

M TECH
(SEM-II) THEORY EXAMINATION 2018-19
OBJECT ORIENTED PROGRAMMING

Time: 3 Hours**Total Marks: 100****Note:** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 10 = 20**

- a. What do you mean by object oriented?
- b. Explain multiple inheritance.
- c. Explain wrapper class?
- d. Explain method overloading?
- e. Explain object oriented design.
- f. Define CORBA.
- g. Explain RPC.
- h. Define RMI.
- i. Define Association.
- j. Explain polymorphism.

SECTION B**2. Attempt any three of the following: 10 x 3 = 30**

- a. What are the merits and demerits of object oriented approach? Explain the concept of encapsulation with proper example.
- b. Draw and explain the OMT object model for payroll system.
- c. Describe why analysis and design model cannot be tested in conventional way. How correctness and consistency of OOA and OOD model can be ensured?
- d. What do you understand by SASD and YSD? Compare the design methodology done with SASD and YSD.
- e. Distinguish between Adhoc and universal polymorphism with the help of example.

SECTION C**3. Attempt any one part of the following: 10 x 1 = 10**

- (a) Compare 2-tier client-server architecture with 3-tier architecture. Also highlight when 3-tier architecture is better than 2-tier architecture.
- (b) Differentiate between object oriented database and relational database. What is OO decomposition? Explain with the help of example.

4. Attempt any onepart of the following: 10 x 1 = 10

- (a) What is an interaction diagram? Explain the steps involved in drawing such a diagram with the help of example.
- (b) Describe the various kinds of relationship exists between classes with examples.

5. Attempt any one part of the following: 10 x 1 = 10

- (a) Write short notes on followings (i) Object Management Group (ii) Database Triggers
- (b) Explain the followings (i) Recursive Aggregate (ii) CORBA.

6. Attempt any one part of the following: 10 x 1 = 10

- (a) What is object query language? Explain with an example
- (b) Draw object diagram for Information Management System (IMS) of the university.

7. Attempt any one part of the following: 10 x 1 = 10

- (a) How does object oriented design and structured design differ? What aspects of these two design methods are the same?
- (b) What is a virtual function? When is it needed? Write a program to find out whether a virtual function can be -friend of another class.