## B.E.Fourth Semester (Computer Engineering) (C.B.S.)

## **Object Oriented Methodology**

P. Pages: 2 NKT/KS/17/7307 Time: Three Hours Max. Marks: 80 Notes: 1. All questions carry marks as indicated. 2. Solve Question 1 OR Questions No. 2. Solve Question 3 OR Questions No. 4. 3. Solve Question 5 OR Questions No. 6. 4. Solve Question 7 OR Questions No. 8. 5. Solve Question 9 OR Questions No. 10. 6. Solve Question 11 OR Questions No. 12. 7. Due credit will be given to neatness and adequate dimensions. 8. Assume suitable data whenever necessary. 9. 10. Illustrate your answers whenever necessary with the help of neat sketches. Explain the following with suitable examples: 1. 8 Class Aggregation i) ii) iii) Generalization Propagation of operations iv) Multiplicity v) vi) Metadata vii) Candidate kev viii) Patterns Discuss Abstraction and Encapsulation. b) 6 OR State and explain various stages of object modelling Technique. 7 2. a) Explain three models used in object oriented development. b) 7 explain state generalization and event generalization with suitable example. 3. a) 6 Draw one-shot state diagram for simple chess game and explain its various components. 7 b) OR What is state diagram? Explain the state diagram for phone line. 7 4. a) b) Explain the terms: 6 Actors. i) ii) Data flows iii) Data stores 5. State and explain the criteria for discarding unnecessary and incorrect associations. 7 a) Write short note on various phases of dynamic modelling. b) 6 OR

6.	a)	Explain the architecture of ATM system.	7
	b)	Write short note on refining the object model.	6
7.	a)	What are the advantages and disadvantages of using database?	8
	b)	What is batch transformation?	5
		OR	
8.	a)	Write short note on system design.	7
	b)	Explain the following with example:  i) Transaction manager.  ii) Dynamic simulation  iii) Continuous transformation	6
9.	a)	Explain the technique of converting a state diagram to code.	7
	b)	What are the methods of object representation explain?	6
		OR	
10.	a)	What are the considerations in choosing among alternative algorithm?	7
	b)	Write short notes on: i) One-way association ii) Two-way association	6
11.	a)	Explain the style rules of reusability.	7
	b)	Explain implementation using programming language.	7
		OR	
12.		Write short notes on: i) Reusability ii) Extensibility iii) Robustness iv) Programming-in-the-large.	14

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