Reg. No. : | | | | | | | | | | |

Question Paper Code: 45203A

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

Fifth Semester

Computer Science and Engineering

14UCS503 - OBJECT ORIENTED ANALYSIS AND DESIGN

(Common to Information Technology)

(Regulation 2014)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Choose the incorrect statement in terms of Objects

   (a) Objects are abstractions of real-world
   (b) Objects can't manage themselves
   (c) Objects encapsulate state and representation information
   (d) none of these

2. A specific sequence of actions and interactions between actors and the system is

   (a) workflow (b) method (c) scenario (d) instance

3. The measure of how strongly one element is connected to, has knowledge of, or relies on other elements is known as

   (a) cohesion (b) controller (c) coupling (d) factory

4. Which works as a bridge between two incompatible interfaces?

   (a) adapter (b) bridge (c) observer (d) factory

5. What is a strong kind of whole-aggregation and is useful to show in models?

(a) elaboration (b) association (c) composition (d) generalization

6. The construction of object-oriented software begins with the creation of

(a) Design model (b) Analysis model
(c) Code levels (d) Both design and analysis mode

7. A description of what a system does, without explaining how it does is

(a) system behavior (b) system event
(c) system boundary (d) system operation

8. Interaction Diagram is a combined term for

(a) Sequence Diagram + Collaboration Diagram
(b) Activity Diagram + State Chart Diagram
(c) Deployment Diagram + Collaboration Diagram
(d) None of these

9. What testing is involved, the system as a whole and the responsibility of the quality-assurance team?

(a) integration testing (b) unit testing (c) system testing (d) stress testing

10. Which testing is used to verify the functional, performance, and reliability between the modules that are integrated?

(a) acceptance testing (b) integration testing
(c) system testing (d) performance testing

PART - B (5 x 2 = 10 Marks)

11. Define class diagram.

12. What is meant by abstract class abstract factory?

13. How to create a domain model?

14. What is mean by system behavior?

15. List out the issues in OO testing.

PART - C (5 x 16 = 80 Marks)

16. (a) What do you mean by unified process in OOAD? Explain the process with suitable diagrams? (16)

Or

(b) What is interaction diagram? Discuss about various types of interaction diagram with example. (16)

17. (a) What is GRASP? Explain about various patterns of GRASP. (16)

Or

(b) Designing the use case realizations with GoF design patterns. (16)

18. (a) Explain the following with example (i) Conceptual class diagram (ii) Activity diagram. (16)

Or

(b) Explain about aggregations and composition relationship of an object. Illustrate with example. (16)

19. (a) Discuss about UML deployment and component diagram with suitable examples. (16)

Or

(b) (i) What is the common class patterns strategy? Describe about different patterns used for finding the candidate class and object. (8)

(ii) What is meant by interaction diagram? Explain about interaction diagram with example. (8)

20. (a) Explain in detail the operations of mapping design to code. (16)

Or

(b) Explain in detail about the different types of testing in OOAD. (16)

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