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

Code No. : 21022 **Sub. Code : GMCA 51**

B.C.A (CBCS) DEGREE EXAMINATION, APRIL 2018.

Fifth Semester

Computer Application — 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 the questions.

Choose the correct answer :

1. ———— is the example of Generic software.

(a) Word processor

(b) Websites

(c) Air-traffic control system

(d) VCR software

2. The ———— paradigm is an approach to the solution of problems in which all computations are performed in the context of objects.

(a) Procedure

(b) Object-oriented

(c) Software

(d) System management

3. Which of the following is the functional requirement?

(a) Input (b) Response time

(c) Throughput (d) Response usage

4. ———— is the process by which a software engineer learns background information.

(a) Frame (b) Domain

(c) Static (d) Constraint

5. Aggregation represent ———— relationships.

(a) One-to-one (b) One-to-many

(c) Many-to-many (d) Part-whole

6. ———— diagrams are used to model the dynamic aspects of a software system.

(a) Interaction (b) Static

(c) Activity (d) Collaboration

7. ———— cohesion is achieved when the facilities for providing a set of related services to the user are kept together.

(a) Layer

(b) Temporal

(c) Sequential

(d) Utility

8. To reduce constraint coupling you have to ———— all instance variables.

(a) Reduce (b) Encapsulate

(c) Integrate (d) Hide

9. A ———— is an unacceptable behaviour exhibited by a system.

(a) Failure (b) Flaw

(c) Error (d) Trap

10. ———— charts shows the sequence in which tasks must be completed.

(a) Pie (b) PERT

(c) Bar (d) Linear

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) What is meant by software Quality? Discuss.

Or

(b) Describe the risk to select a programming language for a software engineering project.

12. (a) Write about different searching domain analysis document.

Or

(b) Explain Brainstorming technique to gather and analysis a requirement.

13. (a) What is UML? State its different diagram types.

Or

(b) Define activity program? Draw an activity diagram to register a course.

14. (a) Write a note on Divide and conquer design principle.

Or

(b) State the contents of good architectural mode? How to develop it?

15. (a) Write about timing and coordination defects in brief?

Or

(b) Explain spiral model.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Briefly describe the activities commonly found in software engineering.

Or

(b) Discuss the features of object oriented language.

17. (a) Brief on how to determine the requirements of a project.

Or

(b) What is requirement? Explain its diffferent types.

18. (a) Discuss the associations and multiplicity of UML diagram.

Or

(b) With example, explain sequence diagram.

19. (a) Discuss different types of cohesion that designers should try to achieve.

Or

(b) Explain any two architectural patterns to design flexible systems.

20. (a) List out some kinds of defects found in all algorithms and discuss.

Or

(b) State the principles of effective cost estimation and briefly explain any four.

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