

HALF YEARLY EXAMINATION, 2024-25

COMPUTER STUDIES (ARTIFICIAL INTELIGENCE & CODING)

Time – 2:00 Hrs.

Class –VI

M.M. : 50

Date – 04.09.2024 (Wednesday)

Name of the student _____ Section _____

Instructions: All questions of a particular section must be attempted in the correct order.

Q1. Fill in the blanks: **5*1=5**

- (a) Mnemonic codes are used in language for writing a program
- (b) Effect make an object move up or down, left or right, or in a star or circular pattern.
- (c) identify patterns based on your data entry and then fills the remaining series accordingly.
- (d) A formula in MS-Excel can be a maximum of characters in length.
- (e) AI based solve customer support based queries 24x7.

Q2. Out of the four options given below, tick (✓) the correct option. **5*1=5**

- (a) Which of the following techniques enable(s) a computer to perceive and understand visual data?
 - a) Computer vision
 - b) Voice recognition
 - c) Natural language processing
 - d) All of these
- (b) What is the shortcut key to run a slide show?
 - a) F1
 - b) F3
 - c) F4
 - d) F5
- (c) Which of the following finds the largest value or number in the given range of cells ?
 - a) Min
 - b) Max
 - c) Average
 - d) Count
- (d) The shortcut key for paste option is:
 - a) Ctrl+X
 - b) Ctrl+Y
 - c) Ctrl+V
 - d) Ctrl+Z
- (e) A _____ converts a high-level language program into machine language, in one go.
 - a) Assembler
 - b) Compiler
 - c) Object Code
 - d) Interpreter

Q3. Application based questions. **5*1=5**

- (a) Your mother purchases her groceries usually through online shopping. The products she generally orders every time are automatically recommended to make her shopping easy and quick. Which field of AI helps to provide these recommendations?
- (b) Priya is chatting with her friend in France. Which AI-powered app can she use to translate her messages from English to French?

- (c) Ananya and her parents are driving to their relatives' home to attend a birthday party. Suggest an app to avoid traffic jam and opt a better route.
- (d) When Riya asks her virtual assistant to play her favorite song, which AI technology helps the assistant understand her request?
- (e) Raj wants to create an interactive presentation for his class project that allows his classmates to navigate to different sections by clicking buttons. What feature should he use in PowerPoint to achieve this?

Q4. Short answer type questions. (any 5) 2*5=10

- (a) Why is machine language called binary language? Why is it not popularly used by programmers?
- (b) Define the term 'Artificial Intelligence'.
- (c) Differentiate between **undo** and **redo** commands.
- (d) What is cell referencing? Mention the different types of cell referencing.
- (e) What are the three R's of the computer vision system ?
- (f) What is the difference between Conditional Formatting and Data Sorting?
- (g) What is the use of Slide Sorter view?

Q5. Long answer type questions. (any 1) 5*1=5

- (a) Below is a spreadsheet showing data in cells A1 to C4.

	A	B	C
1	5	10	
2	7	14	
3	9	18	
4			

- (i) Write a formula in cell C1 to calculate the sum of values in cells A1 and B1.
- (ii) Write a function in cell A4 to calculate the average of the values in cells A1, A2, and A3.
- (iii) Write a function in cell B4 to find the maximum value among the cells B1, B2, and B3.
- (iv) Write a function in cell C4 to find the minimum value among the cells B1, B2, and B3.
- (v) Write a formula in cell C3 to calculate the product of the values in cells A3 and B3.
- (b) Define animation. Briefly explain the steps involved in the animation process.

Practical Assignment : 20 Marks

