

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**

Supplementary\_Summer\_2023

**Course: TY. B.Tech.Branch: Artificial Intelligence and Data Science.**

**Subject Code & Name: BTAIOE505C Software Engineering and Testing Sem :V**

**Max Marks: 60**

**Date:19/08/2023**

**Duration: 3 Hr.**

***Instructions to the Students:***

- 1. All the questions are compulsory.*
- 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.*
- 3. Use of non-programmable scientific calculators is allowed.*
- 4. Assume suitable data wherever necessary and mention it clearly.*

(Level/CO) Marks

**Q. 1 Solve Any Two of the following.**

- |                                                                        |           |          |
|------------------------------------------------------------------------|-----------|----------|
| A) What are Software myths? Explain its types in details.              | (BT1/CO1) | <b>6</b> |
| B) Explain generic View of Software Engineering with suitable diagram. | (BT3/CO1) | <b>6</b> |
| C) Discuss requirements engineering activities with suitable diagram.  | (BT2/CO1) | <b>6</b> |

**Q.2 Solve Any Two of the following.**

- |                                                                                               |           |          |
|-----------------------------------------------------------------------------------------------|-----------|----------|
| A) Explain concepts of software design attributes in detail.                                  | (BT2/CO2) | <b>6</b> |
| B) What is Software Architecture? Explain with taxonomy.                                      | (BT4/CO2) | <b>6</b> |
| C) Define software engineering? Explain Software Development Life Cycle with suitable diagram | (BT3/CO2) | <b>6</b> |

**Q. 3 Solve Any Two of the following.**

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|------------------------------------------------------------------------------------------------------------|-----------|----------|
| A) Explain Software Testing Life Cycle with suitable diagram.                                              | (BT1/CO3) | <b>6</b> |
| B) Define a) Quality b) Quality Control c) Quality assurance & d) Differentiate Validation & Verification. | (BT3/CO3) | <b>6</b> |
| C) Differentiate black box & white box testing. Explain challenges in white box testing.                   | (BT4/CO3) | <b>6</b> |

**Q.4 Solve Any Two of the following.**

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|---------------------------------------------------------------------------------------------|-----------|----------|
| A) What is Integration testing? Explain any three approach of Integration Testing.          | (BT2/CO4) | <b>6</b> |
| B) Define system testing. Explain a) Load testing b) Stress testing c) Performance testing. | (BT2/CO4) | <b>6</b> |
| C) Differentiate a) Test case & Test scenario b) Functional & Non-functional testing.       | (BT3/CO4) | <b>6</b> |

**Q. 5 Solve Any Two of the following.**

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|--------------------------------------------------------------------------------------|-----------|----------|
| A) What is performance testing? Explain<br>1) Throughput 2) Response time 3) Latency | (BT2/CO5) | <b>6</b> |
| B) Describe Internationalization testing with its aspect & benefits.                 | (BT2/CO5) | <b>6</b> |
| C) Explain Performance testing process in detail.                                    | (BT3/CO5) | <b>6</b> |

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