21718

3 Hours / 100 Marks   Seat No.

Instructions :   (1)   All Questions are *compulsory.*

(2)   Answer each next main Question on a new page.

(3)   Illustrate your answers with neat sketches wherever necessary.

(4)   Figures to the right indicate full marks.

(5)   Assume suitable data, if necessary.

Marks

1.   **(A)**   **Attempt any THREE of the following :**   **12**

(a)   Give any four difference between Quality Assurance and Quality Control.

(b)   Describe technical review under static testing.

(c)   With the help of neat diagram, describe unit testing.

(d)   Give any two advantages and any two limitations of Function/test matrix.

(B)   **Attempt any ONE of the following :**   **06**

(a)   Prepare and write six test cases for simple calculator application.

(b)   Describe Defect Management Process with neat & labelled diagram.

2.   **Attempt any FOUR of the following :**   **16**

(a)   What is Boundary Value Analysis ? List any three guidelines for boundary value analysis.

(b)   Describe how to select testing tool.

    (c)   Prepare and write four test cases for Library Management System of college.

    (d)   Give any four difference between Manual and Automated testing.

    (e)   Explain Requirement defects and Design defects.

    (f)   Explain Equivalence partitioning with respect to equivalence classes.

3.   **Attempt any FOUR of the following :**   **16**

    (a)   Explain any one type of structural white box testing in detail.

    (b)   Give any four difference between alpha and beta testing.

    (c)   What is external test standard ? Give any three types of external standards.

    (d)   Describe how to perform usability and GUI testing.

    (e)   Give any two advantages and any two disadvantages of using testing tools.

    (f)   Explain Defect template.

4.   **(A)**   **Attempt any THREE of the following :**   **12**

        (a)   Give any four advantages of test planning.

        (b)   What do you mean by Software Metrics ? List any three types of metrics.

        (c)   What are different techniques for finding defects ? Explain in detail.

        (d)   Describe the factors considered to decide test strategy or test approach.

    (B)   **Attempt any ONE of the following :**   **06**

        (a)   Differentiate between verification and validation.

        (b)   Distinguish between white box testing and black box testing. (any **six**)

5.   **Attempt any TWO of the following :**   16

(a)   Describe test reporting in detail. How to prepare a summary report ?

(b)   With the help of an example, explain Graph-based testing.

(c)   Explain following concepts related to Integration testing with neat & labelled diagram :

(i)   Top-down testing.

(ii)   Bottom-up testing.

6.   **Attempt any FOUR of the following :**   16

(a)   Give any two root causes of defects. Also give any two effects of defects.

(b)   What is Software testing ? Give any three objectives of testing.

(c)   Explain Defect Life Cycle with diagram.

(d)   What is Test plan ? List test planning activities.

(e)   Describe compatibility testing with an example.

(f)   Explain Client-Server testing.

_____