

**B.C.A. Part—III (Semester—V) Examination**  
**SOFTWARE ENGINEERING**  
**Paper—5ST3**

Time : Three Hours]

[Maximum Marks : 60

**Note :—**(1) **ALL** questions are compulsory.

(2) All questions carry equal marks.

1. (a) What is Software Engineering ? Explain importance of Software Engineering Layers in detail. 6
- (b) Explain the software requirement analysis using DFD in detail. 6

**OR**

2. (a) Explain the Spiral Model for Software Engineering in detail. 6
- (b) Define the Requirement Engineering. Explain Requirement Engineering Process in detail. 6
3. (a) What are the steps in Project Management Process ? Explain in detail. 6
- (b) Write short notes on :—
- (i) Software Project Planning (ii) Risk Management. 6

**OR**

4. (a) Explain the term Problem Analysis in detail. 6
- (b) Explain six issues in Software Cost Estimation. 6
5. (a) What is the need of Problem Partitioning ? Explain with suitable example. 6
- (b) Write short notes on :—
- (i) Decision table (ii) Decision tree. 6

**OR**

6. (a) What is Software Architecture ? Explain in detail with its importance. 6
- (b) Write short notes on :—
- (i) Modularity (ii) Abstraction. 6
7. (a) Differentiate between structured programming and object oriented programming. 6
- (b) Why system documentation is necessary ? Explain in detail. 6

**OR**

8. (a) Write short note on :—
- (i) Classes and Object (ii) Attributes 6
- (iii) Inheritance (iv) Polymorphism. 6
- (b) What is Software Reuse ? Explain the concept of Software Reuse in detail. 6
9. (a) Explain Software Quality Management in detail. 6
- (b) Explain Software Quality Parameters in detail. 6

**OR**

10. (a) Write short notes on :—
- (i) Quality Control [QC] (ii) Quality Assurance [QA]. 6
- (b) What are the elements of ISO 9001-2000 standards ? Explain in detail. 6