



PRIYADARSHINI COLLEGE OF ENGINEERING, NAGPUR
DEPARTMENT OF COMPUTER TECHNOLOGY
ACADEMIC SESSION: 2022-23 (ODD SEMESTER)
QUESTION BANK FOR CAT-I

Subject	:	Artificial Intelligence	Semester	:	V - A and B
Subject Teacher	:	Dr. A.V. Dehankar Prof. Pragati Budhe	Date of Display	:	11-09-2022
Unit	:	I, II and III(1/2)			

Course Outcomes:

After completing the course, students will be able to

- C01 :** Explain the concepts of AI, its importance in various fields and basics of AI problem solving techniques with more stress on various problem characteristics.
- C02:** Illustrate various search techniques and understand various types of knowledge representation schemes.
- C03:** Understand and apply various non-formal knowledge representation methods and statistical reasoning methods in AI problem solving.

Que No.	Questions	Mapping with CO	BT Level
Q1 a	What do you mean by control strategies ? What are requirements of good control strategies ?	C01	I, II
b	Write & explain various AI problem characteristics.	C01	I, II
Q2 a	What is production system ? Give the classification of production system. Explain it with examples.	C01	II, III
b	List various task domains of AI.	C01	III
Q3 a	What is AI ? What are its related fields?	C01	I, II
b	What are intelligent agents? Draw and explain generic architecture of intelligence agents.	C01	I, II
Q4 a	B) Explain the importance of defining the problem as a state space search. Give example.	C01	I, II
b	B) Give production system rules or water jug problem. Also give the sequence of rules to solve water jug problem	C01	I, II
Q5 a	Explain generate & test search technique.	C02	I, II
b	What are the problems of hill climbing? How they are overcome?	C02	I, II
Q6 a	What is Hill Climbing Algorithm? What are its limitations? How these limitations are solved?	C02	I, II
b	Explain best-first search with example	C02	I, II
Q7 a	Explain constraint satisfaction with some example.	C02	I, II
b	What are various approaches to knowledge representation? Explain in detail.	C02	II, III
Q8 a	short notes on i) Procedural & declarative knowledge ii) Forward & backward reasoning	C02	II, III
b	Write the difference between:- i) Predicate logic and propositional logic iii) Forward and Backward reasoning.	C02	I, II
Q9 a	Explain the following. i) Scripts ii) Frames	C03	I, II

	b	What is Semantic Network? Explain its advantages and disadvantages.	C03 I, II
Q10	a	Write short note on fuzzy logic.	C03 I, II
	b	Explain Conceptual dependency.	C03 I, II