

(i) Printed Pages : 3 Roll No.

(ii) Questions : 9 Sub. Code :

2	6	0	4	2
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Exam. Code :

0	4	6	0
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M.Sc. (Information Technology) 2nd Semester
(2056)

Opt. (ii) DATA ANALYTICS—II

Paper : MS-73

Time Allowed : 3 Hours] [Maximum Marks : 80

- Note :-** (1) Question Paper consists of **nine** questions comprising **two** questions in each of Sections A, B, C, D and **one** compulsory question of short answer type in Section E.
- (2) The students are required to attempt any **one** question each from Sections A, B, C, D and Section E is compulsory.

SECTION—A

1. (a) What is machine learning? Explain history of machine learning in detail. 8
- (b) Explain supervised learning, K-nearest Neighbor advantages and disadvantages in detail. 8

2. (a) What is unsupervised learning? Explain characteristics and applications in detail. 8
- (b) Explain K-means clustering in detail. 8

SECTION—B

3. (a) Explain artificial intelligence with its types in detail. 8
- (b) Explain AI applications in detail. 8
4. (a) Explain breadth first search in detail. 8
- (b) Explain forward and backward chaining in detail. 8

SECTION—C

5. Explain Natural Language Processing (NLP) and its key features with applications in detail. 16
6. (a) Explain components of Natural language processing (NLP) in detail. 8
- (b) Explain the significance of neural networks in detail. 8

SECTION—D

7. (a) Define Big data and how does traditional data differ from Big data? 8
- (b) What is Hadoop, and how does it solve the problem of big data and explain its components? 8

8. (a) What is Big data analytics? Explain classification of Big data analytics. 8
- (b) Differentiate between Business intelligence vs Big data in detail. 8

SECTION—E (Compulsory)

9. Elaborate:

- (a) Structured Data
- (b) Support Vector machines
- (c) Noise Learning
- (d) Parsing.

4×4=16