Reg. No. ☐☐☐☐☐☐☐☐☐

B

MCA DEGREE III SEMESTER EXAMINATION NOVEMBER 2015

CAS 2504/2505/2304/2305 OBJECT ORIENTED DESIGN
(*Regular*)

Time: 3 Hours

Maximum Marks: 50

PART A
(Answer *ALL* questions)

$(15 \times 2 = 30)$

I. (a) Write a note on links and associations.
    (b) Differentiate between aggregation and composition.
    (c) What is meant by reification?

II. (a) Write a short note on signal event.
     (b) Draw the activity diagram for stock trade processing.
     (c) Draw and explain the state diagram for a copy machine.

III. (a) What is meant by shifting the level of abstraction?
      (b) What classes require state diagrams? Describe some relevant states and events.
      (c) Draw and explain ATM class model with attributes and inheritance.

IV. (a) Draw and explain an activity diagram for debit card verification
     (b) Write a note on frameworks and patterns.
     (c) Explain various global resources.

V. (a) Explain various considerations for choosing among alternative algorithms.
    (b) Write a note on reification of behavior.
    (c) Explain various ways to hide information in class design.

PART B

$(5 \times 4 = 20)$

VI. Explain the term constraints.
OR
VII. Draw and explain a class model for managing credit card accounts.

VIII. Explain the procedural sequence models.
OR
IX. Write and explain the guidelines for use case models.

X. Explain interaction model in detail.
OR
XI. Explain domain state model in detail.

XII. Draw and explain ATM application class model.
OR
XIII. Explain various common architectural styles.

XIV. Explain the concept of testing.
OR
XV. Explain various design optimization tasks in class design.

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