Reg. No. :

Question Paper Code: 45203A

B.E. / B.Tech. DEGREE EXAMINATION, NOV 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. Which is a combination of data and logic?

    (a) object   (b) class   (c) attributes   (d) methods

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. An external event that directly stimulates the software is called as

   (a) system event   (b) package   (c) sequence   (d) interaction

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 and activity diagram.

12. What is meant by abstract class abstract factory?

13. What do you mean by inception?

14. What is system sequence diagrams?

15. List out the issues in OO testing.

PART - C (5 x 16 = 80 Marks)

16. (a) (i) Explain about various phases of unified process and list out the primary goals in the design of UML. (8)

    (ii) Discuss about package, component and deployment diagrams. (8)

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

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

Or

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

18. (a) (i) Discuss about the key ideas and best practice that will manifest in elaboration and what are the artifacts may start in elaboration? (8)

(ii) How do you create a domain model? Discuss about how the domain model is illustrated. (8)

Or

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

19. (a) How would you identify attributes and methods? Discuss about various approaches for identifying classes. (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) (i) Discuss about various five distinct levels of OO testing and specify the issues of OO testing. (8)

(ii) Explain about the process of mapping designs to code. (8)

Or

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

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