



NP – 413

**V Semester B.C.A. Examination January/February 2026
(NEP Scheme)**

**COMPUTER APPLICATION
Data Analytics**

Time : 2½ Hours

Max. Marks : 60

Instruction : Answer **any four** from **all** the Sections.

SECTION – A

I. Answer **any four** of the following. **Each** question carries **2** marks. **(4×2=8)**

- 1) Define Data Analytics.
- 2) Mention two benefits of Data Analytics.
- 3) Define probability and sample space.
- 4) Write any two properties of Normal Distribution.
- 5) What is Power BI ? Mention one of its advantages.
- 6) List two ways Netflix uses Analytics to improve recommendations.

SECTION – B

II. Answer **any four** of the following. **Each** question carries **5** marks. **(4×5=20)**

- 7) Explain the importance and benefits of Data Analytics in business.
- 8) Explain the evolution of Data Analytics.
- 9) A coin is tossed three times. Find the probability of getting :
 - a) Exactly two heads.
 - b) At least one head.
- 10) Discuss regression in data analytics.
- 11) Explain the architecture of Power BI.
- 12) Discuss how Uber uses Analytics for business decision-making.

P.T.O.



SECTION – C

III. Answer **any four** of the following. **Each** question carries **8** marks. **(4×8=32)**

- 13) Discuss different types of Data Analytics.
 - 14) Describe different probability distributions.
 - 15) Explain estimation and hypothesis testing with examples.
 - 16) The probabilities of three machines A, B and C produces 40%, 50% and 10% of the total productions, out of which 2%, 4% and 1% are defective. Find the probability that an item selected at random is :
 - i) Defective
 - ii) Is defective and manufactured by machine A.
 - 17) Analyze the case study of Amazon to demonstrate the role of analytics in customer engagement.
 - 18) Explain data access mechanism and visualization for multi variant data.
-