

97693

B.C.A., VI<sup>th</sup> Semester (Reappear)

Examination, February-2022

ARTIFICIAL INTELLIGENCE

(BCA-308)

Time allowed : 3 hours]

[Maximum marks : 80

*Note : Attempt five questions in all, selecting at least one question from each unit. Question No. - 1 is compulsory. All questions carry equal marks.*

1. (i) Explain the uses of expert system.
- (ii) Explain uses Hill climbing technique.
- (iii) Define Problem Space.
- (iv) What do you mean by Syntactic Processing ?
- (v) Explain the issues in the design of the search problem.
- (vi) What do you mean by Constraint satisfaction ?
- (vii) Explain the concept of Learning by taking advice.
- (viii) Explain the concept of Representing instances.

97693-P-3-Q-9 (22)

P.T.O.

( 2 )

97693

Unit - I

2. Explain the following in detail :
- (i) Best first search technique
  - (ii) Issues in the design of the search problem
3. Write is Artificial Intelligence ? Explain the nature and importance of AI in detail. Also explain AI techniques in detail.

Unit - II

4. (i) Explain how can inheritable knowledge be represented ? Also explain the various approaches used in knowledge representation.
- (ii) Explain the issues in knowledge representation in detail.
5. (i) What do you mean by knowledge representation ? What are the characteristics of a knowledge representation system.
- (iii) Explain the concept of computable function and predicate in detail.

97693

( 3 )

97693

Unit - III

6. Explain the following in detail :
- (i) Learning in problem solving
  - (ii) Discourse and pragmatic processing
7. (i) What is learning ? Explain Rote learning and Explanation based learning in detail.
- (ii) What is natural language processing ? Also explain semantic processing in detail.

Unit - IV

8. What is a Expert system ? What are the different applications of expert systems ? Explain in detail the expert system shells.
9. (i) What is knowledge ? Explain the components of knowledge base in detail.
- (ii) Explain the various stages of knowledge acquisition in detail.

97693