B.C.A DEGREE END SEMESTER EXAMINATION : NOVEMBER 2023
SEMESTER 3 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY
COURSE : **19U3CRBCA8 : SOFTWARE ENGINEERING**
(For Regular - 2022 Admission and Improvement/Supplementary - 2021/2020/2019/2018/2017/2016 Admissions)

Time : Three Hours   Max. Marks: 75

PART A
Answer All (1 mark each)

1. What is the drawback of horizontal partitioning?
2. Define requirement engineering.
3. Define coupling.
4. What is the prime objective of software engineering?
5. What is software maintenance?
6. Define the predicate node.
7. What is the expansion of CASE?
8. Define unit testing.
9. List out the software life cycle models.
10. Define data model.

(1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. What is the need for Black Box testing?
12. Describe about equivalence partitioning.
13. List the coupling factors.
14. What are the drawbacks of RAD models?
15. List the common factors that affect the feasibility study.
16. Describe about monitoring system with example.
17. Distinguish between "known risk" and "unknown risk".
18. Distinguish between the open-ended and close-ended approach.
19. What is configuration database?
20. Summarize the pros and cons of iterative software development model.

(2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Explain the software requirement specifications.
22. i) What is the purpose of feasibility study? State the inputs and results of feasibility study.
    ii) List any four issues addressed by a feasibility study and elaborate the phases involved when carrying out a feasibility study.
23. Abstraction and refinement are complementary concepts in design. Explain.
24. a) Describe about basic COCOMO.
    b) Which is more important, the product or process? Justify your answer.
25. Discuss configuration management planning.

26. What are the common approaches to debugging?

27. Outline the umbrella activities in the software engineering process.

(5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Compare the following life cycle models based on their distinguishing factors, strengths and weakness- waterfall model, evolutionary model and spiral model. Illustrate with diagram wherever necessary.

29. What is COCOMO Model? Give the procedure of the delphi method.

30. What are the various testing strategies to software testing? Discuss them briefly.

31. Explain in detail about functional and non-functional requirements.

(12 x 2 = 24)