(For the candidates admitted from 2012-2013 onwards)

M.C.A. DEGREE EXAMINATION, NOVEMBER 2017.

Third Semester

OBJECT ORIENTED ANALYSIS AND DESIGN

Time: Three hours

Maximum: 75 marks

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

Answer ALL questions.

1. (a) What is an object? Explain with example.

Or

- (b) Give an note on the nature of a class.
- 2. (a) Explain the elements of the notation.

Or

- (b) Draw an interaction diagram and explain its feature.
- 3. (a) Draw a module diagram and explain it with an example.

Or

(b) Write the basic principles of development process.

4.	(a)	Give	short	notes	on	singleton	pattern	with
		an ex	ample					

Or

- (b) Describe observer pattern.
- 5. (a) Give a short overview on different object oriented programming languages.

Or

(b) Give short notes on UML.

PART B — $(5 \times 10 = 50 \text{ marks})$

Answer ALL the questions.

6. (a) Explain the elements of the object model with example.

Or

- (b) Discuss on interplay of classes and objects.
- 7. (a) How will you identify classes and objects? Explain with an example.

Or

(b) Discuss on the state transition diagram with a proper example.

8. (a) Explain the object diagram with a suitable example.

Or

- (b) Discuss on micro development process.
- 9. (a) Explain the following:
 - (i) Mediator pattern.
 - (ii) Visitor pattern.

Or

- (b) Discuss on:
 - (i) Prototype pattern.
 - (ii) Builder pattern.
- 10. (a) Explain the features of C++ as an object oriented programming language.

Or

(b) Draw a suitable UML diagram for credit card management system and explain the same.

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