GUJARAT TECHNOLOGICAL UNIVERSITY

POST GRADUATE DIPLOMA IN BIOINFORMATICS (DB) - SEMESTER - 1 EXAMINATION - WINTER - 2023

Subject Code:1310204   **Date: 19 Dec 2023**
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 are some of the key features of Cloud Computing?
2. What are the different versions of the cloud?
3. Discuss advantages and disadvantages of cloud computing.
4. What do you mean by data mining?
5. Define Infrastructure as a Service Providers challenges and risks.
6. Define Platform as a Service Providers challenges and risks.
7. What are the different tasks of Data Mining?
8. What is classification in reference to data mining?
9. Name any 10 areas of applications of data mining?
10. Explain any two virtual machine software in detail.

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

1. With an example elaborate use of AI and machine learning algorithms in computational Biology.
2. Describe the Cloud Computing Architecture in detail.
3. What are the challenges of the Big Data Analytics and how Hadoop overcomes it?

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

1. Discuss any three data visualization tools in detail.
2. Explain the Decision Tree Classifier?
3. Write a short note on PowerBi.
4. Differentiate Between Data Mining And Data Warehousing?
5. Explain the Tool for Building Private Cloud: IaaS using Eucalyptus.
6. Differentiate between Private cloud and Public Cloud.
7. Explain Bayesian classification in Data Mining?
8. Discuss analyzing sets of biological data generated by high-throughput technologies.

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