

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**(An Autonomous Institute Affiliated to AKTU, Lucknow)****MCA****SEM: II - THEORY EXAMINATION (2022-2023)****Subject: Software Testing****Time: 2 Hours****Max. Marks: 50****General Instructions:****IMP:** Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of **three Sections -A, B, & C.** It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.
2. Maximum marks for each question are indicated on right -hand side of each question.
3. Illustrate your answers with neat sketches wherever necessary.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.
6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION A**15****1. Attempt all parts:-**

- 1-a. UML is used for (CO1) 1
- (a) design
 - (b) testing
 - (c) implementation
 - (d) None of the above
- 1-b. In which environment we can performed the Alpha testing? (CO2) 1
- (a) User's end
 - (b) Developer's end
 - (c) User's and developer's end
 - (d) None of the above
- 1-c. Which is a formal review technique? (CO3) 1
- (a) Walk through
 - (b) peer to peer review
 - (c) Inspection

- (d) All of the above
- 1-d. White Box testing is also known as____ (CO4) 1
- (a) closed box
 - (b) structural testing
 - (c) Gray box testing
 - (d) None of the mentioned
- 1-e. What is the role of a test manager in test execution? (CO5) 1
- (a) Creating test scripts
 - (b) Executing test cases
 - (c) Analyzing test results
 - (d) Allocating resources for testing

2. Attempt all parts:-

- 2.a. State the objectives and guidelines for debugging. (CO1) 2
- 2.b. Write a brief note on waterfall model. (CO2) 2
- 2.c. Define the term Cyclomatic Complexity. (CO3) 2
- 2.d. Define equivalence class partitioning. (CO4) 2
- 2.e. Describe Multiple factors affecting Test Estimation. (CO5) 2

SECTION B

15

3. Answer any three of the following:-

- 3-a. Explain the following: (i) absence of error fallacy (ii) defects clustering (iii) pesticide paradox (CO1) 5
- 3-b. Explain Functional and Non-Functional Testing in detail. (CO2) 5
- 3.c. Define the Types of Reviews in software Testing. (CO3) 5
- 3.d. Explain why black box testing is important in application development? (CO4) 5
- 3.e. Describe the Specialized positions in Test Organization. (CO5) 5

SECTION C

20

4. Answer any one of the following:-

- 4-a. Explain the attributes of the good test. Explain the test case design. (CO1) 4
- 4-b. Explain why a developer and tester mindset should be different? (CO1) 4

5. Answer any one of the following:-

- 5-a. Differentiate between Alpha testing and beta testing. (CO2) 4
- 5-b. Explain the various levels of software testing. Also explain some of the 4

limitations of testing. (CO2)

6. Answer any one of the following:-

- 6-a. Describe what things are tested in Static Testing. (CO3) 4
- 6-b. Define Individual Review in Work Product Review process. (CO3) 4

7. Answer any one of the following:-

- 7-a. Compare black box and white box testing. (CO4) 4
- 7-b. Differentiate between Checklist-based testing and multiple statement coverage testing. (CO4) 4

8. Answer any one of the following:-

- 8-a. Define Experience based Testing Techniques. (CO5) 4
- 8-b. Define the Term Defect Management Process. (CO5) 4

2022-23 Jan_Jun