

**FOURTH SEMESTER B.VOC. DEGREE EXAMINATION, APRIL 2017**

Software Development

GEC 4SE 11—SOFTWARE ENGINEERING PRINCIPLES

Time : Three Hours

Maximum : 80 Marks

**Section A***Answer all questions.**Each question carries 1 mark.*

1. Software engineering approach is used to achieve \_\_\_\_\_.
2. RAD stands for \_\_\_\_\_.
3. \_\_\_\_\_ are strong medium to collect requirements.
4. Requirement elicitation means \_\_\_\_\_.
  - (a) Gathering of requirements.
  - (b) Capturing of Requirements.
  - (c) Understanding of requirements.
  - (d) All of the above.
5. Which tool is used for structured designing ?
  - (a) Program flowchart.
  - (b) Structure chart.
  - (c) DFD.
  - (d) Module.
6. Which is not a characteristic of a good SRS ?
  - (a) Correct.
  - (b) Complete .
  - (c) Consistent.
  - (d) Brief.
7. In cause effect graphing \_\_\_\_\_ is the input conditions and \_\_\_\_\_ output conditions.
8. Alpha testing is done by \_\_\_\_\_.
  - (a) Customer.
  - (b) Tester.
  - (c) Developer.
  - (d) All of these.
9. CASE stands for \_\_\_\_\_.
10. What enables a software engineer to define screen layout rapidly for interactive applications ?

(10 × 1 = 10 marks)

**Turn over**

**Section B**

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

11. Explain the components of software.
12. What do you mean by Win-Win model ?
13. What is an object point ?
14. What is the use of decision tables ?
15. Explain the symbols used in DFD.
16. Briefly explain the basic concept of software design.
17. Write a short note on structure charts.
18. What are the benefits of conducting smoke testing ?
19. List out various methods for finding Cyclomatic complexity.
20. What is PERT ?
21. What is COCOMO model ?
22. What are the parameters used for measuring quality ?

(8 × 2 = 16 marks)

**Section C**

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

23. What are the characteristics of the software ?
24. What is evolutionary development model ?
25. What do you mean by formal technical review ?
26. Draw DFD of your college management.
27. What is coupling ? What are the various types of coupling ?
28. What are the requirements engineering process functions ?
29. Why testing is important with respect to software ?
30. Explain software re-engineering.
31. How the CASE tools are classified ? Explain software cost estimation.

(6 × 4 = 24 marks)

**Section D**

*Answer any two questions.*

*Each question carries 15 marks.*

32. Explain IEEE standard structure of SRS. Explain validation and verification Software Engineering.
33. Explain the various data design principles and architectural styles. Describe the transform and transaction mapping processes.
34. Explain Black Box and White Box testing. Give the merits and demerits of both approaches.
35. What is software reliability ? How is it different from software availability ? Explain one reliability model.

(2 × 15 = 30 marks)