

**Bachelor of Computer Application (B.C.A.) Semester—V Examination****SOFTWARE ENGINEERING—II****Paper—4**

Time : Three Hours]

[Maximum Marks : 50

**Note :—** (1) All questions are compulsory and carry equal marks.

(2) Draw neat and labelled diagram wherever necessary.

**EITHER**

1. (a) Explain the role of the software architecture. 5
- (b) What is archetypes ? What is the role of archetypes in architecture designing ? 5

**OR**

- (c) Explain Data Centered Architecture. 5
- (d) What is data design ? Explain the purpose of data design. 5

**EITHER**

2. (a) Explain software testing and testability. List the various characteristics of testability. 5
- (b) Explain the different levels of testing. 5

**OR**

- (c) Explain the white-box testing with its advantages. 5
- (d) What are the various debugging strategies ? Explain in brief. 5

**EITHER**

3. (a) Explain the metrics for Analysis model. 5
- (b) What is software quality ? Explain software quality metrics. 5

**OR**

- (c) Explain :
  - (i) Metrics for source code
  - (ii) Metrics for design model. 5
- (d) Explain the metrics for specification quality. 5

**EITHER**

4. (a) Define Risk Management. Give the objectives of risk management. 5
- (b) Describe Risk Identification and Risk Projection in detail. 5

**OR**

- (c) Write notes on :
  - (i) Assessing risk impact
  - (ii) Risk refinement. 5
- (d) What is RMMM ? Explain. 5

5. Attempt **ALL** :

- (a) Explain the steps of the architectural design process. 2½
- (b) What is debugging ? Explain. 2½
- (c) Explain the metrics for testing. 2½
- (d) Write a note on ISO 9000 quality standards. 2½