

Enrollment No.....



Faculty of Science / Engineering

End Sem Examination Dec-2023

CA3SE07 Software Testing

Programme: BCA / BCA - Branch/Specialisation: Computer
MCA (Integrated) Application

Duration: 3 Hrs.**Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. Which thing is not include in "High-Level Review of the 1
Specification"?
- (a) Pretend to be the customer
 - (b) Review specification terminology checklist
 - (c) Review and test similar software
 - (d) Research existing standards and guidelines
- ii. "Push the software to its limit and checkthe bugs that occur when the 1
software is operated under extreme conditions"-
Purpose of this dynamic testing technique's main focus is to?
- (a) Test to pass (b) Test to fail
 - (c) Data testing (d) State testing
- iii. Which one is not a essential elements of formal review? 1
- (a) Identify problems (b) Follow rules
 - (c) criticize the developer (d) Write a report
- iv. Which one of the following subsumption relations is incorrect? 1
- (a) Multiple condition coverage subsumes decision coverage
 - (b) Basic condition coverage subsumes decision coverage
 - (c) Basic condition coverage subsumes statement coverage
 - (d) Modified Condition/ Decision Coverage (MC/DC) subsumes basic condition coverage
- v. The most appropriate level for compatibility testing is- 1
- (a) Unit/component (b) Integration
 - (c) System (d) Server

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- vi. _____ testing is a technique for ensuring that the intended users of a system can carry out the intended tasks efficiently, effectively and satisfactorily. **1**
 (a) Configuration testing (b) Usability testing
 (c) Compatibility testing (d) Foreign-language testing
- vii. During documentation testing, which type of software documentation is not considered? **1**
 (a) Packaging text and graphics
 (b) Marketing material, ads, and other inserts
 (c) Software Requirements Specification (SRS)
 (d) Warranty/registration
- viii. What are Three D's of vandalize motives of hackers? **1**
 (a) Disturb, Destruction, and Denial of Service
 (b) Defacing, Destruction, and Denial of Service
 (c) Disturb, Debugging, and Denial of Service
 (d) Defacing, Dirty, and Denial of Service
- ix. Which of the following statement are correct? **1**
 I. Stubs are used in bottom-up approach
 II. Stubs are used in Top-down approach
 III. Drivers are used in bottom-up approach
 IV. Drivers are used in Top-down approach
 (a) I, III (b) I, IV (c) II, III (d) II, IV
- x. Which one is not a field of test case specification? **1**
 (a) Identifiers (b) Input specification
 (c) Output specification (d) Actual output
- Q.2 i. Explain the concept of V&V in testing. **4**
 ii. What is the utility of black-box and white-box testing? Explain high-level review of the specification in detail. **6**
 OR iii. What is dynamic black-box testing? Differentiate between equivalence partitioning and boundary condition testing with example. **6**
- Q.3 i. What do you mean by stub and driver? Explain the role of stub and driver in unit and integration testing. **4**
 ii. Explain any six types of coverage-based testing. **6**
 OR iii. What is static white-box testing? Explain formal reviews, walkthroughs and inspections in detail. **6**

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- Q.4 i. What is usability testing? How different types of disabilities could affect software usability? **4**
 ii. Write the importance of compatibility testing. Explain the example of backward and forward compatibility. **6**
 OR iii. What do you mean by configuration testing? Explain step by step approach for configuration testing. **6**
- Q.5 i. What is buffer overrun/ overflow? Why it is important in security testing? **4**
 ii. What is black box testing of a website? What basic elements of a web page can easily be tested with a black-box approach? **6**
 OR iii. What is documentation testing? In what three ways does good documentation contribute to the product's overall quality? **6**
- Q.6 i. What is random testing? Differentiate between monkeys and gorillas testing. **4**
 ii. Explain the bug's life cycle with suitable diagram. **6**
 OR iii. What is the utility of test tool? Explain any four types of test tool with example. **6**

Scheme of Marking

Software Testing (T) - CA3SE07 (T)

| | | | |
|-----|-------|---|---|
| Q.1 | i) | Which thing is not include in "High-Level Review of the Specification" | 1 |
| | | B. Review Specification Terminology Checklist | |
| | ii) | "Push the software to its limit and checkthe bugs that occur when the software is operated under extreme conditions" | 1 |
| | | Purpose of this dynamic testing technique's main focus is to? | |
| | | B. Test to fail | |
| | iii) | Which one is not a essential elements of formal review? | 1 |
| | | C. criticize the developer | |
| | iv) | Which one of the following subsumption relations is incorrect? | 1 |
| | | B. Basic condition coverage subsumes decision coverage | |
| | v) | The most appropriate level for compatibility Testing is | 1 |
| | | C. system | |
| | vi) | testing is a technique for ensuring that the intended users of a system can carry out the intended tasks efficiently, effectively and satisfactorily. | 1 |
| | | B. Usability testing | |
| | vii) | During Documentation Testing, Which type of Software Documentation is not considered | 1 |
| | | C. Software Requirements Specification (SRS) | |
| | viii) | What are Three D's of vandalize motives of hackers | 1 |
| | | B. Defacing, Destruction, and Denial of Service | |
| | ix) | Which of the following statement are correct? 1. Stubs are used in bottom-up approach. 2. Stubs are used in Top-down approach. 3. Drivers are used in bottom-up approach. 4. Drivers are used in Top-down approach. | 1 |
| | | C. 2,3 | |
| | x) | Which one is not a field of test case specification? | 1 |
| | | D. Actual Output | |
| Q.2 | i. | Verification- 2 Marks | 4 |
| | | Validation- 2 Marks | |
| | ii. | Utility - 2 Marks | 6 |
| | | High-Level Review - 4 Marks | |
| OR | iii. | Dynamic Black-Box - 1 Marks | 6 |
| | | Equivalence Partitioning -2.5 Marks | |

Boundary Condition -2.5 Marks

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|-----|------|--|---|
| Q.3 | i. | Definition- 1 marks | 4 |
| | | Role- 3 Marks | |
| | ii. | 1 marks for each Coverage-based Testing. | 6 |
| OR | iii. | Definition- 1 marks | 6 |
| | | Formal Reviews- 1 Marks | |
| | | Walkthroughs and -2 Marks | |
| | | Inspections – 2 Marks | |
| Q.4 | i. | Usability Definition- 1 marks | 4 |
| | | types of disabilities could affect software usability- 3 marks | |
| | ii. | importance of compatibility testing- 2 marks | 6 |
| | | Backward compatibility-- 2 marks | |
| | | Forward compatibility-- 2 marks | |
| OR | iii. | configuration testing definition- 2 | 6 |
| | | Approach for configuration testing- 4 marks | |
| Q.5 | i. | What is Buffer Overrun/ Overflow- 2 marks | 4 |
| | | important in Security Testing- 2 marks | |
| | ii. | What is black box testing of a website- 2 marks | 6 |
| | | For four basic elements – 4 marks | |
| OR | iii. | Definition of Documentation Testing - 2 marks | 6 |
| | | three ways – 4 Marks | |
| Q.6 | i. | Random Testing - 1 marks | 4 |
| | | Monkeys and Gorillas Testing- 3 marks | |
| | ii. | Bug's Life Cycle – 4 marks | 6 |
| | | diagram: 2 Marks | |
| OR | iii. | Utility of test tool: 2 Marks | 6 |
| | | four types of test tool with example: – 4 Marks | |
