

2025

3rd Semester Examination (CCFUP : NEP)

Paper : MDC 3-T

Basics of Artificial Intelligence (AI)

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any **five** questions : $2 \times 5 = 10$

1. Define Artificial Intelligence.
2. Write any two key milestones in the development of AI.
3. What is Natural Language Processing (NLP)?
4. What is machine learning?
5. Mention two supervised and two unsupervised learning algorithms.
6. What is meant by bias in AI systems?
7. Mention any two applications of AI in healthcare.
8. What is generative AI?

P.T.O.

(18)

Group - B

Answer any **four** questions : $5 \times 4 = 20$

9. Discuss the scope and objectives of Artificial Intelligence.
10. Discuss the applications of AI in finance.
11. Write short notes on AI in transportation and customer service.
12. What are the ethical and social implications of AI in employment?
13. Explain the importance of data privacy in AI systems.
14. Explain the role of AI in innovation and creativity.

Group - C

Answer any **one** question : $10 \times 1 = 10$

15. Define classification and clustering in machine learning with suitable example. Discuss the operation of CNN with suitable block diagram. $5+5$
16. What are training and loss functions in learning algorithm? Mention and discuss two applications of NLP. $6+4$

বঙ্গানুবাদ

বিভাগ - ক

যে-কোনো পাঁচটি প্রশ্নের উত্তর দাও : $2 \times 5 = 10$

১। কৃত্রিম বুদ্ধিমত্তা কী?