B.E/B.TECH DEGREE EXAMINATIONS: APRIL/MAY 2012

Fourth Semester

CSE107: OBJECT ORIENTED ANALYSIS AND DESIGN

(Common to Computer Science and Engineering / Information Technology)

Time: Three Hours   **Maximum Marks: 100**

Answer ALL Questions:-

PART A (10 x 1 = 10 Marks)

1. Evaluation of the attitude of senior and user manager within the organization as well as end user by _____

   A. Operational Evaluation   B. User, Manager Assessment

   C. Organizational impact   D. System design evaluation

2. Systems that interact with their environment (receive input and produce output), are

   A. Open systems   B. Closed systems   C. Sub systems   D. Information systems

3. The scheme for representing the relationships between classes.

   A. Method   B. Inheritance   C. Message   D. Polymorphism

4. A _____ prototype is a subset of system features with complete functionality.

   A. Horizontal   B. Vertical   C. Analysis   D. Domain

5. If you want plan project activities such as developing new functionalities or test cases, which of the following is the most useful?

   A. Sequence diagrams   B. Use cases   C. Domain model   D. Package diagrams

6. _____represents the built –in extensibility mechanism of the UML

   A. Constraints   B. Note   C. Stereotype   D. Meta-model

7. The _____association helps to avoid redundancy by allowing a use case to be shared.

   A. Uses   B. location   C. Communication   D. Extends

8. A dependency between two or more classes _____

   A. Aggregation   B. Association   C. Super-sub structure   D. Generalization

9. A _____ is the language used to describe the structure of and the relationships between objects stored in a database.

   A.DML   B.OCL   C.SQL   D.DDL

10. The macro level UI design process is for _____ view layer objects

   A. Identifying   B. Designing   C. Prototyping   D. Testing

PART B (10 x 2 = 20 Marks)

11. What is done by System Analyst?

12. List out the steps in the prototyping process.

13. Define framework.

14. Name the models in objectory.

15. Define OCL.

16. What is encapsulation leakage?

17. List the approaches for identifying classes.

18. Why do we need to identify the system's responsibilities?

19. Define reverse engineering.

20. What is a Metaphor?

PART C (5 x 14 = 70 Marks)

21. a) Explain the categories of information systems.

(OR)

   b) (i) Describe about system development strategies. (6)

   (ii) List out the tools for system development and explain them in detail. (8)

22. a) Explain object oriented systems development life cycle.

(OR)

   b) Explain the layered approach to software development.

23. a) (i) What is UML? What are the primary goals in the design of the UML? (6)

   (ii) What is object relationship? Explain different types of relationship with suitable examples. (8)

(OR)

   b) Consider the online library system. Draw the following UML diagrams for the above mentioned system and explain:

   (i) Use case diagram (4)

   (ii) Activity diagram (5)

   (iii) Sequence diagram (5)

24. a) Explain with an example how the classes can be identified using noun phrase approach.

(OR)

   b) (i) What is CRC? How is it used to identify classes? Explain with an example. (8)

   (ii) How is super-subclass identified? Explain with an example. (6)

25. a) Explain the object oriented design axioms and corollaries.

(OR)

   b) What is the task of view layer? Explain in detail the process of designing view layer classes with an example.

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