O. P. JINDAL SCHOOL, SAVITRI NAGAR
Half – Yearly Examination (2026 – 2027)

Class: VII **MM:50**
Subject: AI **Time: 2 Hrs.**

General Instructions: All questions are compulsory.

SECTION – A

Q1. Tick out the correct option: **(10 x 01 = 10 Marks)**

i) _____is an incorrect octal number.

a) 701 b) 138

c) 156 d) 165

ii) In Binary addition, 1+1 equals to _____.

a) 0 b) 10

c) 1 d) 2

iii) Which of these is not a type of a chart in Excel?

a) Bar b) Pie

c) Row d) Line

iv) _____is a tiny graph that resides in a single cell.

a) Area b) Scatter

c) Line d) Sparkline

v) Which of the following filters is used to create patterns and textures?

a) Artistic b) Generic

c) Render d) Blur

vi) Splitting an image into layers is called _____.

a) Merging b) Layering

c) Filtering d) Staking

vii) Which of the following tools is used to change the size of an image?

a) Scale Tool b) Cut-out Tool

c) Transform Tool d) Spline Tool

viii) GIMP stands for GNU Image _____Program.

a) Modification b) Morphing

c) Multiplication d) Manipulation

ix) To convert a decimal number into octal number, divide the number by _____?

a) 2 b) 10

c) 8 d) 7

x) _____is used quickly add information to multiple worksheets at the same time.

a) Grouping Worksheets
b) Data Consolidation
c) Chart
d) Functions

SECTION – B

Q2. Fill in the blanks: **(10 x 01 = 10 Marks)**

Hints: - [Binary, Area, Vector, Edge Detect, C, Time loop, Light Brown, Opacity, F11, Tabular]

i) _____filters search the borders between different colors.

ii) Sparklines can be used with any numerical data in a _____format.

iii) An _____chart is the combination of a line and bar graph.

iv) The numeric value of _____is 12 in Hexadecimal system.

v) _____number system is understood by the computer system.

vi) _____is used to repeat an animation over and over.

vii) A keyframe looks like a _____vertical dashed line.

viii) The _____is used to set the transparency of the layers.

ix) Synfig Studio is used to create _____graphics – based animation programs.

x) The _____key will automatically generate a chart based on the selected data.

SECTION – C

Q3. Check whether the following statements are true or false: **(10 x 01 = 10 Marks)**

i) Simple level robots have a complex model-based circuits.

ii) Drone is an example of a middle -level robot.

iii) A bar chart organizes the categories along the vertical axis.

iv) You can perform arithmetical operations on binary numbers.

v) The decimal number system consists of 10 digits 0 to 9.

vi) Robots can never replace human workers.

vii) In Synfig, the handles are also known as ducks.

viii) The short cut key to select Transform tool is Alt +T.

ix) In Binary addition, 1+1 is equal to 11.

x) Scatter chart is used to observe how the values of two series compare over time.

SECTION – D

Q4. Very short answer the following questions: **(05 x 02 = 10 Marks)**

i) What is the difference between Octal and Hexadecimal number system?

ii) What are Legends?

iii) Write the steps to rename a layer.

iv) Give a difference between fixed and mobile robot.

v) What is the purpose of Time loop?

SECTION – E

Q5. Short answer the following questions: (Any Two) **(02 x 05 = 10Marks)**

i) Explain the significance of charts in Excel. Explain its types in details.

ii) Define Number system. What do you mean by the least and most significant digits? Explain with an example.

iii) What is a Keyframe? State difference between Spline tool and Fill tool.