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 ?

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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)

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BCA DEGREE (CBCS) EXAMINATION, MAY 2019

Fourth Semester

Bachelor of Computer Application

Core Course - CA4CRT03 - SYSTEM ANALYSIS AND SOFTWARE ENGINEERING

2017 Admission onwards

46071D27

Maximum Marks: 80 **Time: 3 Hours**

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1. What is Business Information System?
2. Define Organization Chart
3. Differentiate a program and a software?
4. Distinguish the terms deliverables and milestones.
5. Explain RAD?
6. What are use case Scenarios?
7. What do you mean by scope in SRS?
8. How many aspects of adjustment factors are considered in determining adjustment factors?
9. What is data flow diagram?
10. List the four types of diagrams.
11. Is complete testing of a software possible? Explain why?
12. What is beta testing?

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain management review of the life-cycle activities
14. What is the meaning of the term baseline document? Name and describe the three baseline documents
15. After every cycle a usable product should be given to customer; which model will be choosen? Explain?
16. Differentiate functional and non-functional requirements.

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17. What is intermediate COCOMO?

18. Explain the differencec between a flow chart and a structure chart.

19. Explain the various software quality factors and criterias.

20. Explain decision-table testing

21. Explain unit testing and integration testing

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. If user have no previous experience of participation in similar projects;which all lifecycle models will be choosen? Explain it.

23. Explain DFD with an example

24. With a neat block diagram explain the design framework of software design

25. Explain:
    (a) Path testing
    (b) Data flow testing

(2×15=30)

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E 5973 (Pages : 2) Reg. No.....

Name.....

B.C.A. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2017

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. Abbreviate the term CMMI.
2. Who developed Spiral Model ?
3. What is meant by requirement elicitation ?
4. In the Empirical Estimation Technique which model is developed by Barry W. Boehm?
5. Who developed function count method ?
6. What is LOC ?
7. What is Capability Maturity model ?
8. How many product quality factors have been proposed in McCall quality model ?
9. What is meant by code walkthrough ?
10. What is a FTR ?

(10 × 1 = 10)

Part B

Answer any **eight** *questions.*
Each question carries 2 *marks.*

11. What is software process ?
12. Differentiate between deliverables and milestones.
13. What does Level 0 DFD represent ?
14. Define requirement engineering process.
15. Differentiate between user and system requirement.

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16. Define software design.
17. What is the difference between function oriented and object oriented design ?
18. What is MTBF ?
19. State any two advantages of OOD methodology.
20. What is beta testing ?
21. Differentiate validation and verification ?
22. What is meant by test suit ?

(8 × 2 = 16)

Part C

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

23. Define a software process. How do software myths affect a software process ?
24. Illustrate with a diagram that the software does not wear out.
25. Write a brief note on feasibility study ?
26. What are the characteristics of SRS ?
27. List the important properties of a modular system.
28. Brief on the objectives of software design.
29. Can we have inheritance without polymorphism ? Explain.
30. Why does software fail after it has passed from acceptance testing ?
31. Explain the limitations of testing.

(6 × 4 = 24)

Part D

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

32. Explain the waterfall model and the spiral model of software development.
33. Discuss the significance and the use of requirement engineering. What are the problems in the formulation of requirements ?
34. Explain different types of coupling and cohesion.
35. How can design attribute facilitate debugging ? Explain various debugging approaches.

(2 × 15 = 30)

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