5, EQ 4, ILF 10, EIF 7, Fi = 3]
- State the importance of McCall Quality model.
- 19. What is design? Describe the difference between conceptual design and technical design.
- 20. What do you mean by cyclomatic complexity? Illustrate any method for finding cyclomatic complexity
- 21.

Find the Cyclomatic Complexity of the given Flow Graph using Graph Matrix method.



Part C

III. Answer any Two questions. Each question carries 15 marks

(2x15=30)

- 22. Explain in detail categories of Information.
- 23. Explain RAD and Prototype model in software engineering.
- 24. Explain SRS? List out the advantages of SRS
- 25. Explain in detail McCall Software Quality Model with a neat diagram