E 6487 (Pages : 2) Reg. No.....

Name.....

B.C.A. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2019

Sixth Semester

Core Course—SOFTWARE ENGINEERING

(2013 Admission onwards)

Time : Three Hours Maximum Marks : 80

Part A

Answer **all** *questions.*

Each question carries 1 *mark.*

1. What is the objective of software engineering ?
2. If the user participation is available, which software life cycle model is suitable ?
3. What is the purpose of requirement review process ?
4. Level-0 DFD is similar to which diagram ?
5. What is the unit of Effort ?
6. Define FAST.
7. What is software failure ?
8. What is functional cohesion ?
9. Define Cyclomatic complexity ?
10. Which method is used for functionality testing ?

(10 × 1 = 10)

Part B

Answer any **eight** *questions.*

Each question carries 2 *marks.*

11. What is the need for a software life cycle model ?
12. Distinguish between generic and customized product.
13. What is software metric ? How is it different from software measurement ?
14. List out requirements of elicitation techniques.
15. Distinguish between user and system requirements.
16. What is data dictionary ?

Turn over

17. What is the purpose of use case diagram ?
18. What is software reliability ? Does it exist ?
19. What is modularity ? List the important properties of a modular system.
20. Differentiate between fault and bug.
21. What is Alpha testing ?
22. What is test suite ?

(8 × 2 = 16)

Part C

Answer any **six** *questions.*
Each question carries 4 *marks.*

23. Why it is difficult to improve software process ? Explain with reasons.
24. What is software life cycle ? Discuss the generic waterfall model.
25. Briefly explain the role of management in software development.
26. What is software requirements specification (SRS) ? List out the advantages of SRS standards.
27. What is meant by test case design? Discuss its objectives and indicate the steps involved in test case design.
28. Discuss the structure testing. How is it different form functional testing ?
29. What are components of a use case diagram ? Explain their usage with the help of an example.
30. Discuss the objectives of software design. How do we transform an informal design to a detailed design ?
31. Explain how the CMM encourages continuous improvement of the software process.

(6 × 4 = 24)

Part D

Answer any **two** *questions.*
Each question carries 15 *marks.*

32. Explain the spiral model of software development. What are the limitations of such a model ? How does the "project risk" factor affect this model ?
33. What are crucial process steps of requirement engineering ? Discuss with the help of a diagram.
34. What do you understand with the term "requirements elicitation" ? Discuss any two techniques in detail.
35. List five desirable characteristics of a good SRS document. Discuss the relative advantages of formal requirement specifications. Also write down the important issues that must be addressed by an SRS.

(2 × 15 = 30)