(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2021 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : MAY-2024
COURSE NAME: B.C.A   MAXIMUM MARKS: 70
SEMESTER: VI   TIME : 3 HOURS

PART - III
CURRENT TRENDS AND RECENT TECHNOLOGIES

SECTION - A   (10 X 1 = 10 MARKS)
ANSWER THE FOLLOWING QUESTIONS.
MULTIPLE CHOICE QUESTIONS.   (K1)

1. Which of the following is not a fundamental characteristics of the IoT?
   a) Interconnectivity   b) Heterogeneity   c) Dynamic changes   d) Homogeneity

2. A Supply Chain is a process of linking?
   a) Suppliers and Manufacturers   b) Suppliers and Dealers
   c) Suppliers and Consumers   d) Customer and products

3. _____is a sparse, distributed, persistent multidimensional sorted map.
   a) Hadoop   b) Big Table   c) MapReduce   d) Big Data Analytics

4. _____represent the strength or importance assigned to the connections between neurons.
   a)Connection   b) Weights   c)Bias   d)Loss function

5. Blockchain is a peer-to-peer _____ distributed ledger technology that makes the records
   of any digital asset transparent and unchangeable.
   a) Decentralized   b) Demanding   c) Secure   d) Popular

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.   (K2)

6. Write the basic usage model identified by Gartner.
7. List the SCM components.
8. Give an example of human-generated unstructured data
9. Define Input Layer.
10. Write the operational aspects of Bitcoin blockchain.

SECTION – B   (5 X 4 = 20 MARKS)
ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Explain the commonly accepted definition of IoT.
                          (OR)
    b) Determine the functional views of IoT.

12.a) Elucidate the process and activities involved in SCM.
                          (OR)
    b) Construct the Multi-tier computing architecture of SAP.

13.a)   Outline the evolution of Data Management.
                                (OR)
   b)   Explain the exploring source of big structured data.

14.a)   Compare the Supervised and Unsupervised Learning and also explain are the various types
        of Supervised Learning.

                                (OR)
   b)   Explain the concept of linear separability and linear regression.

15.a)   Differentiate between various types of block chain.
                                (OR)
   b)   Determine the asymmetric key encryption.

               SECTION - C   **(4 X 10 = 40 MARKS)**
ANSWER ANY FOUR OUT OF SIX QUESTIONS
(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS
(FROM Qn. No : 17 to 21)   **(K4 (Or) K5)**

16. Illustrate the various types of Machine Learning.

17. Sketch and explain the following IoT smart X applications
     i) Smart Mobility and Transport   ii) Smart Factory and Smart Manufacturing

18. Summarize the business application components of SAP and APO infrastructure of SCM.

19. Describe the brief history and fundamental concepts of distributed computing.

20. Explain the concept of Version Spaces and the Candidate Elimination Algorithm with proper
     example. How this algorithm used in machine learning?

21. Illustrate the usage and advantages of hashing. how it is used block chain technology
     with an example.
                          ****