

Con. 5163-08.

(REVISED COURSE)

(3 Hours)

RC- 6912

[Total Marks : 100

N. B. : (1) Question No. 1 is **compulsory**.(2) Attempt any **four** questions out of remaining **six** questions.

1. (a) Explain features of object oriented programmings with suitable example. 10
(b) What are use case analysis steps ? Explain with example. 10
2. (a) Explain different types of test scenarios for system. 10
(b) Construct the state diagram and interaction diagram for the online Reservation System. 10
3. (a) You are appointed as a system administrator to setup the labs in your college. Write a program statement and construct the component diagram. 10
(b) State UML dynamic diagrams. Explain any one in detail with example. 10
4. (a) What is sequence diagram ? What are the elements used in sequence diagram, explain each. 10
(b) Explain object oriented metrics and testing. 10
5. (a) Name and Explain in short five Borch diagrams. 10
(b) How deployment diagrams are useful in modeling a fully distributed system ? 10
6. (a) Construct the state transition diagram for following scenario ; student information system. The University conducts many courses and students can register for those courses. The registrar of the University will introduce any new course. Also the registrar maintains the curriculum and students details. The examination will be conducted for the students and the degree is issued for the students who have completed the course successfully. 10
(b) Explain different types of coupling and cohesion. 10
7. (a) What is static modelling ? Explain different steps that are performed in contracting a static model. 10
(b) Explain approaches for identifying classes. 10