BACHELOR OF TECHNOLOGY (CBCS) (2020 COURSE)
B.Tech.Sem - VI INFORMATION TECHNOLOGY : WINTER : 2024
SUBJECT: SOFTWARE TESTING & QUALITY ASSURANCE

Day : Saturday
Date : 30/11/2024

W-24744-2024

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

1) All questions are **COMPULSORY**.
2) Figures to the **RIGHT** indicate **FULL** marks.
3) Assume suitable data **WHEREVER** necessary.
4) Draw neat diagrams **WHEREVER** necessary.
5) use of non-programmable **CALCULATOR** is allowed

Q.1 Define Bug, Defect, Error, Failure, Fault. Differentiate between functional and non-functional testing **(10)**

OR

Q.1 Define test plan. Design test plan for testing railway management system. **(10)**

Q.2 List and explain various white box testing techniques in detail. **(10)**

OR

Q.2 Design test cases for inventory management system using path coverage technique of white box texting. **(10)**

Q.3 Define Black box testing. Explain boundary value analysis techniques of black box testing. Design boundary test cases for Airline reservation system. **(10)**

OR

Q.3 Define Black box testing. Explain equivalence partitioning technique of black box testing with suitable example. Design a functional test case for banking system. **(10)**

Q.4 Design control flow graph for the following code. **(10)**

```
while (x!=y)
{
if(x>y) then
x=x-y;
else y=y-x
}
return x;}
```

Use Mc Cabe's formula for calculating cyclomatic complexity. Also highlight the testcases.

OR

Q.4 Define website testing. Discuss the various parameters for testing a website. **(10)**

Q.5 Define Test script. Discuss selenium and its components in detail **(10)**

OR

Q.5 List and explain the quality management techniques in detail **(10)**

Q.6 Write note on **(10)**

a) Six Sigma
b) ISO Standard

OR

Q.6 Enlist and explain the various components of SQA **(10)**

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