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Reg. No	

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCBCSS-UG)

B.C.A.

BCA 5B 10—PRINCIPLES OF SOFTWARE ENGINEERING

(2017 Admissions)

Time: Three Hours

Maximum: 80 Marks

Part A

Answer **all** questions.

Each question carries 1 mark.

- 1. List out the layers of software engineering.
- 2. Give two umbrealla activities.
- 3. What do you mean by reverse engineering?
- 4. ——— is a system test that forces the software to fail in a variety of ways and verifies that recovery is properly performed.
- 5. ——— executes a system in a manner that demands resources in abnormal quantity, frequency or volume.
- 6. Deployment testing is also known as ———
- 7. What do you mean by business process re-engineering?
- 8. A prioritized list of project requirements or features that provide business value for the customer is ———.
- 9. List out the framework activities in XP process.
- 10. What is called integration testing?

 $(10 \times 1 = 10 \text{ marks})$

Part B

Answer all questions.

Each question carries 2 marks.

- 11. Write a note on spiral model.
- 12. Briefly write down about dynamic system development model (DSDM).
- 13. Discuss about the modularity in design aspect.
- 14. What are user defined data types?
- 15. Write a note on security testing.
- 16. How will you negotiate the requirements?

Turn over

- 17. What do you mean by Quality Function Deployment (QFD)?
- 18. Write about the deployment diagram.

 $(8 \times 2 = 16 \text{ marks})$

Part C

Answer any six questions. Each question carries 4 marks.

- 19. Draw a class diagram for library management system.
- 20. Explain different evolutionary process models.
- 21. How the requirements model is built?
- 22. Write a note on specialized process models.
- 23. Explain different design aspects in design process.
- 24. Illustrate the activity diagram with an example.
- 25. What are the standards and guidelines for coding styles?
- 26. Explain software re-engineering.
- 27. Discuss all validation testing techniques in detail.

 $(6 \times 4 = 24 \text{ marks})$

Part D

Answer any three questions. Each question carries 10 marks.

- 28. Draw the use case diagram and activity diagram for hospital management system.
- 29. Differentiate incremental process models and evolutionary process models.
- 30. Explain the testing strategies for object oriented software.
- 31. Detail the documentation guidelines for software engineering.
- 32. How will you elicit the requirments? Discuss.

 $(2 \times 10 = 30 \text{ marks})$