

Total No. of Questions : 6]

SEAT No. :

P 5860

[Total No. of Pages : 2

BE/Insem/Oct.-604

B.E.(IT)

Software Testing & Quality Assurance

(Semester - I) (Elective- II)

(2015 Pattern)

Time : 1 Hour]

[Max. Marks :30

Instructions to the candidates:

- 1) *Answers. Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 2) *Neat diagrams must be drawn wherever necessary and.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume Suitable data if necessary.*

Q1) a) Explain Software Testing Life Cycle Phases. **[6]**

b) Define the following terms. **[4]**

- | | |
|----------------|----------------------|
| i) Fault | ii) Test bed |
| iii) Test Case | iv) Software Quality |

OR

Q2) a) Explain Defect Life cycle. **[6]**

b) Explain V model of testing. **[4]**

Q3) a) Explain Control Flow Graph and Draw a control flow graph for following code. **[6]**

`/* pos_sum finds the sum of all positive numbers (greater than zero) stored in an integer array a. Input parameters are num_of_entries, an integer, and a, an array of integers with num_of_entries elements. The output parameter is the integer sum*/`

- i) `Pos_sum(a,num_of_entries, sum)`
- ii) `sum = 0`
- iii) `inti=1`

P.T.O.

```
iv)      while (i < num_of_entries)
v)        if a [i] > 0
vi)        sum=sum+a[i]
          endif
vii)      i=i+1
          end while
viii)     end pos_sum
```

b) Explain configuration testing and its objectives. [4]

OR

Q4) a) Explain the steps in developing test cases with a cause-and-effect graph. [6]

b) Give difference between black box testing and white box testing. [4]

Q5) a) Explain Taguchi Quality Loss Function. [6]

b) Write short note on FMEA. [4]

OR

Q6) a) Explain Six Sigma Life cycle. [6]

b) Explain Defect removal Efficiency with an example. [4]

