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2103

Reg. No. :

Code No. : 21022

Sub. Code : GMCA 51

B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2016.

Fifth Semester

Computer Applications — 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. A software is said to be _____ if it has fewer failures.
(a) reliable (b) usability
(c) efficiency (d) reusability
2. _____ is the units of data abstraction in object oriented design.
(a) class (b) object
(c) property (d) behaviour

3. _____ is a process by which a software engineer learns background information.
(a) reusability
(b) Re-engineering
(c) domain analysis
(d) scheduling
4. Which of the following is the functional requirement?
(a) input (b) response time
(c) through put (d) reliability
5. An _____ is used to show how two classes are related to each other.
(a) Association (b) Multiplicity
(c) Inheritance (d) Dependency
6. A _____ diagram shows several objects working together.
(a) Collaboration (b) Intraction
(c) Sequence (d) Activity

7. _____ design specifies the languages with which processes communicate with each other over a network.

- (a) Protocol (b) Algorithm
(c) Class (d) Architecture

8. The set of procedures or methods through which a layer provides its services is called _____

- (a) API (b) CGI
(c) GUI (d) Frame

9. The _____ are the logical conditions that govern looping and if-then-else statements are wrongly formulated.

- (a) defects (b) errors
(c) flaws (d) failures

10. A _____ is a situation where two or more threads are stopped waiting for each other to do something.

- (a) Dead lock (b) live lock
(c) Cohesion (d) Coupling

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b), each answer should not exceed 250 words.

11. (a) Write about Software Quality.

Or

(b) What is Object Orientation? Discuss.

12. (a) Discuss the benefits of domain analysis.

Or

(b) State the difficulties and risks in domain and requirement analysis.

13. (a) What are the essentials of UML class diagrams?

Or

(b) With example explain the activities and actions in state diagram.

14. (a) Describe different types of design.

Or

(b) Write a note on Broker-architectural design.

15. (a) Explain black box and glass box testing with example.

Or

- (b) Discuss how to estimate cost based on past experience.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b), each answer should not exceed 600 words.

16. (a) Discuss various activities of Software Engineering Projects.

Or

- (b) Briefly explain about classes and objects with example.

17. (a) What is requirements? Discuss different types of requirements.

Or

- (b) Briefly describe the role of interviewing in gathering and analysis requirements.

18. (a) Describe various issues in creating generalization.

Or

- (b) Explain in detail about sequence diagram.

19. (a) What is coupling? How to reduce coupling? Explain any two coupling methods.

Or

- (b) Discuss how to write a good design document.

20. (a) List and explain various numerical computations defects.

Or

- (b) Explain different commercial tools used for project scheduling and Tracking.