

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

P. Pages : 2

Time : Three Hours



AHK/KW/19/2151

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. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain three models of object oriented methodology. 6  
b) What is inheritance? Explain types of inheritance. 7

**OR**

2. a) Explain abstract and concrete class with suitable example. 6  
b) What is object oriented development? Explain object oriented themes in detail. 7
3. a) Explain scenario and event trace with the help of phone call. 7  
b) Define following with example. 6
  - i) Data flow.
  - ii) Data stores .
  - iii) Entry & Exit Actions.

**OR**

4. a) Draw the data flow diagram of computing volume & surface area of cylinder. 6  
b) Define dynamic modelling. Explain components of state diagram in detail. 7
5. a) State and explain the criteria for discarding unnecessary and incorrect associations. 7  
b) Draw event trace diagram for ATM. 6

**OR**

6. What is need of analysis phase in OOD? Explain various phase of analysis in OOD. 13
7. a) Write a note on breaking a system into subsystems. 7

- b) Explain the issues that must be addressed while handling boundary conditions. 7

**OR**

8. a) How the procedure driven, event driven & concurrent system differ from each other? Discuss it in detail. 9

- b) Explain batch transformation & write steps in designing the batch transformation. 5

9. a) Explain the kinds of adjustments that can be used to increase the chances of inheritance. 6

- b) Write short notes on. 3

i) Physical packaging.

ii) Algorithm design. 4

**OR**

10. a) State and explain the difference between one way association and two way association. 6

- b) What are the methods of object representation? Explain.. 7

11. a) Explain database systems in detail. 7

- b) Define Reusability. What are the kinds of reusability. Discuss the style rules for reusability. 7

**OR**

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

i) Programming in the large.

ii) Robustness.

iii) Implementation using programming language.

iv) Extensibility.

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