M.E. - DEGREE EXAMINATIONS, APRIL / MAY 2024

Second Semester

M.E. – Big Data Analytics

20PBDEL201 – HIGH PERFORMANCE COMPUTING

Regulations - 2020

Duration: 3 Hours   Max. Marks: 100

PART - A (10 × 2 = 20 Marks)
Answer ALL Questions

	Marks	K–Level	CO
1. Define IOE.	2	K1	CO1
2. Distinguish Cluster and Grid Computing.	2	K2	CO1
3. Write short notes on Network Functions Virtualization.	2	K1	CO2
4. Define SAN. List out some advantages of SAN.	2	K1	CO2
5. Outline the challenges in implementing HPC Architecture.	2	K1	CO3
6. State Massive Online Analysis.	2	K1	CO3
7. How does trust impact users' experiences and interactions with products or services?	2	K2	CO4
8. What is meant by End to End Security?	2	K1	CO4
9. Write short notes on Support Vector Machine Algorithm.	2	K1	CO5
10. List out two types of Learners in classification Problem.	2	K1	CO5

PART - B (5 × 13 = 65 Marks)
Answer ALL Questions

	Marks	K–Level	CO
11. a) Explain working of the following phases of Map Reduce with one common example (i) Map Phase, (ii) Shuffle and sort phase, and (iii) Reducer Phase.	13	K3	CO1

OR

	Marks	K–Level	CO
b) Illustrate in detail about grid computing and Cluster computing.	13	K3	CO1

	Marks	K–Level	CO
12. a) Find the different file systems used in cloud environment and Explain in detail about the file systems used GFS and Amazon S3.	13	K3	CO2

OR

	Marks	K–Level	CO
b) Generalize the following in detail. (i) Google Bigtable Datastore (ii) Mobile Me.	13	K2	CO2

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create   **12639**

13. a) You are required to make a case study on STOCK MARKET PREDICTION with following requirements: *13*   *K3 CO3*
    (i) Briefly introduce about Stock market and its prediction
    (ii) The Solution Path of the stock Market Perdition.
    (iii) Do the Empirical Study of the Stock Market Prediction.

<div align="center">OR</div>

  b) i) Tabulate the short notes on GPFS   *6*   *K2 CO3*

    ii) Compare and contrast- In Database analytics–In memory analytics.   *7*   *K3 CO3*

14. a) Explain in detail about the security architecture design of IOT and brief about their challenges and solutions.   *13*   *K2 CO4*

<div align="center">OR</div>

  b) Discuss the following in detail.   *13*   *K2 CO4*
    (i) Security and Privacy
    (ii) Trust for user.

15. a) Explain in Brief about Clustering applications in machine learning   *13*   *K2 CO5*

<div align="center">OR</div>

  b) Describe in details about Deep learning Accelerators and its workflow.   *13*   *K2 CO5*

<div align="center">PART - C (1× 15 = 15 Marks)</div>

16. a) Compare and contrast in classification algorithms and Big data Genome sequencing.   *15*   *K2 CO6*

<div align="center">OR</div>

  b) Elaborate about Binary Classification and how it is used in various real world applications.   *15*   *K3 CO6*