| C 60  | 0099 (Pages : 2) Name                                                              |
|-------|------------------------------------------------------------------------------------|
|       | Reg. No                                                                            |
|       | SIXTH SEMESTER BCA DEGREE EXAMINATION, MARCH 2019                                  |
|       | (CUCBCSS)                                                                          |
|       | B.C.A.                                                                             |
| 3     | BCA 6B 14—SOFTWARE ENGINEERING                                                     |
| Time: | Three Hours Maximum: 80 Marks                                                      |
|       | Part A                                                                             |
|       | Answer all questions.  Each question carries 1 mark.                               |
| 1.    | Simplifying a problem by omitting unnecessary details is known as ———.             |
| 2.    | UML stands for ———.                                                                |
| 3.    | The ——— is the final outcome of the requirements analysis and specification phase. |
| 4.    | The relationship of data element in a module is called ———.                        |
| 5.    | Level 0 DFD is similar to ———.                                                     |
| 6.    | ——————————————————————————————————————                                             |
| 7.    | A development style based on widgets is called ————                                |
| 8.    | Beta testing is carried out by ———.                                                |
| 9.    | Software mistakes found during coding are known as ———.                            |
| 10.   |                                                                                    |
|       | $(10 \times 1 = 10 \text{ marks})$                                                 |
|       | Part B                                                                             |
|       | Answer all questions.  Each question carries 2 marks.                              |
| 11.   | State three important advantages of structured programming.                        |
| 12.   | What are the features of function oriented design approach?                        |
| 13.   | Write short note on context diagram.                                               |
| 14.   | What do you mean by modeless interface?                                            |

 $(5 \times 2 = 10 \text{ marks})$ 

Turn over

15. Discuss the term software reverse engineering.

## Part C

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

- 16. What is data structure oriented software design methodology? How it differs from the data flow oriented design methodology?
- 17. Explain any two empirical estimation techniques.
- 18. What is coupling? Explain the various types of coupling.
- 19. Discuss common mistakes committed in use case model development.
- 20. What is window management system? Explain its components.
- 21. Distinguish between graphical user interface and Text based user interface.
- 22. Write the procedure to get ISO 9000 certification.
- 23. Identify the stages through which a reuse domain progress

 $(5 \times 4 = 20 \text{ marks})$ 

## Part D

Answer any five questions.

Each question carries 8 marks.

- 24. What is project planning? Explain various project estimation techniques.
- 25. What are the different categories of users of SRS document and what are the different categories of customer requirement?
- 26. What is a formal technique? Explain operational semantics of a formal method.
- 27. Explain requirement gathering techniques.
- 28. What are design patterns? Explain common design patterns.
- 29. Explain component based GUI development.
- 30. Explain different approaches used in black box and white box testing.
- 31. What do you mean by software reliability? Explain different reliability metrics.

 $(5 \times 8 = 40 \text{ marks})$