97693

BCA 6th Semester (Re-Appear) Examination – December, 2022

ARTIFICIAL INTELLIGENCE

Paper : BCA-308

Time : Three hours]   [Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

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

1. (a) What is the difference between AI and Expert system ?

   (b) What is the difference between Problem solving and Planning ?

   (c) What is knowledge representation ?

   (d) What is problem reduction ?

   (e) What capabilities must a machine possess to be called it as intelligent ?

(f) Explain the concept of explanation based learning.

(g) Explain the concept of representing instances.

(h) Explain the importance of Artificial Intelligence.

UNIT – I

2. (a) What is Artificial Intelligence ? Explain the applications areas of Artificial Intelligence in detail.

(b) What is Production System ? Explain its characteristics in detail.

3. Explain the following in detail :

(a) Various A.I. techniques

(b) Hill climbing and Best first search technique

UNIT – II

4. Explain the following in detail :

(a) Computable function and predicate

(b) Representing simple facts in logic

5. (a) Explain the issues in knowledge representation in detail. Also explain how can inheritable knowledge be represented ?

(b) Explain the various approaches used in knowledge representation in detail.

UNIT – III

6. What is learning ? Explain learning from example-induction, learning by taking advice and learning in problem solving in detail.

7. What are various Processing in NLP (Natural Language Processing) ? Explain Syntactic processing, Discourse and Pragmatic processing in detail.

UNIT – IV

8. What is Expert system ? What are the different applications of expert systems ? Explain in detail.

9. What do you mean by Expert system shells ? Explain in detail. Also explain the importance of expert system shell in development of expert system.

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