

B. E. DEGREE EXAMINATIONS: APRIL / MAY 2010

Fourth Semester

COMPUTER SCIENCE AND ENGINEERING

U07CS401: Object Oriented Analysis and Design

Time: Three Hours

Maximum Marks: 100

Answer ALL the Questions:-

PART A (10 x 1 = 10 Marks)

1. Polymorphism is
 - A. a scheme for sharing operations and data between related classes
 - B. the generic message-sending scheme that allows flexibility in design
 - C. a high level instruction to perform an operation on an object
 - D. a scheme for representing relationships between classes
2. _____ measures the consistency of the product requirements with respect to design specification
 - A. Correspondence
 - B. verification
 - C. validation
 - D. correctness
3. “A pattern in waiting” is called as
 - A. Antipattern
 - B. Generative pattern
 - C. Non-generative pattern
 - D. Proto-pattern
4. Which of the following is UML interaction diagram?
 - A. Sequence diagram
 - B. State chart diagram
 - C. Activity diagram
 - D. Use-case diagram
5. Classes whose purpose is not clearly identified are called as
 - A. Irrelevant classes
 - B. Adjective classes
 - C. Fuzzy classes
 - D. Redundant classes
6. Which one of the following is a property of ‘a-part-of’ relationship
 - A. non-transitivity
 - B. Anti-symmetry
 - C. Symmetry
 - D. Reflexivity
7. The degree of coupling for stamp coupling is
 - A. Very high
 - B. High
 - C. Medium
 - D. Low
8. Which of the following is a transient data
 - A. Data that exists between executions of a program
 - B. Data that out-live a program
 - C. Data that exists between versions of a program
 - D. Results of evaluation of an expression.

9. Scenario based testing is also called as
- A. Usage-based testing
 - B. Error-based testing
 - C. Path testing
 - D. Regression testing
10. The process of quantifying the usability of a system using various attributes
- A. Usability test
 - B. User satisfaction test
 - C. Verification
 - D. Wizard of oz

PART B (10 x 2 = 20 Marks)

- 11. How object-orientation technique works?
- 12. What are meta-classes?
- 13. What is a qualifier?
- 14. What is a use case?
- 15. Why object oriented analysis is difficult?
- 16. What are some common association patterns?
- 17. State the Occam's razor rule of simplicity.
- 18. What is object-relational mapping?
- 19. What is beta testing?
- 20. When is a test considered as successful?

PART C (5 x 14 = 70 Marks)

21. (a) Explain briefly about the concepts included in object-oriented methodology that supports the system development.

(OR)

- (b) With a neat diagram explain the object-oriented system development life cycle.

22. (a) Explain neatly about the macro and micro development process of Booch methodology.

(OR)

- (b) Explain briefly about UML interaction diagrams with an example.

23. (a) Explain briefly about various classification approaches used for identifying classes.

(OR)

(b) Explain the steps in object-oriented analysis -an use case driven approach.

24. (a) Explain the design axioms and corollaries used in object oriented design.

(OR)

(b) Explain about the Access layer.

25. (a) List down the guidelines for User Interface design and explain briefly.

(OR)

(b) What is usability test and user satisfaction test? Explain how user satisfaction is measured.
