B.E. (Information Technology) Fourth Semester (C.B.S.)
Object Oriented Methodology

P. Pages : 2

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0782

NRT/KS/19/3387

Time : Three Hours

Max. Marks : 80

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Notes : 1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Solve Question 11 OR Questions No. 12.
8. Due credit will be given to neatness and adequate dimensions.
9. Assume suitable data whenever necessary.
10. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Define object oriented modeling and design. Also discuss stages of OMT. **7**

b) State the difference between generalization and aggregation with example. **6**

OR

2. a) Explain recursive aggregation and propagation of operation with example. **5**

b) Explain multiple inheritance with suitable example. **5**

c) Differentiate between Abstract class and concrete class. **3**

3. a) What is state diagram? Explain the state diagram for telephone line with actions and activities. **8**

b) Explain the terms: **6**
   i) Entry and Exit Actions.   ii) Processes.
   iii) Actor   iv) Control flow.
   v) Multiplicity.   vi) Metadata

OR

4. a) Draw functional model for flight simulators, Also explain it in detail. **7**

b) Prepare a data flow diagram for computing the volume and surface area of a cone. **4**

c) Explain the term Dynamic modeling in detail. **3**

5. a) What is the need of analysis phase in object oriented development? Explain various phases of analysis in object oriented development? **7**

b) Write short notes on: **6**
   i) Event driven system.
   ii) Concurrent system.
   iii) Procedure driven system.

OR

6.	a)	Prepare an event - trace and event flow diagram for an elevator machine.	**8**
	b)	Discuss the criteria for discarding unnecessary and incorrect association.	**5**
7.	a)	What is datastore? How datastore gets managed?	**6**
	b)	Write a note on breaking a system in subsystems.	**7**

OR

8. a) Explain the issues that must be addressed while handling boundary conditions. **7**

b) Write short notes on: **6**
   i) Handling global resources.
   ii) Choosing software control implementation.

9. a) Explain the steps that are to be considered while designing an algorithm. **7**

b) Explain following with example: **6**
   i) One-way association.
   ii) Two - way association.
   iii) Object representation.

OR

10. a) What is the need of packaging? What different issues are involved in physical packaging of a software product? Explain implementation of packaging. **7**

b) Explain the phases of design optimization in an object design. **6**

11. a) What is Reusability? What are the types of Reusability? Explain the style rules for Reusability. **8**

b) Explain programming styles for following: **6**
   i) Implementation using programming Language.
   ii) Implementation using database system.

OR

12. Write short notes on: **14**
   i) Extensibility.
   ii) Robustness.
   iii) Programming in the Large
   iv) Object oriented style.

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