

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF COMPUTER APPLICATIONS
EXAMINATION : MAY/JUNE - 2024
SEMESTER - III

Sub : Data Analytics (MCA- 306-22)

Date : 03/06/2024

Total Marks : 60

Time: 2.00 pm To 4.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2 - 3 lines. (Any 5) (10)

1. What is data analytics?
2. What are the key steps in the data analytics process?
3. What are some common data cleaning techniques?
4. What are the main types of data analytics?
5. What is exploratory data analysis (EDA)?
6. What is tensor flow?
7. What are the benefits of using data visualization in data analytics?

Q. 2. Answer the following in short. (Any 4) (20)

1. What is data preprocessing, and why is it important in data analysis?
2. What are the benefits of using data visualization in data analytics?
3. Explain the concept of data mining and its various techniques used in data analysis.
4. Explain the concept of regression analysis and its applications in data analytics.
5. Describe the clustering algorithms in data analytics.
6. Write a short note on CNN

Q. 3. Answer the following in detail. (Any 3) (30)

1. What are the key differences between supervised and unsupervised learning in machine learning?
2. What is natural language processing (NLP) contribute to data analytics applications?
3. Describe the main steps involved in the preprocessing of data for machine learning tasks.
4. Explain the support vector machines (SVMs) in machine learning.
5. Explain the Life Cycle of Data Analytics.
