Roll No: _____

Time allowed: 2 Hrs
Max Marks: 40

Instruction: Students are required to write Roll No on the cover page of the Answer Sheet. All other instructions on the question paper / Admit card should be followed meticulously.

Sections	No. of Questions to attempt	Marks	Total Marks
A	Minimum 4 questions with internal choices and all COs (Course Intended Learning Outcomes) covered in the Question Paper	4* 5	20
B	Compulsory Case Study	2*10	20
			40

Section A **(4 X 5 marks = 20 marks)**

1a. What is Artificial Intelligence? Explain the different areas explored in AI. (CO 1)

or

1b. What is the paradigm shift in problem solving, when we talk about AI and Machine Learning? (CO 1)

2a. Explain the role of Statistics in the world of machine learning. (CO 2)

Or

2b. Describe the different statistical algorithms used across the learning approaches. (CO 2)

3a. What are the different techniques used for processing images in Computer Vision? (CO 3)

Or

3b. Explain the different techniques applied in NLP for processing the text. (CO 3)

4a. Identify at least 5 different applications for Computer Vision in today's corporate world. (CO 4)

<center>Or</center>

4b. Identify at least 5 different applications for NLP in today's corporate world. (CO 4)

SECTION B – CASE STUDY   (2 X 10 Marks = 20 Marks)

With all top institutions aiming to be data driven, BIMTECH also likes to join the league by bringing the power of automation and intelligence in its day-day decision making.

To facilitate the process, the Director of the institute has engaged one of the top consulting firms. You are the consultant from the firm who is going to work with the college management to make this transition happen.

In this context, answer the following questions

5) Identify the top 3 applications of machine learning that can be implemented in BIMTECH and what are the benefits of implementing them for the college?   (10 marks)

6) The director is curious to know the team that might be needed to implement one of the use cases. What do you think would be the right team for implementation?   (10 marks)