GN-451

V Semester B.C.A. Examination, December - 2019
(CBCS) (Y2K14) (F+R)
COMPUTER SCIENCE
BCA 502 : Software Engineering

Time : 3 Hours

Max. Marks : 100

Instruction : *Answer **all** Sections.*

SECTION - A

I. Answer **any ten** questions.   10x2=20

1. What is Software Engineering ?

2. Differentiate between generic product and customised product.

3. Define requirement engineering process.

4. What are the objectives of prototyping ?

5. Define ethnography.

6. Differentiate between Generic model and Reference model.

7. What is adaptability ?

8. What are the characteristics of GUI/UI ?

9. What is RGM ?

10. What is the difference between failure and fault ?

11. What is Alpha testing ?

12. Define Quality Assurance.

P.T.O.

SECTION - B

II. Answer **any five** questions.   5x5=25

13. Explain IEEE structure of SRS.

14. Write a note on risk management.

15. What is coupling ? Explain types of coupling.

16. Explain object-oriented and function oriented design.

17. What do you mean by fault tolerance ? Write a detailed note on approaches to fault tolerance.

18. Describe clean room software development process with its advantages and disadvantages.

19. Describe Design principles.

20. Explain different types of software maintenance.

SECTION - C

III. Answer **any three** questions.   3x15=45

21. (a) Explain the different phases of SDLC.   8+7
    (b) Explain the classification of Non-functional requirements.

22. (a) With neat diagram explain Spiral model.   10+5
    (b) Write a short notes on User-Interface design activities.

23. (a) What is Software reliability metrics ? Explain the different types of software reliability metrics.   10+5
    (b) Explain the classification of failures.

24. (a) Write a note on verification and validation model.   8+7
    (b) Explain evolutionary and throw-away prototyping.

25. (a) Explain COCOMO model in detail.   10+5
    (b) What is Cohesion ? Explain different types of Cohesion in brief.

SECTION - D

IV. Answer **any one** question.   1x10=10

26. Explain the requirement engineering process with neat diagram.

27. Explain different test strategies.

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