AG-104

April-2022

BCA., Sem.-VI

CC-307 : Software Testing

Time : 2 Hours] [Max. Marks : 50

Instructions : (1) Attempt any **two** questions in **Section – I**
(2) **Section – II** is *compulsory*.
(3) Figures to the right indicates full marks.

SECTION – I

1. (A) Answer the following questions : **10**

    (1) What is software testing ? List and explain goals of software testing.

    (2) How dynamic testing differs from static testing ?

    (B) Write short note on following **10**

    (1) Software Testing Life Cycle (STLC)

    (2) Principles of Software Testing

2. (A) Answer the following questions : **10**

    (1) What is black box testing ? List different techniques of it.

    (2) What is white box testing ? Why we need white box testing ?

    (B) Write short note on following : **10**

    (1) BVA

    (2) Basis path testing

3. (A) Do as directed : **10**

    (1) Differentiate alpha and beta testing

    (2) Discuss different tests which have to be performed under system testing.

(B) Explain the following terms :

    (1) Drivers

    (2) Stub

10

4. (A) What is test management ? Explain choice of standards in brief.

    10

    (B) What is test planning ? List all the steps of it. Explain any two in detail

    10

SECTION – II

Answer the following MCQs (Any **Five**) :

10

(1) Testing is the process of _____ errors.

    (A) Finding   (B) Hiding

    (C) Removing   (D) None of the above

(2) Symptom(s) associated with a failure that alerts the user to the occurrence of a failure is called _____ .

    (A) Bug   (B) Incident

    (C) Error   (D) Defect

(3) The process of evaluating a system or component during or at the end of the development process to determine whether it satisfies the specified requirements is called _____ .

    (A) Verification   (B) STLC

    (C) SDLC   (D) Validation

(4) Every design feature and its corresponding code is checked logically with every possible path execution in_____ .

    (A) Black box Testing   (B) White box testing

    (C) Testing tool   (D) Test Report

(5) How many test cases are there in BVC if there are 4 variables in a module ?

    (A) 23   (B) 17

    (C) 13   (D) 21

(6) How many test cases are there in worst-case testing if there are 3 variables in a module ?

    (A) 125   (B) 625

    (C) 623   (D) 521

(7) If there are k rules over n binary conditions, there are at least ____ test cases and at the most ____ test cases.

    (A) $k + 2, 2n + 2$ (B) $k + 3, 2n + 3$

    (C) $k, 2n$ (D) $3k + 3, 2n + 2$

(8) A node with more than one arrow entering it is called a ____.

    (A) Junction node   (B) Decision node

    (C) Predicate node   (D) Region

(9) The number of independent paths is given by ____.

    (A) $V(G) = e - n + 1$ (B) $V(G) = e - n + 2$

    (C) $V(G) = 2e - n + 1$ (D) $V(G) = e - 2n + 1$

(10) ____ is done based on estimation of effort involved and availability of time for release.

    (A) Defect Repository   (B) Test Cycle Report

    (C) Traceability   (D) Staffing

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