

TRIBHUVAN UNIVERSITY
FACULTY OF MANAGEMENT

Office of the Dean

March - April 2018

Full Marks: 40

Time: 2 hrs.

BIM / Seventh Semester / IT 228: Artificial Intelligence

Candidates are required to answer all the questions in their own words as far as practicable.

Group "A"

1. Brief Answer Questions:

[10 × 1 = 10]

- i. What is learning agent?
- ii. What is alpha beta pruning?
- iii. Define inference engine.
- iv. List the components of problem definition.
- v. What is meant by logical consequence?
- vi. In which situation fuzzy logic can be used?
- vii. What is meant by expert system shell?
- viii. With suitable example write on crossover operator in genetic algorithm.
- ix. What is pragmatic analysis?
- x. What is DENDRAL?

Group "B"

Short Answer Questions:

[5 × 4 = 20]

2. In which situation hill climbing search will be more appropriate? Explain.
3. Explain benefits of Reinforcement learning.
4. Provide example to illustrate working of forward chaining method in production system.
5. Write algorithm for Depth first search.
6. Consider the following statements. "Jack owns a dog. Every dog owner is an animal lover. No animal lover kills an animal. Either Jack or Curiosity killed the cat, who is named Tuna" Using resolution principle prove that, Curiosity kill the cat.

Group "C"

Comprehensive Questions:

[2 × 5 = 10]

7. What do you mean by testing of neural network? Explain with example.
8. Differentiate between first order predicate language and propositional logic. How will you use first order predicate language? Provide example.

