

D 50635

(Pages : 2)

Name.....

Reg. No.....

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2018

(CUCBCSS—UG)

Computer Science

BCS 5B 11—PRINCIPLES OF SOFTWARE ENGINEERING

Time : Three Hours

Maximum : 80 Marks

Part A

Answer all questions.

Each question carries 1 mark.

1. Which is not a requirements elicitation technique ?
 - (a) Interviews.
 - (b) The use case approach.
 - (c) FAST.
 - (d) Data flow diagram.
2. CASE tool is _____.
 - (a) Computer Aided software engineering.
 - (b) Component Aided software engineering.
 - (c) Constructive Aided software engineering.
 - (d) Computer Analysis software engineering.
3. Outcome of requirement specification is :
 - (a) Design document.
 - (b) Software requirement specification.
 - (c) Text document.
 - (d) None of these.
4. Which is not a characteristic of good SRS ?
 - (a) Correct.
 - (b) Complete.
 - (c) Consistent.
 - (d) Brief.
5. The relationship between data elements in a module is called _____.
6. _____ are used to quantify the attributes of software development process and environment.
7. A design notation used for representing function oriented design is _____.
8. Level 0 DFD is similar to _____.
9. The primary characteristic of a good design is low cohesion and high coupling. (True or False)
10. A program can have more than one linearly independent path. (True or False).

(10 × 1 = 10 marks)

Turn over

Part B

*Answer all questions.
Each question carries 2 marks.*

11. Define software Engineering.
12. Differentiate between product metrics and process metrics.
13. What are decision tables ?
14. What is the difference between a flowchart and a structure chart ?
15. What is the primary goal of coding phase ?

(5 × 2 = 10 marks)

Part C

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

16. Explain the three entities that repeatedly occur in software engineering.
17. Explain the limitations of waterfall model.
18. Explain the different phases of project management process.
19. What is SRS ? Explain the need for SRS.
20. What is prototyping in problem analysis ? What are the various approaches in prototyping ?
21. What is functional modeling in OOD ?
22. What are the different types of modules used in a structure chart ?
23. What is test plan ? What are its components ?

(5 × 4 = 20 marks)

Part D

*Answer any five questions.
Each question carries 8 marks.*

24. Explain the various phases in the software development process.
25. With the help of a diagram explain the spiral model.
26. Explain the structured design methodology for developing system designs.
27. What is functional testing ? Explain the various techniques used to select test cases.
28. Explain the needs for software requirement specification.
29. How a detailed design is different from system design ? Explain.
30. What is the fundamental objective of a process ? Explain the important characteristics of a software process.
31. Write notes on :
 - (a) Unified Modeling language.
 - (b) Critical Design review.
 - (c) Consistency checks.

(5 × 8 = 40 marks)