

QP Code : 5065

(3 Hours)

[ Total Marks :80

- N.B. : (1) Question No. 1 is compulsory.  
(2) Attempt any three questions out of remaining five.

1. (a) Write suitable applications of different software models. 10  
(b) Compare Verification and Validation Testing. 10  
(c) Explain COCOMO Model.  
(d) Explain the different types of software Maintenance.

2. (a) What is Agile methodology? Explain it with the principles used and give 10  
example of any One such software model.  
(b) Explain Change Control and Version Control in SCM. 10

3. (a) Explain size oriented software engineering metrics. 10  
Find function points for an e-commerce application with following data,

|                               |    |
|-------------------------------|----|
| Number of user Inputs         | 50 |
| Number of user Outputs        | 40 |
| Number of user Inquiries      | 35 |
| Number of user Files          | 65 |
| Number of External Interfaces | 04 |

Assume suitable complexity adjustment factors and weighting factors.

- (b) What Is Coupling and Cohesion? Explain different forms of it. 10
4. (a) What are the features of a good user Interface? Design and interface for 10  
Online Air Ticket Reservation System.  
(b) Explain different metrics used for maintaining Software Quality. 10
5. (a) What is SRS document? Build an SRS document for Online Student 10  
Feedback System.  
(b) What are Software Risks? Write a note on RMMM for delayed projects. 10

6. (a) Compare Black box and White Box Testing. Find cyclomatic complexity of following code 10

```
IF A = 10 THEN
  IF B > C THEN
    A=B
  ELSE A= C
END IF
END IF
PRINT A
PRINT B
PRINT C
```

- (b) Explain software Reverse Engineering In detail. 10
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