

Intg. M.Sc. IT BIA Semester 2 Examination

BIAMSC 12

Data Science Exploration

Time : 2-30 Hours]

June-2024

[Max. Marks : 70

Instructions:

1. *Figures to the right indicates full marks*
2. *Attempt all questions.*
3. *Write the answers according to question's marks.*
4. *Make suitable assumption whenever necessary.*

Question 1: - Attempt following questions.

- a) Explain Data Science life cycle with figure. [07]
- b) Explain Any 7 uses of Data Science. [07]

Question 2: - Attempt following questions.

- a) Write 7 difference between Data science Vs Data Analytics. [07]
- b) Explain Any 7 data science components. [07]

OR

- b) Explain the use of following libraries: - [07]
 - a. NumPy
 - b. Pandas
 - c. Scikit-learn
 - d. Seaborn
 - e. TensorFlow
 - f. Matplotlib
 - g. SciPy

Question 3: - Attempt following questions.

- a) Explain Any 7 techniques for working with Traditional data. [07]
- b) Explain Any 7 Real life examples of Big Data. [07]

OR

Question 3: - Attempt following questions.

- a) Write at least 7 differences of Traditional data Vs Big Data. [07]
- b) What is Big Data? Explain Volume, Velocity, Variety, Veracity, Value, Variability. [07]

Question 4: - Attempt following questions.

- a) Explain Arrays, Linked Lists, Stacks, Queues, Trees, Graphs, Hash Tables. [07]
- b) How any platform generates the data in various formats in data science? [07]

OR

Question 4: - Attempt following questions.

- c) Explain Any 7 techniques of Data Formatting. [07]
- d) Explain Any 7 real life examples of Machine Learning. [07]

Question 5: - Attempt following questions.

- c) What is Supervised Learning. Explain 6 real life examples of Supervised learning. [07]
- d) Explain Reinforcement Learning with figure. [07]

OR

Question 5: - Attempt following questions.

- e) List any 3 types of Machine Learning and explain it. [07]
- f) Explain Linear Regression. [07]

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