

**Total No. of Questions: 07**

**BCA (2011 & Onward) (Sem. – 4)**

**SOFTWARE ENGINEERING**

**M Code: 10066**

**Subject Code: BSBC-401**

**Paper ID: [B0240]**

**Time: 3 Hrs.**

**Max. Marks: 60**

**INSTRUCTIONS TO CANDIDATES:**

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and students have to attempt any **FOUR** questions.

**SECTION A**

1. Briefly answer the following:

- a) What are the characteristics of Software?
- b) What are software components?
- c) What is the need for software project planning?
- d) Briefly discuss the software equation.
- e) What are the characteristics of Software Requirement Specification?
- f) Define the term Modularization.
- g) What is data hiding?
- h) Why software testing is important?
- i) Define software verification.
- j) What are test cases?

**SECTION B**

2. Discuss the Waterfall model of software development in detail. What are the problems associated with the Waterfall model?
3. What is the importance of metrics and measurements in software engineering? Discuss the various types of software metrics.
4. What do you mean by software cost estimation? Why Software cost estimations are not so correct? Discuss the COCOMO model for cost estimation in detail.
5. What do you mean by Data Flow Diagram (DFD)? Discuss various symbols required to draw a DFD. Explain with suitable example.
6. What are the levels of testing? Discuss different types of testing with suitable examples.
7. Elaborate in detail the taxonomy of CASE tools.