Hall Ticket Number:

Code No. : 42521 M

VASAVI COLLEGE OF ENGINEERING *(Autonomous)*, HYDERABAD

B.E. (IT) IV Year II-Semester Makeup Examinations, June-2019

Software Testing

(Elective-III)

Time: **3** hours Max. Marks: **70**

*Note: Answer **ALL** questions in **Part-A** and any **FIVE** from **Part-B***

Part-A (10 × 2 = 20 Marks)

1. Why exhaustive testing is impractical?
2. Differentiate between error, fault and failure.
3. What is equivalence class testing?
4. What is the need of Loop testing?
5. Name different types of Testers in hierarchy.
6. What is the basis of halstead (token count) metrics to calculate size of the software?
7. Differentiate between conventional testing and object oriented testing.
8. What are watch points? Explain.
9. What is the need for using testing tools to test a system?
10. Mention two uses of QTP.

Part-B (5 × 10 = 50 Marks)

11. a) Describe software testing life cycle. [5]
    b) Explain the steps to prepare Test Strategy. [5]

12. a) A program determines the next date in the calendar. Its input is entered in the form of <ddmmyyyy> with the following range: [6]
    $1 \leq mm \leq 12$
    $1 \leq dd \leq 31$
    $1900 \leq yyyy \leq 2025$
    Its output would be the next date or an error message 'invalid date.' Design test cases using equivalence class partitioning method.
    b) What is mutation testing? Explain. [4]

13. a) Explain test plan components. [5]
    b) What is Test Point Analysis (TPA)? How to do you compute TPA. [5]

14. a) Discuss the challenges in Testing Web Based applications. [5]
    b) What are the guide lines for Debugging? [5]

15. a) Describe testing an application using WinRunner. [5]
    b) Explain the features of JMeter. [5]

16. a) Describe the attributes of a test case. [5]
    b) Write the procedure to convert state graph and state tables into test cases. [5]

17. Answer any ***two*** of the following:
    a) What is Defect Density? What is the problem if the defect density is high? [5]
    b) Describe the issues of object oriented testing. [5]
    c) Explain the features of LoadRunner. [5]