

MCA DEGREE EXAMINATIONS: MAY/JUNE 2013

Fourth Semester

MASTER OF COMPUTER APPLICATIONS

MCA516: Object Oriented Analysis And Design

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. State the reasons for the object orientation.
2. Differentiate between patterns and antipatterns
3. What are the different models in OMT?
4. List the various steps in micro development process of Booch Methodology
5. Distinguish between abstract use case and concrete use case.
6. What is a qualifier? How is it used in association?
7. What is the main objective of object oriented analysis?
8. What is coupling?
9. What is quality assurance testing?
10. What is a test plan?

PART B (5 x 16 = 80 Marks)

11. a) (i) Discuss in detail about object oriented software development life cycle. (12)
(ii) State the history of object oriented development. (4)

(OR)

- b) (i) Draw a State chart diagram showing the activities to be performed while operating an ATM machine for cash transaction (8)
(ii) Explain about aggregation with an example (8)

12. a) Draw the Use case, Sequence, Collaboration, State Chart and Activity diagram for a library system. State your assumptions

(OR)

- b) (i) Explain the diagrams associated with Booch methodology. (8)
(ii) Highlight the features of Jacobson methodology. (8)

13. a) (i) What is a noun phrase approach? Explain its usage for an online book store application. (10)
(ii) Why is identifying classes an incremental approach? (6)

(OR)

- b) (i) List and explain the processes associated with object oriented analysis. (10)
(ii) What is an association? What are some common associations? How would you eliminate unnecessary associations? (6)

14. a) (i) Explain the object oriented design process in unified approach. (8)
(ii) List the object oriented design axioms and corollaries (8)

(OR)

- b) (i) Discuss the process of creating access layer classes. (10)
(ii) Explain the basic concepts of OODBMS. How does it differ from a traditional database? (6)

15. a) Explain
a) Testing strategies (8)
b) Test case and test plan (8)

(OR)

- b) (i) Differentiate between black box testing and white box testing. Discuss the applications of both the types of testing. (8)
(ii) What is the impact of object orientation on testing? (8)
