

DiplETE – CS {NEW SCHEME}

Time: 3 Hours

DECEMBER 2018

Max. Marks: 100

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after 45 minutes of the commencement of the examination.
- Out of the remaining EIGHT Questions answer any FIVE Questions. Each question carries 16 marks.
- Any required data not explicitly given, may be suitably assumed and stated.

Q.1 Choose the correct or the best alternative in the following: (2×10)

- Which testing is performed with Planning and Documentation?
(A) Ad-hoc testing (B) Monkey testing
(C) Fuzz testing (D) End-to-End testing
- Test cases are created in which phase?
(A) Test Specification (B) Test Planning
(C) Test Requirement (D) Test Configuration
- Testing helps us to _____ of product by finding defects in product.
(A) Fix defect (B) Improve quality
(C) Measure quality (D) All of these
- Which technique is applied for usability testing?
(A) White box (B) Black box
(C) Grey box (D) Combination of all
- In Software Development Life Cycle, who is the best person to catch a Defect?
(A) Software Tester (B) Customers
(C) Business Analyst (D) Developer
- Independent modules are easier to maintain and test because of
(A) Code modification is limited (B) Error propagation is reduced
(C) Reusable modules are possible. (D) All of these
- Which of the following is the largest bug producer?
(A) Code (B) Design
(C) Specification (D) All of these
- Regression Testing is a major part of which of the life cycle?
(A) Waterfall model (B) V model
(C) Iterative model (D) All of these

- i. Which of the following categories, Black-box testing attempts to find errors?
 (A) Incorrect or missing functions (B) Interface errors
 (C) Behavior or performance errors (D) All of these
- j. When Testing should be stopped?
 (A) When manager asks to stop
 (B) When time runs out
 (C) When enough money are spend on testing
 (D) It depends on risk associated with that project.

**Answer any FIVE Questions out of EIGHT Questions.
 Each Question carries 16 Marks**

- Q.2** a. Define Testing. Explain its objective and purpose for software. (12)
 b. What is the main purpose of testing in software development, explain? (4)
- Q.3** a. What are the software testing types or levels? Define each in short. (10)
 b. Differentiate between integration and system testing. (6)
- Q.4** a. Point out the difference between Performance & Regression testing (5)
 b. What is acceptance testing. (5)
 c. What is interoperability testing (6)
- Q.5** a. Explain Data flowgraphs and their representation. (10)
 b. What is transaction flow technique, list-out all types of transaction flow technique ? (6)
- Q.6** a. Explain what is domain & path in software testing? Explain with the help of example. (8)
 b. What is the difference between ugly and nice domains in domain testing? (8)
- Q.7** a. Explain Path Reduction Procedure. (10)
 b. What is path product, path sums & path expression, explain? (6)
- Q.8** a. Explain the concept of logic based testing. (6)
 b. What is predicates in logic based testing? (6)
 c. Define decision table in structural testing. (4)
- Q.9** a. What is object oriented testing method? Also define fault-based testing & Scenario-based testing in brief (8)
 b. What are the tools for testing of O.O. system, explain each of them? (8)