

K. J. Somaiya College of Engineering, Mumbai-77
(Autonomous College Affiliated to University of Mumbai)
Semester: January –May 2022
In-Semester Examination

Class: TY B. Tech
Branch: Computer
Full name of the course: Artificial Intelligence
Duration: 1hr.15 min

Semester: VI
Course Code: 2UCC603
Max. Marks: 30

Q. No	Questions	Marks
Q1	A) Consider a hotel that expects national and international patrons. The agent(s) help the patrons in checking in, check out, room service, cleaning and billing process. Define PEAS for this given problem instance.	5M
	B) Discuss the key features of thinking like humans and thinking rationally approaches of AI. Justify why they were not suitable candidates for getting selected as a rational agent approach.	5M
	OR State and justify Properties of task environment for the problem stated in Q. 1 A.	10M
Q2	State and justify problem characteristics applicable to knapsack problem.	10M
Q3	A. Draw state space for water jug problem. Problem: You have two jugs of capacity 4 and 5 liters respectively, with no measuring markings on them. The problem is to get 2 litres of water in 5 litre jug. B. Run BFS, DLS (L=3) and IDS on the same to give: a) Sequence of nodes visited for every algorithm b) Solution path given by BFS, DLS and IDS with respective path costs.	10M