# **INSTITUTE OF AERONAUTICAL ENGINEERING**

(Autonomous) Dundigal-500043, Hyderabad

B.Tech IV SEMESTER END EXAMINATIONS (REGULAR) - JULY 2022

Regulation:UG20

DATA MANAGEMENT AND REPRESENTATION

Time: 3 Hours

(CSE-DATA SCIENCE)

Max Marks: 70

Answer ALL questions in Module I and II Answer ONE out of two questions in Modules III, IV and V (NOTE: Provision is given to answer TWO questions from among one of the Modules III / IV / V All Questions Carry Equal Marks All parts of the question must be answered in one place only

## $\mathbf{MODULE}-\mathbf{I}$

- 1. (a) Write a short note on codebook. Summarize any six important steps and questions to be considered while creating codebook. [BL: Remember| CO: 1|Marks: 7]
  - (b) What is file management? Outline file organization terms and concept and objective.

[BL: Understand| CO: 1|Marks: 7]

### $\mathbf{MODULE}-\mathbf{II}$

- 2. (a) Give the principles of primary data. List and explain any two primary data collection method with their pros and cons. [BL: Understand] CO: 2|Marks: 7]
  - (b) Write a short note on secondary data. Compare and contrast between primary data and secondary data based on their properties. [BL:Understand | CO: 2|Marks: 7]

### $\mathbf{MODULE}-\mathbf{III}$

- 3. (a) What is missing data? List various problem faced by missing data. Describe about addressing of missing data in the analysis stage. [BL: Understand| CO: 3|Marks: 7]
  - (b) List five approaches to avoid missing data. Explain different types of missing data with example. [BL: Understand] CO: 3|Marks: 7]
- 4. (a) Why is missing a data happens? Illustrate different methods to handle missing data problem during data analysis. [BL: Understand] CO: 4|Marks: 7]
  - (b) What is unit nonreponse missing data? Demostrate various forms of missing data for representing a data. [BL: Understand| CO: 4|Marks: 7]

### $\mathbf{MODULE}-\mathbf{IV}$

- 5. (a) Summarize different type of data presentation. Explain clarity principles of data presentation with example. [BL: Understand| CO: 5|Marks: 7]
  - (b) What is data presentation? Discuss the importance of data presentation in data analysis process. [BL: Understand] CO: 5|Marks: 7]
- 6. (a) List and explain the key points to be considered for the data presentation. Describe how the data is to be presented and visualized. [BL: Understand| CO: 5|Marks: 7]

(b) Explain the following terms in detail with neat diagrams
i) Graph ii)Plot
iii)Chart iv) Illustration

v)Table

[BL: Apply] CO: 5|Marks: 7]

#### $\mathbf{MODULE}-\mathbf{V}$

- 7. (a) Illustrate data representation in table with an example. Discuss advantages of data representation using table. [BL: Understand| CO: 6|Marks: 7]
  - (b) Give some examples of graphics. Construct bar chart and scatter plot for any application.

[BL: Apply] CO: 6|Marks: 7]

- 8. (a) List the different representation of data in graphics. Explain the need of data representation in data analysis. [BL: Understand] CO: 6|Marks: 7]
  - (b) What is a table for data presentation? Discuss any seven differences between tables and graphics with an examples. [BL: Remember] CO: 6|Marks: 7]

