

C.U.SHAH UNIVERSITY

WADHWAN CITY

University (Winter) Examination -2013

Course Name: M.Tech(Engineering-CE) Sem-I Subject : Object Oriented Methodology & Implementation**Marks : 70****Duration :- 2:30 Hours****Date : 06/01/2014****Instruction**

- (1) Attempt all Questions of both sections in same answer book / Supplementary.
- (2) Use of Programmable calculator & any other electronic instrument is prohibited.
- (3) Instructions written on main answer Book are strictly to be obeyed.
- (4) Draw neat diagrams & figures (If necessary) at right places.
- (5) Assume suitable & Perfect data if needed

SECTION-I

- Q-1 Explain the following terms with respect to object oriented design.**
- | | | |
|----|-------------------------------|---|
| a) | Cohesion | 2 |
| b) | Coupling | 2 |
| c) | Modifiability and testability | 2 |
| d) | Modular design | 1 |
- Q-2 Answer the following**
- | | | |
|----|--|---|
| a) | Explain with example: “Mistakes made in the requirements analysis stage are the costliest to correct” | 5 |
| b) | What is the purpose of deciding the major subsystem? Consider any system and give example of its subsystem | 5 |
| c) | Explain the characteristics of objects | 4 |

OR

- Q-2 Answer the following**
- | | | |
|----|---|---|
| a) | How to compare the equality of objects? Explain it. | 5 |
| b) | Explain the object modeling technique in brief. | 5 |
| c) | Explain aggregation and association with example | 4 |
- Q-3 Answer the following**
- | | | |
|----|--|---|
| a) | Define the term “Design Pattern”. Explain Iterator design pattern with suitable example. | 7 |
| b) | Draw a Sequence diagram for registering a new member in library management system and also draw a Sequence diagram for adding new books in library system. | 7 |

OR

- Q-3 Answer the following**
- | | | |
|----|---|---|
| a) | What are the reasons of evolving the Object Oriented Methodology in programming? Explain with real world example. | 7 |
| b) | Which design pattern is used to ensure that only one object of particular class can exist in application? Explain with proper example | 7 |

1/2



SECTION-II

- Q-4 Answer the following**
- a) Explain in brief: Class Diagram 2
 - b) Explain the limitations of Inheritance 2
 - c) What is the importance of knowledge of domain in analysis? 2
 - d) Explain: Definitional Rules 1

- Q-5 Answer the following**
- a) What is RTTI? Explain with example 5
 - b) What questions should be answered during designing process? Explain with example 5
 - c) Explain exception handling with appropriate example. 4

OR

- Q-5 Answer the following**
- a) When are the dynamic models helpful? Give an example and explain. 5
 - b) Explain client server architecture system 5
 - c) Write a short note: Multiple Inheritance. 4

- Q-6 Answer the following**
- a) Write a short note on "Pattern-Based Solutions" 7
 - b) Which are the approaches to work with distributed objects? Explain RMI with example. 7

OR

- Q-6 Answer the following**
- a) Write a note on MVC architecture. 7
 - b) Explain the three activities during analysis process with importance. 7

*****6***14*****

