

Roll No. 

|  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|

Total No. of Pages: 02

Total No. of Questions: 09

**MCA (2015 & Onwards) (Sem. – 3)**  
**SOFTWARE ENGINEERING AND PROJECT MANAGEMENT**

**M Code: 74075**

**Subject Code: MCA-303**

**Paper ID: [74075]**

**Time: 3 Hrs.**

**Max. Marks: 60**

**INSTRUCTIONS TO CANDIDATES:**

1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks and students have to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

**SECTION A**

1. Why is the engineering approach to software development important? In this context discuss the difference between software development and software engineering. (6,4)
2. What is a software process model? Discuss the evolution of the process models over the period of time? (2,8)

**SECTION B**

3. What is Software Requirement Specification (SRS)? Discuss the different types of requirements that are mentioned in an SRS. (5,5)
4. Explain the object oriented design approach? How is it better than the procedural approach? (6,4)

**SECTION C**

5. How is effort in a software project estimated? (10)
6. Identify at least 5 risks in a software project. How can these risks be mitigated? (5,5)

**SECTION D**

7. Discuss the good practices for controlling quality in an organization? (10)
8. Discuss the following: CASE tools, Reverse Engineering (10)

## SECTION E

9. a) What is the software problem?
- b) List the different testing levels.
- c) What is Scrum?
- d) Write any two design principles.
- e) How is software reuse implemented in Object Oriented Design?
- f) How is size of a program measured?
- g) Write the full forms of COCOMO and CPM.
- h) Differentiate between verification and validation.
- i) Is change good or bad for a software program?
- j) What is the role of ISO 9126?

2X10