

MCCA505

M.C.A. + Ph.D./M.C.A., V Semester Examination, November - 2018

Artificial Intelligence and Applications

Choice Based Credit System (CBCS)

Time: 3 Hrs.**Maximum Marks : 60****Minimum Pass Marks: 24**

- Note: 1. From each questions Parts 'A' and 'B' are compulsory and part 'C' has internal choice.
 2. All questions carry equal marks, out of which part 'A' and 'B' carries 3 marks and part 'C' carries 6 marks.

Q.1(A) What do you mean by AI? Explain problems associated with AI. **03**

(B) Describe atoms, strings and lists with suitable examples. **03**

(C) What is the utility of AI systems in modern era? What are the important AI techniques?

OR

Discuss formatted and unformatted I/O functions with suitable examples. **06**

Q.2(A) How problems can be represented in AI? **03**

(B) What do you understand by production systems? What are the advantages of using it? **03**

(C) Explain water jug problem with example.

OR

Trace the constraint satisfaction procedure solving the following crypt-arithmetic problem-

$$\begin{array}{r}
 \text{S E N D} \\
 + \text{M O R E} \\
 \hline
 \text{M O N E Y}
 \end{array}$$

06**Contd..**

- Q.3(A)** What do you mean by knowledge representation? 03
(B) Explain predicate and quantifiers with suitable examples. 03
(C) Construct a movie script.

OR

Briefly explain the structure of the frame. 06

- Q.4(A)** Define natural language processing? Explain need of NLP. 03
(B) Explain the term transition networks. 03
(C) What is game playing and why game playing occupies a pivotal role in AI?

OR

Explain alpha-beta cut offs with an example. 06

- Q.5(A)** What do you mean by expert systems? 03
(B) Draw architecture of expert systems. 03
(C) Explain life cycle of an expert system.

OR

Write a note on MYCIN. 06
