

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- APRIL-2023

COURSE CODE(CREDITS): 19B1WC1837 (3)

MAX. MARKS: 25

COURSE NAME: REINFORCEMENT LEARNING

COURSE INSTRUCTORS: DHA

MAX. TIME: 1 Hour 30 Minutes

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

- Q1. Differentiate between Model-free Prediction and Model-free Control. [CO-3, Marks: 3]
- Q2. a) Explain Monte Carlo Reinforcement Learning. [CO-1,3, Marks: 2+2+5]
b) What are the advantages of Monte carlo over Markov decision process?
b) Explain how the Black jack game is simulated with the Monte Carlo method?
- Q2. a) Compare First Visit and Every Visit Monte Carlo Policy Evaluation. [CO-3, Marks: 3+5]
b) Write algorithm to perform Every Visit Monte Carlo Policy Evaluation.
- Q3. Explain Policy Iteration method along with a real world application. [CO-3, Marks: 3]
- Q4. Explain how Dynamic Programming can be used to solve Planning problem in Reinforcement Learning. [CO-1, Marks: 2]