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Reg. No. :

Code No. : 21022

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B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2017.

Fifth Semester

Computer Applications — 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. The code you write to connect the two component package is called _____
- (a) Frame work (b) Glue
- (c) Product line (d) Domain.
2. _____ is a property by which an abstract operation may be performed in different ways
- (a) Abstraction (b) Polymorphism
- (c) Encapsulation (d) Instances.

3. _____ is an effective way to gather information from a group of people
- (a) brain storming (b) multiviewing
- (c) observation (d) prototyping.
4. Which of the following is the non-functional requirements?
- (a) platform
- (b) input
- (c) output
- (d) timing and synchronization.
5. _____ diagrams show the behaviour of system interms of how objectives with each other
- (a) interaction (b) state
- (c) activity (d) object.
6. Which diagram is used to understand the flow of work that an object or component performs?
- (a) action (b) state
- (c) activity (d) interaction.
7. Several different designers create their own designs is called
- (a) parallel design (b) design space
- (c) design decision (d) static design.

8. In _____ design, you start with the very high level structure of the system
- (a) top-down (b) bottom-top
- (c) best-fit (d) worst-fit.
9. A _____ sort will take equal elements and sometimes switch their order after the sorting process
- (a) stable (b) non-stable
- (c) quick (d) bubble.
10. Which of the following is a locking mechanism?
- (a) designer (b) defector
- (c) semaphore (d) lock.

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Discuss and differentiate types of softwares.
- Or
- (b) Write about classes and their instances.

12. (a) Describe the sections of Domain Analysis document.

Or

- (b) How to manage the changing requirements?

13. (a) Discuss how to handle multiple discriminations in generalizations.

Or

- (b) Explain collaboration diagram with example.

14. (a) Describe the parts of a design.

Or

- (b) Write the strategies to increase the reusability.

15. (a) Describe numerical computation defects.

Or

- (b) Briefly explain various process scheduling tools.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Define and discuss software engineering. What are the difficulties and risks in software engineering as a whole?

Or

- (b) What is object orientations? Write about method operation and polymorphism.

17. (a) Discuss how to define the problem and its scope.

Or

- (b) Explain brain storming in detail.

18. (a) Discuss the advanced features of class diagram.

Or

- (b) Write about state diagram.

19. (a) Explain functional and layer cohesion in detail.

Or

- (b) Discuss multilayer architectural pattern in detail.

20. (a) Discuss different kinds of timing and coordinations defects.

Or

- (b) Explain various software process models in brief.