TB213130V **Reg. No :.....**

Name :.....

B. Sc. / B. Voc. DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2022

(2021 Admissions Regular,2020 Admissions Supplementary/Improvement,2019 & 2018 Admissions Supplementary)

SEMESTER III - CORE COURSE (COMPUTER APPLICATIONS (TRIPLE MAIN))

(For Computer Applications & B.Voc. SWD)

CA3B07B18 - 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 do you mean by System Design?
2. Explain the term "System'
3. What do you mean by Strategic Information ?
4. List out the most important feature of Spiral Model
5. List out the significance of SRS
6. Name four software applications
7. Expand COCOMO
8. Name the three modes of software development of Basic COCOMO
9. Define Design
10. Define Temporal Cohesion
11. Define Error
12. What are the reasons behind to perform white box testing?

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. Discuss evolutionary process models
15. Explain prototyping model
16. Discuss quality function deployment technique of requirements elicitation
17. Compute the functional point value for a project with the following information domain characteristics : No of user inputs = 50 No of user outputs = 40 No of user enquiries = 35 No of user files = 06 No of external interfaces = 04 Assume all complexity adjustment factors and weighting factors are average. [Weighting Factors for EI - 4, EO – 5, EQ – 4, ILF – 10, EIF – 7, Fi = 3]
18. Explain software quality attributes.
19. Define Coupling. Explain different types of coupling.
20. What is the difference between Alpha testing and beta testing?
21. Explain the basis path testing in detail.

Part C

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

22. Explain the role of a System Analyst

23. What are the advantages of developing the prototype of a system?
24. Explain in detail McCall Software Quality Model with a neat diagram
25. Describe the equivalence class testing method. Compare this with boundary value analysis technique