

**MCA-17**  
June - Examination 2017  
**MCA IIIrd year Examination**  
**Software Engineering**  
**Paper - MCA-17**

**Time : 3 Hours ]**

**[ Max. Marks :- 80**

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**Note:** The question paper is divided into three sections A, B and C. Write answers as per given instructions.

**Section - A**

**8 × 2 = 16**

(Very Short Answer Questions)

**Note:** Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

- 1) (i) Define Cardinality and Modality.
- (ii) Name Software quality attributes.
- (iii) Draw the symbol use to represent relationship in E-R Diagram.
- (iv) List advantages of Modules Sharing.
- (v) What is Beta Testing?
- (vi) State the need of Software Maintenance.

(vii) What is Software evolution?

(viii) Write the basic COCOMO equation to calculate “Effort Applied”.

### Section - B

4 × 8 = 32

(Short Answer Questions)

**Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

- 2) What is Decision Tables? Explain with suitable example.
- 3) Explain incremental process model. Justify that it is appropriate for business software system but less appropriate for real time systems.
- 4) What do you understand by data dictionary? Where and how it is used?
- 5) How are coupling and cohesion related? Give example.
- 6) What is the need of DFD (Data Flow Diagram)? Write some rule to draw a DFD.
- 7) Write short note on Regression Testing.
- 8) What is Risk Analysis and Management? State its importance.
- 9) Explain the prototyping model with their advantages and disadvantages.

**Section - C****2 × 16 = 32**

(Long Answer Questions)

**Note:** Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

- 10) What is system? Differentiate between System Engineering and Software Engineering. List and describe characteristics of good software.
- 11) What is Re-engineering? How it is different from Reverse Engineering? Explain.
- 12) Why do we need Software review? Describe its types in detail.
- 13) Discuss in detail about:
  - (i) Verification versus Validation
  - (ii) Feasibility Study

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