B3.3-R4: SOFTWARE ENGINEERING & CASE TOOLS

«QP_SRLNO»

NOTE:

1. **Answer question 1 and any FOUR from questions 2 to 7.**
2. **Parts of the same question should be answered together and in the same sequence.**

Time: 3 Hours **Total Marks: 100**

1.

a) Explain Integrated Case Environment.
b) What do you mean by term data dictionary?
c) Explain the terms cohesion and coupling.
d) What is the role of repository in I-CASE tools?
e) What is the difference between structural testing and functional testing?
f) What is reverse engineering? What is its relevance to software development?
g) What are the advantages of evolutionary techniques?

(7x4)

2.

a) Describe the basic principles of Iterative Development Model.
b) Define system context diagram and system flow diagram and differentiate between these two.
c) Prepare a SRS for Library Management System.

(5+5+8)

3.

a) What is the difference between Object Oriented Programming and Procedural Programming?
b) Explain the building block of CASE tool?
c) Explain White box testing technique with example.

(6+6+6)

4.

a) Explain three golden rules of interface design.
b) Describe Software Configuration Management Process.
c) Describe Corrective, Adaptive, Preventive and Perfective Maintenance.

(6+6+6)

5.

a) What are McCall's Quality Factors?
b) Draw a Use Case Diagram for hotel management system.
c) Describe all levels of CMMI.

(6+6+6)

6.

a) Compare Object Oriented and conventional approaches of software development.
b) Describe a Software Agent and its applications.
c) Explain how data designing is done at component level.

(6+6+6)

7.

a) Explain software engineering as a layered technology.
b) What do you mean by Version control?
c) Differentiate between System Design and Logical Design.

(6+6+6)