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MASTER OF COMPUTER APPLICATIONS (CBCS - 2020 COURSE)
M.C.A. Sem-III : WINTER- 2022
SUBJECT : ARTIFICIAL INTELLIGENCE

Day : Wednesday

Time : 10:00 AM-01:00 PM

Date : 30-11-2022

W-22738-2022

Max. Marks : 60

N.B.:

- 1) **Q.No.4** is **COMPULSORY**.
 - 2) Attempt **ANY TWO** questions from **Q.No.1** to **Q. No.3** in Section-I.
 - 3) Attempt **ANY TWO** question from **Q.No.5** to **Q.No.7** in Section-II.
 - 4) Each question carries **12** marks.
 - 5) Answer to both the sections should be written in **SAME** answer book.
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SECTION – I

- Q.1** a) What is supervised machine learning?
b) What is unsupervised machine learning?
- Q.2** a) What are the steps in Natural Language Processing
b) Explain Rule- based system with example.
- Q.3** a) Explain two data structures series and data frame supported by Panda.
b) Explain following functions in python.
i) count() ii) Mean() iii) Mode()
- Q.4** Write short notes on **ANY THREE** of the following:
a) NumPy data types
b) Components of knowledge based system
c) Symbolic Artificial Intelligence
d) Arrays in NumPy

SECTION – II

- Q.5** a) How knowledge can be represented by using semantic net with example.
b) Explain Bi-directional search technique.
- Q.6** Explain Traveling-Salesman problem and its solution.
- Q.7** Convert the following statement in First Order Predicate Logic.
a) Ravi likes all kinds of food.
b) Apple and chicken are food.
c) Anything any one eats and is not killed is food.
d) Ajay eats peanuts and is still alive.
e) Rita eats everything that Ajay eats.
f) Ajay eats food which do not liked by Rita

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