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

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

B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2015.

Fifth Semester

Computer Application — Main

SOFTWARE ENGINEERING

(For those who joined in July 2012 and afterwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Software engineering focuses on producing

(a) good quality product

(b) high performance product

(c) reusable product

(d) defect–free product.

2. The Literal meaning of polymorphism is

(a) few forms

(b) different things with the same meaning

(c) no form

(d) many forms

3. The hardest part of software development is

(a) requirement gathering

(b) software design

(c) software implementation

(d) none of these

4. A requirement should be

(a) correct (b) unambiguous

(c) verifiable (d) all of these

5. UML is related to ———— concepts.

(a) object oriented

(b) operation oriented

(c) procedure oriented

(d) all of these

6. Which type of relationship is modelled by the aggregation relationship

(a) is–a (b) has–a

(c) type–if (d) parent–child

7. In which diagrams, the messages sent between objects are time ordered.

(a) sequence diagrams

(b) collaboration diagrams

(c) class diagrams

(d) state transition diagrams

8. CCB stands for

(a) change corporation board

(b) control change board

(c) change control board

(d) change control boundary.

9. The purpose of regression testing is to ensure ———— of the software.

(a) correctness

(b) quality

(c) confidence in modified parts

(d) all of these

10. Maintenance of object–oriented software is difficult due to the use of

(a) classes

(b) inheritance and polymorphism

(c) exception handling

(d) none of these

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 software engineering? Explain.

Or

(b) Who are the stakeholders in software engineering? Why?

12. (a) List out requirements elicitation techniques. Which one is most popular and why?

Or

(b) Explain the activites for managing changing requirements.

13. (a) Explain about the various types of messages in UML with their notations.

Or

(b) Explain the advanced features of class diagrams.

14. (a) Explain the process of design.

Or

(b) Explain the principles leading to good design.

15. (a) Explain the defects in ordinary algorithms.

Or

(b) What do you mean by cost estimation?

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Describe the activities common to software projects.

Or

(b) Explain the basic concepts of object orientation.

17. (a) Explain the importance of requirements. How many types of requirements are possible and why?

Or

(b) Explain the techniques for gathering and analyzing requirements.

18. (a) What is UML? Explain the essentials of UML class diagrams.

Or

(b) Explain the following.

(i) interaction diagrams

(ii) activity diagrams.

19. (a) Explain the techniques for making good design decisions.

Or

(b) What is object oriented design? List the steps to be followed during the OOP Process.

20. (a) What is software testing? Discuss issues, limitations, prachces and future of software testing.

Or

(b) Discuss the following:

(i) building software engineering teams.

(ii) project scheduling and tracking.

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