P955   **[3664]-344**

B.E. (Computer)

SOFTWARE TESTING & QUALITY ASSURANCE

(2003 Course) (410450)   sem II

Time : 3 Hours]   *[Max. Marks : 100*

Instructions to the candidates :

   1)   *Answers to the two sections should be written in separate books.*

   2)   *Neat diagrams must be drawn wherever necessary.*

   3)   *Figures to the right indicate full marks.*

   4)   *Your answers will be valued as a whole.*

SECTION - I

Q1) a)   What is good data? How to store & extract the data?   **[10]**

    b)   Explain the four principles of investigation.   **[8]**

<div align="center">OR</div>

Q2) a)   How to plan formal experiments? Explain with formal experiments examples.   **[10]**

    b)   Describe software measurement validation.   **[8]**

Q3) a)   Explain the Halstead's software science.   **[8]**

    b)   Which are the difficulties with the general complexity measures?   **[8]**

<div align="center">OR</div>

Q4) a)   Which are the object - oriented metrics?   **[8]**

    b)   Explain the need for internal product attributes measurement.   **[8]**

Q5) a)   Write short notes on-   **[8]**

      i)   Measurement tools.

      ii)   Software defects.

    b)   Explain White-Box testing in detail.   **[8]**

<div align="center">OR</div>

Q6) a)   Explain equivalence partitioning with example.   **[8]**

    b)   Describe user documentation testing.   **[8]**

SECTION - II

Q7) Write short notes on - (any three):   [18]

    a)   Integration testing.

    b)   Acceptance testing.

    c)   Scenario testing.

    d)   Regression testing.

    e)   Ad-hoc testing.

<center>OR</center>

Q8) Write a short note on - (any three):   [18]

    a)   Test plan.

    b)   GUI testing.

    c)   Usability testing.

    d)   Accessibility testing.

Q9) a)   Explain Ishikawa's seven basic tools.   [8]

    b)   Explain the Cause-effect diagram with example.   [8]

<center>OR</center>

Q10) a)   Describe the defect removal effectiveness.   [8]

    b)   Explain software maintenance & process maturity level.   [8]

Q11) a)   How one can make fixation of a problem & test it for any software maintenance?   [8]

    b)   How can one choose the method of fix distribution?   [8]

<center>OR</center>

Q12) a)   How can we distribute the fixation of the problem, prepare & test shipment unit?   [8]

    b)   Which are the logistics & tooling available for problem reporting? Explain with any problem.   [8]

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