


RAN-2411000901030003
F.Y.B.C.A. (NEP) (Sem. I) Examination November - 2025
Minor - 103 : Fundamentals of Computer
[Total Marks: 50
સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book.
- (2) All questions are compulsory.
- (3) Figures to the right indicate full marks.

Seat No.:

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Student's Signature

Q. 1. (A) Select appropriate option (Any Five)
(05)

1. The device that connects all hardware components of a computer is:
 - a) SMPS
 - b) CPU
 - c) Motherboard
 - d) Hard Disk
2. ASCII is used to represent:
 - a) Numbers
 - b) Alphabets and Symbols
 - c) images
 - d) None
3. Which device converts digital signals to analog for Internet connection?
 - a) Modem
 - b) Router
 - c) Hub
 - d) Switch
4. Which of the following is an Internet protocol?
 - a) HTTP
 - b) GOOGLE
 - c) Ms Word
 - d) Power point
5. Information is obtained from:
 - a) Raw Data
 - b) Software
 - c) Hardware
 - d) Processor
6. Which of the following is not a web browser?
 - a) WhatsApp
 - b) Edge
 - c) Chrome
 - d) Firefox
7. The process of replacing missing data with mean or median is called:
 - a) Sampling
 - b) Imputation
 - c) Normalization
 - d) Data Scaling

(B) Answer in short (Any Five)
(05)

1. What is the function of an operating system?
2. What is the use of BIOS?
3. Write the binary equivalent of $(7)_{10}$.
4. Define nibble.
5. What is an IP address?
6. What is the role of a data scientist?
7. Define noise in data.

Q. 2.(A)

1. Write a detailed note on the working of CPU and its components. (05)
2. Compare structured, semi-structured, and unstructured data. (05)

OR

1. Explain the concept and working of virtual and cache memory. (05)
2. Explain in detail the difference between data, information, and knowledge. (05)

- (B)**
1. Explain various data collection methods and their advantages. (03)
 2. Explain the role of an operating system as a system software. (03)

OR

1. Write a detailed note on preprocessing techniques used in machine learning. (03)
2. Discuss various roles and responsibilities of a Data Scientist. (03)

Q. 3.(A)

1. Explain Internet connection technologies like Wi-Fi, LAN, and Hotspot. (05)
2. Discuss various roles and responsibilities of a Data Scientist. (05)

OR

1. Describe the use of Internet in data sharing and communication. (05)
2. Explain the types and characteristics of memory units. (05)

(B)

1. Write a short note on data warehouse. (03)
2. Explain different types of Internet services with examples. (03)

OR

1. Describe various data types with examples. (03)
2. Explain the working and structure of the Internet. (03)

- Q. 4.(A)** Explain various data collection methods and their advantages. (05)

OR

- (A)** Explain the importance of data collection and management. (05)
- (B)** Perform $(1011)_2 + (1101)_2$ and show all steps. (03)

OR

- (B)** Discuss the advantages and disadvantages of cloud storage. (03)
