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**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**  
**(An Autonomous Institute Affiliated to AKTU, Lucknow)**

**MCA (Integrated)**

**SEM: VI - THEORY EXAMINATION (2025 - 2026)**

**Subject: Fundamentals of Digital Marketing and Analytics**

**Time: 3 Hours**

**Max. Marks: 100**

**General Instructions:**

**IMP:** Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of **three Sections -A, B, & C**. It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.

2. Maximum marks for each question are indicated on right -hand side of each question.

3. Illustrate your answers with neat sketches wherever necessary.

4. Assume suitable data if necessary.

5. Preferably, write the answers in sequential order.

6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

**SECTION-A**

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1. Attempt all parts:-

- |       |                                                                                   |   |
|-------|-----------------------------------------------------------------------------------|---|
| (1.1) | Main goal of digital marketing. (CO1,K2)                                          | 1 |
|       | (a) Decrease operational costs                                                    |   |
|       | (b) Increase market share and customer base                                       |   |
|       | (c) Decrease customer engagement                                                  |   |
|       | (d) Minimize sales efforts                                                        |   |
| (1.2) | Digital marketing platform primarily used to share news and updates. (CO1,K1)     | 1 |
|       | (a) Pinterest                                                                     |   |
|       | (b) YouTube                                                                       |   |
|       | (c) Twitter                                                                       |   |
|       | (d) LinkedIn                                                                      |   |
| (1.3) | A key difference between analysis and reporting involves:CO2,K2                   | 1 |
|       | (a) Analysis involves interpreting data, while reporting involves presenting data |   |
|       | (b) Reporting is more complex than analysis                                       |   |
|       | (c) Analysis involves collecting raw data                                         |   |
|       | (d) There is no difference between analysis and reporting                         |   |
| (1.4) | Primary tool used in data preparation phase:CO2,K2                                | 1 |
|       | (a) Python                                                                        |   |
|       | (b) MS Paint                                                                      |   |
|       | (c) Windows Explorer                                                              |   |
|       | (d) Zoom                                                                          |   |
| (1.5) | Explain the purpose of identifying missing values in a dataset. CO3,K2            | 1 |

- (a) To ensure data security
  - (b) To analyze the trends in the data
  - (c) To clean the data and improve its accuracy
  - (d) To store data efficiently
- (1.6) Explain a best practice in data ethics. CO3,K2 1
- (a) Ignoring privacy concerns for more data access
  - (b) Ensuring fairness and non-discrimination in data collection and analysis
  - (c) Collecting data from unreliable sources
  - (d) Using biased algorithms to predict outcomes
- (1.7) Key role of metadata in data governance.CO4,K2 1
- (a) Backup storage
  - (b) Performance tuning
  - (c) Data discovery
  - (d) UI design
- (1.8) Social platform for professional data analyst profiles.CO4,K2 1
- (a) Facebook
  - (b) YouTube
  - (c) LinkedIn
  - (d) Pinterest
- (1.9) Data mining can best be described as: CO5,K1 1
- (a) Organizing data
  - (b) Discovering patterns in large datasets
  - (c) Transforming raw data into structured data
  - (d) Storing data in databases
- (1.10) Handling missing data can be done using: CO5,K1 1
- (a) Imputation
  - (b) Normalization
  - (c) Clustering
  - (d) Regression

2. Attempt all parts:-

- (2.1) Explain the evolution of digital marketing. (CO1,K2) 2
- (2.2) Define structured data. (CO2,K2) 2
- (2.3) Define data normalization and explain its necessity. (CO3, K2) 2
- (2.4) Discuss the importance of sorting data for analysis. (CO4, K2) 2
- (2.5) Discuss ethical concerns in data mining. (CO5, K2) 2

## **SECTION-B**

30

Answer any one of the following:-

- (3.1) Explain why data analytics is important in tracking marketing success. (CO1,K2) 6
- (3.2) Explain the effect of influencer marketing on brands. (CO1,K2) 6

Answer any one of the following:-

|                                             |                                                                                                           |    |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------|----|
| (3.3)                                       | Explain predictive analytics in forecasting. (CO2,K3)                                                     | 6  |
| (3.4)                                       | Explain the role of cloud computing in analytics. (CO2,K3)                                                | 6  |
| Answer any one of the following:-           |                                                                                                           |    |
| (3.5)                                       | Describe managing stakeholder expectations in a project. (CO3, K3)                                        | 6  |
| (3.6)                                       | Discuss metadata role in data exploration. (CO3, K4)                                                      | 6  |
| Answer any one of the following:-           |                                                                                                           |    |
| (3.7)                                       | Explain the end-to-end process of storing, retrieving, and managing data using databases. (CO4, K4)       | 6  |
| (3.8)                                       | Analyze the role of personal branding in digital networking. (CO4, K4)                                    | 6  |
| Answer any one of the following:-           |                                                                                                           |    |
| (3.9)                                       | Demonstrate steps of KDD using dataset. (CO5, K3)                                                         | 6  |
| (3.10)                                      | Examine relationship between similarity and clustering accuracy. (CO5, K4)                                | 6  |
| <b>SECTION-C</b>                            |                                                                                                           | 50 |
| 4. Answer any <u>one</u> of the following:- |                                                                                                           |    |
| (4.1)                                       | Describe the key components of the digital marketing landscape and their interrelationships. (CO1,K2)     | 10 |
| (4.2)                                       | Explain the role of affiliate marketing and influencer marketing. (CO1,K2)                                | 10 |
| 5. Answer any <u>one</u> of the following:- |                                                                                                           |    |
| (5.1)                                       | Analyze key roles and skills required in analytics projects. (CO2,K4)                                     | 10 |
| (5.2)                                       | Evaluate the effectiveness of modern tools in data analytics. (CO2,K5)                                    | 10 |
| 6. Answer any <u>one</u> of the following:- |                                                                                                           |    |
| (6.1)                                       | Describe preprocessing techniques for missing data. (CO3, K3)                                             | 10 |
| (6.2)                                       | Describe outlier handling techniques and impact. (CO3, K3)                                                | 10 |
| 7. Answer any <u>one</u> of the following:- |                                                                                                           |    |
| (7.1)                                       | Evaluate various techniques for ensuring data confidentiality, integrity, and availability.CO4,K4         | 10 |
| (7.2)                                       | Discuss the ethical responsibilities of analysts in handling sensitive data.CO4,K2                        | 10 |
| 8. Answer any <u>one</u> of the following:- |                                                                                                           |    |
| (8.1)                                       | Explain the applied method for transform raw data into a normalized form with suitable algorithms .CO5,K3 | 10 |
| (8.2)                                       | Design approaches for dimensionality reduction in high-dimensional data. (CO5, K6)                        | 10 |