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Total No. of Questions : 07]   [Total No. of Pages : 02

BCA (Sem. - 6th)
ARTIFICIAL INTELLIGENCE
SUBJECT CODE : BC - 601
Paper ID : [B0223]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours   **Maximum Marks : 60**

Instruction to Candidates:

1) Section - A is **Compulsory**.

2) Attempt any **Four** questions from Section - B.

Section - A

Q1)   *(10 × 2 = 20)*

   a)   State Relationship between terms "Intelligence" and "Knowledge".

   b)   What do you mean by knowledge conceptualization?

   c)   Define Heuristic function.

   d)   List out basic components of a production system.

   e)   Define "Clause".

   f)   Define the terms "Fact" and "Rule".

   g)   What is a Certainty fact.

   h)   What is Closed World Assumption.

   i)   What is Property List.

   j)   What is Backtracking?

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Section - B

(4 × 10 = 40)

Q2) Define knowledge based system? What is the importance of knowledge? How the knowledge is represented?

Q3) (a) Discuss the steps needed to convert a wff in predicate logic and into clause form.

   (b) Convert the following sentence into wff in predicate logic and convert it into clause forms "Any thing any one eats and is'nt ' killed by is food".

Q4) What are the limitations of predicate logic as a tool for knowledge representation?

Q5) Write suitable example and explain advantages of script based representation over semantic net.

Q6) What are the advantages and disadvantages of declarative knowledge?

Q7) Explain the following :
   (a) CYC.
   (b) Resolution.

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