GUJARAT TECHNOLOGICAL UNIVERSITY

POST GRADUATE DIPLOMA IN BIOINFORMATICS (DB) - SEMESTER - 1 EXAMINATION - WINTER - 2024

Subject Code:1310204   **Date: 02 Jan 2025**
Subject Name: Cloud Computing, Data Mining & Visualization
Time:10:30 AM TO 01:00 PM   **Total Marks: 70**

Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Draw neat and clean diagrams as required

Q.1	**Write a note on following**	**(Marks-10X2=20)**

1. What is cloud computing?
2. What are the benefits of cloud computing?
3. Explain different types of cloud.
4. What is virtualization in cloud computing?
5. Define Platform as a Service Providers challenges and risks.
6. What is virtual machine?
7. Explain any data visualization tool.
8. Give an overview of PowerBi.
9. Define Hyper Visor in reference of cloud computing.
10. What do you mean by data mining?

Q.2	**Answer the following (Any 2 out of 3)**	**(Marks-2X10=20)**

1. Write a short note on Apache Hadoop.
2. Compare Infrastructure as a service and Software as a service in detail.
3. Describe the Cloud Computing Architecture in detail.

Q.3	**Answer the following (Any 6 out of 8)**	**(Marks-6X5=30)**

1. Write a short note on Cloud Aligner map Reduce tool.
2. Explain Online Analytical Processing in data mining.
3. Discuss the architecture & use of Amazon Web Service.
4. What is a bar chart, and when it is typically used for data visualization?
5. Explain the configuration, launch and customization of virtual machine.
6. Discuss any Cloud Based Case-Study specifically for Bioinformatics.
7. Explain the process of KDD in data mining in detail.
8. Explain the Decision Tree Classifier in detail.

****