

Exam. Code : 107206

Subject Code : 1995

BCA Semester—VI

SOFTWARE ENGINEERING

Paper—II

Time Allowed—3 Hours] [Maximum. Marks—75

**Note** :— Attempt any **FIVE** questions. All questions carry equal marks.

1. (a) What are the fundamental activities of a software process ? Name the evolutionary process models and explain the spiral model.
- (b) What is the difference between program and software ? Write out the reasons for the failure of Water Fall Model. 10,5
2. (a) Discuss various metrics used for measuring software productivity and quality. List the metrics computed during error tracking activity.
- (b) What are the objectives of Requirement Analysis ? 10,5
3. (a) What do you mean by structured analysis ? Explain in detail the tools used for analysis of any software system.

- (b) What is Coupling ? What are the various types of coupling ? 10,5
4. (a) What is Testing ? What are its objectives ? Describe various testing fundamentals and the characteristics of a good test.
- (b) Differentiate between the following :
- Verification and Validation
  - Functional and Non-functional testing. 10,5
5. (a) Discuss about Software Quality, Software Reliability, Quality of Design and Quality of Conformance.
- (b) What is Vertical Partitioning ? What are its benefits over horizontal partitioning ? 10,5
6. Discuss the software cost estimation techniques in detail. 10,5
7. (a) Define design process. List the principles of a software design. Discuss the guidelines for data design.
- (b) What is Architectural Evolution ? Describe in brief. 10,5
8. Write short notes on :
- Information hiding
  - Project Scheduling
  - Structured Programming. 5,5,5