**15600**

**MCA 1st Semester Examination**

**Software Engineering (CBS)**

**MCA-104**

**Time : 3 Hours**                                      **Max. Marks : 60**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Attempt one question each from Section A, B, C, and D. Section E is compulsory. Write suitable comments wherever necessary. Assume Data wherever necessary.

### SECTION - A

1. Describe in detail unified process for software development. Also, write its advantages and disadvantages.          (12)

OR

2. Explain all steps in sequence to be followed to get validated requirement specification.          (12)

### SECTION - B

3. What is Agile modeling? Also write its usefulness and shortcomings.          (12)

OR

4. Explain various types of views in software architecture.  (12)

### SECTION - C

5. What is structured design? Explain various notations/ diagrams used for construction of structure chart with example.     (12)

**[P.T.O.]**

OR

6. Write a detailed note on PDL. What are its strengths and shortcomings?          (12)

### SECTION - D

7. Explain the role of refactoring in coding by taking suitable example.          (12)

OR

8. Explain two software maintenance process models.     (12)

### SECTION - E

9. Short answer type questions:

   (i)   What is meant by evolution of software?

   (ii)  Write any two desired characteristics of software process.

   (iii) Define risk mitigation.

   (iv)  Write any two design principles for function oriented design.

   (v)   How lifetime of an object is represented in sequence diagram?

   (vi)  Specify types of certificates.          (2×6=12)