

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

P. Pages : 2

Time : Three Hours



KNT/KW/16/7302

Max. Marks : 80

- 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) Explain three models of OOM. **6**
- b) State the difference between generalization & aggregation with Example. **4**
- c) Explain link & association with Example. **4**

OR

2. a) Explain following terms with Example:- **6**
- | | |
|-------------|------------------|
| 1) Object | 2) Class |
| 3) Role | 4) Qualifier |
| 5) Metadata | 6) Candidate key |
- b) Explain multiple inheritance with suitable example. **5**
- c) What is abstract class? Where it is used? **3**
3. a) Explain simple state diagram & Nested state diagram along with Example. **5**
- b) Define following with Example. **8**
- | | |
|-------------------------|----------------|
| 1) Data flow | 2) Data stores |
| 3) Entry & Exit actions | 4) Actor |

OR

4. a) Explain scenario & Event trace diagram for phone call. **6**
- b) Explain functional modeling for library management system. Draw detail DFD. **7**
5. a) Explain steps carried out in construction of object model considering ATM network. **10**
- b) Explain in short how analysis is carried in OMT. **3**

OR

6. a) Draw state diagram for ATM machine. 6
b) Draw Event trace diagram for ATM machine. 7
7. a) What are sub-systems? How sub-systems are allocated? 6
b) Explain management of data stores. 4
c) What is boundary condition & how they are handled? 3

OR

8. Explain system design & various steps involved in it in detail. 13
9. a) Explain steps performed during object design. 6
b) Explain the implementation of 2 - way association using pointers. 7

OR

10. Write Short Notes on.
- i) Physical packaging. 3
 - ii) Object representation. 3
 - iii) Design optimization. 3
 - iv) Algorithm design. 4
11. a) Write Short Notes on:
- i) Robustness. 3
 - ii) Reusability. 4
 - iii) Extensibility. 4
 - iv) Object oriented style. 3

OR

12. a) Explain the role of programming in large in programming style. 7
b) Explain database systems in detail. 7
