



MCA DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

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 = 10 Marks)

1. List the advantages of object oriented system development.
2. Compare static and dynamic models.
3. What is the strength of BOOCH methodology?
4. Define use-case.
5. Identify the actors of an online course registration system.
6. Why is analysis a difficult activity?
7. What is a multi database system?
8. Distinguish between coupling and cohesion.
9. What kinds of errors might be encountered while running a program?
10. What is the use of a test plan?

PART B (5 x 16 = 80 Marks)

11. a) (i) Write short notes on encapsulation and information hiding. (8)
(ii) Discuss associations and aggregations with suitable examples. (8)

(OR)

- b) Explain about the object oriented system development process.

12. a) Describe the Unified approach of software development in detail.

(OR)

- b) (i) Explain the notations used for generating a class diagram. (10)

(ii) Develop a sequence diagram for an online movie ticket reservation system. (6)

13. a) (i) With an example, explain the following terms with respect to Use-case model. (10)

- Use case
- Actors
- Extends association
- Uses association

(ii) Explain the guidelines to be followed for developing effective documentation. (6)

(OR)

b) (i) Explain the class-responsibility-collaborator approach for identifying classes. (6)

(ii) List and explain the guidelines to be followed for identifying super-sub relationships and A-part-of relationship in an application. (10)

14. a) Explain the object oriented design axioms and corollaries in detail.

(OR)

b) (i) Discuss the features of object oriented data base management system. (8)

(ii) Explain the process of designing forms and data entry windows. (8)

15. a) Write short notes on test cases and test plan.

(OR)

b) Explain how usability and user satisfaction testing are carried out during the process of software development.
