

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,  
LONERE – RAIGAD -402 103**

**Winter Semester Examination – Dec. - 2019**

**Branch: M.Tech. Computer Engineering**

**Sem.:- I**

**Subject:- Artificial Intelligence & Knowledge Reasoning (MTCE1105C)**

**Date:- 21/12/2019**

**Marks: 60**

**Time:- 3 Hr.**

**Instructions to the Students**

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

**(Marks)**

**Q.1. Solve any two sub questions**

- |   |      |
|---|------|
| a) Explain the Tableau Method.  | (06) |
| b) Explain The Resolution Refutation Method.  | (06) |
| c) What is knowledge representation technique? Explain the role of reasoning in AI. | (06) |

**Q.2. Solve any two sub questions**

- |   |      |
|---|------|
| a) Explain the Resource Description Framework(RDF). | (06) |
| b) Explain the Conceptual Dependency (CD) Theory,.  | (06) |
| c) Explain the RATE Algorithm.                      | (06) |

**Q.3. Solve any two sub questions**

- |   |      |
|---|------|
| a) Explain The Cut Operator in PROLOG.  | (06) |
| b) Explain The Resolution Refutation Method for FOL.                          | (06) |
| c) Explain The PROLOG (Programming for Artificial Intelligence) with example. | (06) |

**Q.4. Solve all sub questions**

- a) Explain The Plan Applier Mechanism (PAM). (06)
- b) Explain the Script Applier Mechanism (SAM). (06)

**Q.5. Solve all sub questions**

- a) Explain the attributive language with complement (ALC) (06)
- b) Differentiate between Inductive and Deductive reasoning. (06)

**Q.6. Solve any two sub questions**

- a) Explain The Kripke Semantics in a Multi Agent Scenario. (06)
- b) Explain the Minimal Models. (06)
- c) Explain The Auto-epistemic Logic. (06)

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Paper End

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