St. Xavier's Institution (Panihati)

Instructor: Saptarshi Jana

Class XI : ARTIFICIAL INTELLIGENCE
Assignment 1-3

Due Date: 20.06.25   **30 marks**

INSTRUCTIONS

- *Don't copy*

- *Don't use AI*

SECTION - Assignment 1
Artificial Intelligence

Question A1: Who is known as the Father of Artificial Intelligence?   *(1 mark)*
Note: Know about contributions of all of them. Then choose the right option

(a) Alan Turing   (b) John McCarthy
(c) Josef Capek   (d) Joseph F. Engelberger

Question A2: What is 'Broad AI'?   *(1 mark)*
Note: Choose the right option.

(a) Strong AI   (b) Weak AI
(c) General AI   (d) Both (a) and (c)

Question A3: Which of these are true about AI:
(i) AI can lead to job displacement of human workers.
(ii) AI skills can be useful to get better jobs.
(1 mark)
Select the correct answer from bellow

(a) (i) true and (ii) false   (b) (i) false and (ii) true
(c) (i) and (ii) true   (d) (i) and (ii) false

Question A5: Write five key milestone of AI.   *(2 mark)*

Question A6: Compare Human Intelligence and Artificial Intelligence in at least five key areas. *(3 mark)*

Question A7: Discuss the applications of AI in any three industries and explain how it transforms operations. *(2 marks)*

SECTION - Assignment 2
Role of data and information, evolution computing

Question B1: We identify qualitative data by identifying: *(1 mark)*
Note: Choose the right option.

(a) Color information   (b) Emotion information
(c) Texture information   (d) All of these

Question B2: Which among these is the example of structured data? *(1 mark)*
Note: Choose the right option.

(a) Tables   (b) Image
(c) Videos   (d) Audios

Question B3: The full form of EDA is _____. *(1 marks)*
Note: Choose the right option.

(a) Exploratory Data Analysis   (b) Explicit Data Analysis
(c) Explicit Design Algorithm   (d) None of these

Question B3: How do you identify if a dataset is relevant and complete for your AI project? *(2 mark)*

Question B4: Describe three major types of data: structured, unstructured, and semi-structured with examples. *(2 mark)*

Question B5: Explain the process of data acquisition. Mention different methods and tools used. *(3 mark)*

SECTION - Assignment 3
Data representation and programming in Python

Question C1: Python Programming: Create a list of 10 students in your class and sort them in alphabetical order. *(3 marks)*

Question C2: Write a program that takes a string as input and returns the count of vowels (a, e, i, o, u) in the string. *(3 marks)*

Question C3: Write four common types of errors in Python. *(4 marks)*