B.E. (Information Technology) Fourth Semester (C.B.S.)

Object Oriented Methodology

P. Pages : 2 **NRJ/KW/17/4442**

Time : Three Hours ||||||||| Max. Marks : 80

0220

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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. Assume suitable data whenever necessary.
9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) What is object oriented development? Explain object oriented themes in detail. **7**

b) Differentiate between the following. **6**

1) Aggregation and association 2) Generalization & Abstract class.

OR

2. a) Write a short note on: **6**
1) Role names 2) Link Attributes
3) Ordering 4) Qualifies
5) Multiplicity 6) Overriding features

b) Explain three different models in detail. **7**

3. a) Distinguish between. **6**
1) Events and states. 2) Actions and activities.

b) Explain scenario and event trace with help of phone call. **7**

OR

4. a) What is state generalization. Explain in detail. Also explain event generalization with example. **7**

b) Write a short note on. **6**
1) Aggregation concurrency. 2) Entry and exit actions.

5. a) Prepare a normal and scenario with exception of ATM system. Also draw event trace diagram for ATM scenario. **7**

b) Discuss the criteria for discarding unnecessary and incorrect classes with help of ATM example. **7**

OR

6. a) Write a short note on **any two.** **7**

    1) Preparing a data dictionary.   2) Keeping Right attributes.
    3) Steps for constructing functional model.

    b) Prepare a state diagram for class ATM. **7**

7. a) Differentiate between. **6**

    1) Layer and partition   2) Files and Databases

    b) Enlist the steps for preparing system design. Also explain how subsystems are allocated to processor and task. **7**

OR

8. a) Write a short note on **any two.** **7**

    1) Batch transformation.   2) Continuous transformation.
    3) ATM architecture.

    b) Explain controls implementation. Also explain procedure driven & event driven control. **6**

9. a) Explain the steps for designing algorithm during object design in detail. **7**

    b) Write a short note on. **6**

    1) State as location within a program.   2) Design of Associations.

OR

10. a) Explain the issues involved in physical packaging. **6**

    b) Explain the steps for design optimization in detail. **7**

11. a) What is reusability. What are kinds of reusability. Also explain style rules for reusability. **7**

    b) Write a short note on. **7**

    1) Implementation using programming language.
    2) Implementation using Database system.

OR

12. Write note on **any three.** **14**

    1) Extensibility.   2) Robustness.
    3) Programming-in-the-large.   4) Using Inheritance.

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