

Total No. of Questions : 12]

SEAT No. :

P3217

OCT - NOV - 17

[Total No. of Pages : 3

[5256]-502

**T. Y. M. C. A. (Engineering) (Semester - V)**  
**SOFTWARE TESTING AND QUALITY ASSURANCE**  
**(2013 Pattern)**

*Time : 3 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to the right side indicate full marks.*
- 3) *Use of Calculator is allowed.*
- 4) *Assume Suitable data if necessary.*

**Q1) a)** Explain quality control and quality assurance with example. **[4]**

b) What is SQA? Explain SQA plan in detail. **[4]**

OR

**Q2) a)** Explain the concept of software reliability. **[4]**

b) What are the components of test plan? Explain execution of test plan in detail. **[4]**

**Q3) a)** Explain V&V Model in detail. **[4]**

b) Explain the concept of bug, error, failure with example **[4]**

OR

**Q4)** What is test case? Write test cases for pin change service and withdraw amount from ATM system. **[8]**

**P.T.O.**

Q5) a) Write an equivalence partition test case and boundary value analysis test case for following example. [5]

A program calculates LIC premium as follows:

- i) Base premium for all ages is 0.50
- ii) based on age group additional monthly premium has to be paid

Age group	Additional premium
Under 35	1
35to59	2
Above 60	3

b) What is white box testing? Explain code coverage types [4]

OR

Q6) a) Write a program to check given number is odd or even [5]

- i) draw control flow diagram(CFD) for the above program.
- ii) Calculate the cyclomatic complexity of the program using three techniques.

b) Write a note on [4]

White box testing and Black box testing

Q7) What is the different phases/levels software testing? Explain integration and system testing. [8]

OR

Q8) What is regression testing? Explain different types of regression testing with example [8]

Q9) a) What is defect? State the different classes of defect with example. [4]

b) Explain web testing in detail. [4]

OR

Q10)a) Explain Defect life cycle. [4]

b) What is performance testing? Which are the different factors considered in performance testing? [4]

Q11)a) Short notes on : [5]

Selenium IDE

b) Explain difference between automated testing and manual testing. [4]

OR

Q12)a) Short notes on: [5]

Selenium command

b) What is the difference between selenium and QTP. [4]

OR