

# B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

### Seventh Semester

Branch: Computer Science and Engineering

CS 010 704—OBJECT-ORIENTED MODELING AND DESIGN (CS)

(New Scheme—2010 Admission onwards—Regular/Supplementary)

Time: Three Hours

Maximum: 100 Marks

#### Part A

Answer all questions.
Each question carries 3 marks.

- 1. What are abstract classes? Explain.
- 2. Distinguish on event and state.
- 3. Why breaking of system into subsystem is necessary? Explain.
- 4. Give a brief description of object representation.
- 5. What is a class diagram? Explain.

 $(5 \times 3 = 15 \text{ marks})$ 

#### Part B

Answer all questions.
Each question carries 5 marks.

- 6. Explain links and associations.
- 7. Explain a sample dynamic model.
- 8. What are global resources? Explain.
- 9. What are the steps needed for designing an algorithm?
- 10. Explain an activity diagram.

 $(5 \times 5 = 25 \text{ marks})$ 

## Part C

Answer all questions.

Each full question carries 12 marks.

11. Explain in detail the object oriented development and modeling concepts.

Or

12. Discuss with example generalization and inheritance.

Turn over

13. Explain advanced dynamic modeling concepts.

Or

- 14. Explain functional models and bring out constraints in functional modeling.
- 15. Discuss in detail the analysis in object modeling.

Or

- 16. In system design how will concurrency is identified? Explain with an example.
- 17. Briefly explain documenting design decisions.

Or

- 18. Make a comparison of different methodologies avail in object design.
- 19. Draw the class diagram, object diagram and use case diagram of a simplified library system.

Or

20. Considering on ATM system construct a state diagram, activity diagram and component diagram.

 $(5 \times 12 = 60 \text{ marks})$ 

