BE | IT | VII CREDS 21|5|2012
Software Testing & Quality Assura

AGJ 1st half (h)-Con-Cod 89

Con. 3723-12. **(REVISED COURSE)** **GN–6425**

(3 Hours) **[Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**.
(2) Answer any **four** questions out of remaining **six** questions.

Q. 1. A) Who should define the acceptance quality attribute criteria of a test project? Justify your answer and give some Acceptance criteria. 5

B) Compare McCall's quality model with ISO 9126 quality model. 5

C) Explain Test case Design effectiveness. 5

D) Explain different types of interface errors. 5

Q. 2. A) Draw data flow graph for below given routine. 10

```
/* pow(m,n) computes m to the power of n */
void pow(int m, n)
   {
      float q;
      int p;
if(n<0)
      p=0-n;
else
      p=n;
      q=1.0;
while(p !=0)
      {
      q=q*m;
      p=p-1;
      }
if(n<0)
      q=1.0/q
      printf("%f", q)
  }
```

B) Explain Dynamic unit testing. 10

Q. 3. A) Briefly explain McCall's Quality Factors and Criteria. 10

B) What are the objectives of Acceptance Testing? Explain different types of Acceptance Testing. 10

Q. 4. A) Explain in detail Evaluation and Selection of Test Automation Tools. 10

B) Explain different metrics used in system testing. 10

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Q.5. A) Explain boundary value analysis with the help of suitable example. 10
B) Discuss the advantage and disadvantage of integration testing. 5
C) Explain scalability testing with example. 5

Q. 6. A) Explain the following terms 10
a)Verification b) Validation c)Error d)Fault e)Defect
B) Draw the Control Flow Graph and Show coverage criteria for given code. 10

```
Public static double ReturnAverage(int value[ ], int AS, int MIN, int MAX)
{
        int  i , ti, tv, sum;
        double  av;
        i=0; ti=0; tv=0; sum=0;
while(ti<AS && value[i] != -999)
{
        ti++;
if(value[i] >= MIN && value[i] <= MAX)
{
        tv++;
        sum = sum + value[i];
}
        i++;
}
if(tv>0)
        av = (double) sum / tv,
else
        av = (double)  -999;
        return(av);
}
```

Q.7. A) Explain test design preparedness matrix. 5
B) Differentiate Black Box and White Box testing. 5
C) Explain load testing and stress testing. 5
D) Explain different views of software quality. 5