

Total No. of Questions :4]

SEAT No. :

P1785

[5233]-12

[Total No. of Pages : 2

M.Sc.

COMPUTER SCIENCE

**CS - 102 : Object Oriented Software Engineering.
(2008 Pattern) (Old Pattern) (Semester - I)**

Time : 3 Hours]

[Max. Marks : 80

Instructions to the candidates:

- 1) All questions are compulsory.***
- 2) Figures to the right indicate full marks.***
- 3) Neat diagrams must be drawn wherever necessary.***

Q1) Attempt all of the following:

[8×2=16]

- a) Define Link attribute.
- b) What are three kinds of building blocks of UML?
- c) Give two standard stereotypes that apply to components?
- d) What is association and state its role.
- e) What do you mean by recursive aggregation?
- f) What are abstract classes?
- g) What is meant by tagged values?
- h) Differentiate between generalization and aggregation.

Q2) Attempt any four of the following.

[4×4=16]

- a) Write a note on Inception and requirement understanding.
- b) What is importance of system Design?
- c) Explain grouping elements of UML.
- d) Write a short note on white box testing.
- e) Explain the component of sequence diagram.

P.T.O.

Q3) Attempt any four of the following.

[4×8=32]

- a) Consider on “ Online money transfer system”, which allows customer to perform various transactions. Discuss different scenario and draw sequence diagram.
- b) Prepare a class diagram for Hospital management system. Consider at least three classes. Define appropriate relationship, association with multiplicity
- c) Draw use case diagram for online Railway reservation.
- d) Draw activity diagram for University Examination form filling.
- e) Draw state chart diagram for automated vending machine for tea/coffee. select option coffee/ Tea/ milk and get appropriate amount of coffee/tea/ milk.

Q4) Attempt any four of the following.

[4×4=16]

- a) Write a note on Object oriented Analysis.
- b) Give any five activities and artifact considered in inception.
- c) Explain the process of forward engineering for the use case diagram.
- d) What is an agile process?
- e) Define U.M.L Explain the advantages of U.M.L.

