(6 pages) **Reg. No. :** .....

Code No. : 20992 **Sub. Code : GMCS 51/ GMSE 51**

B.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2017.

Fifth Semester

Computer Science/Software Eng. – Main

SOFTWARE ENGINEERING

(For those who joined in July 2012 – 2015)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. A ———— software is developed by a group of software developers working together in a team.

   (a) Professional (b) Application

   (c) System (d) Programming

2. Which of the following activity spans all stages of a software development life cycle?

   (a) Coding

   (b) Testing

   (c) Project Management

   (d) Design

3. The primary objective of requirement gathering task is to the requirements from the ————.

   (a) Stakeholders (b) Users

   (c) System (d) Employers

4. The outcome of the detailed design is

   (a) Structure chart (b) SRS document

   (c) UML diagram (d) MSPEC

5. A data flow diagram represents

   (a) The co–ordinates based on which a data may be processed

   (b) The order in which the activities are carried out

   (c) The transformation of data through processing stations

   (d) The order in which various functions of a program are involved

6. Which of the following indicated is a kind of relationship?

(a) Aggregation (b) Association

(c) Dependency (d) Inheritance

7. Direct Manipulation interface is called as ————

(a) Iconic Interface

(b) Hierarchical Interface

(c) Walking menu

(d) Lexical Interface

8. Use of ———— statement makes a program unstructured.

(a) GoTo (b) IF

(c) Break (d) Continue

9. Which of the following is the focus of modern quality paradigms.

(a) Process Assurance

(b) Product Assurance

(c) Thorough Testing

(d) Thorough testing and rejections of bad products

10. Behman's ———— law states that good products are maintained and bad products are thrown away

(a) FIRST (b) SECOND

(c) THIRD (d) FOURTH

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) State the major responsibilities of a software manager.

Or

(b) What is computer system engineering? How is it different from S/W engineering?

12. (a) What do you understand by requirements gathering? Explain its different techniques.

Or

(b) What is meant by modular design? How can you determine whether a given design is modular or not?

13. (a) Explain how to create a DFD model of S/W from its source code?

Or

(b) State the advantages and disadvantages of OOD.

14. (a) Write about different types of widgets.

Or

(b) Illustrate various code review techniques.

15. (a) What is statistical listing? In what way is it useful during S/W development? Discuss.

Or

(b) Discuss the characteristics of S/W maintenance.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the various phases of classical waterfall model.

Or

(b) What is configuration management? Illustrate the activities of CM.

17. (a) Discuss the organization of an SRS document as prescribed by IEEE standard.

Or

(b) Explain various software design approaches.

18. (a) What is meant by structured design? Discuss the basic building blocks needed to design a structure chart.

Or

(b) With example, explain class diagram.

19. (a) Discuss different types of user interfaces.

Or

(b) Explain Black Box Testing with examples.

20. (a) Briefly discuss the important issues associated with a quality system.

Or

(b) Write about S/W maintenance process models.

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