

केंद्रीय विद्यालय संगठन , कोलकाता संभाग
KENDRIYA VIDYALAYA SANGATHAN, KOLKATA REGION
अर्ध-वार्षिक परीक्षा / Half-Yearly Examination – 2026-27

कक्षा /CLASS- VI
विषय / SUB - CT & AI

अधिकतम अंक / MAX MARKS – 60
समय / TIME- 2.30 घंटे /Hours

QUESTION PAPER (SET-2)

General Instructions:

- 1. All questions are compulsory.**
- 2. This Question Paper consists of 37 questions in four sections: Section A,B,C & D.**
- 3. Section A has MCQ,B has Fill in the Blanks,C has Short Answer and Section D contains Think & Apply type questions.**
- 4. All questions of a particular section must be attempted in the correct order.**

Q.No.	QUESTIONS	MARKS
A	SECTION-A: MCQ (All questions are compulsory)	14x1=14
1	The following series follows a fixed pattern: 2, 4, 6, 8, _____. What comes next? (a) 9 (b) 10 (c) 11 (d) 12	1
2	Ravi is arranging tiles in rows to form a pattern: Row 1 has 1 tile, Row 2 has 4 tiles, Row 3 has 9 tiles, Row 4 has 16 tiles. How many tiles will Row 5 have? (a) 20 (b) 22 (c) 25 (d) 30	1
3	An angle measuring exactly 90° is called a: (a) Acute angle (b) Right angle (c) Obtuse angle (d) Straight angle	1
4	Two lines that never meet, however far they are extended, are called: (a) Intersecting lines (b) Perpendicular lines (c) Parallel lines (d) Curved lines	1
5	What is the angle formed between the hour hand and the minute hand of a clock at 3:00? (a) 60° (b) 90° (c) 120° (d) 180°	1
6	Meena rotates a square in the anticlockwise direction so that it looks exactly the same as before. What is the MINIMUM angle by which it must be rotated? (a) 45° (b) 60° (c) 90° (d) 180°	1
7	Which of the following is a prime number? (a) 21 (b) 27 (c) 29 (d) 33	1
8	Arjun picks two DIFFERENT single-digit prime numbers and adds them together. Which of the following CANNOT be his sum?	1

	(a) 5 (b) 8 (c) 9 (d) 6	
9	A pictograph uses one ★ to represent 4 notebooks. If 7 ★ are shown, how many notebooks are represented? (a) 11 (b) 21 (c) 28 (d) 32	1
10	In a bar chart, the height (or length) of a bar shows: (a) The colour of the item (b) The value/quantity of that category (c) The name of the category (d) The time taken to draw it	1
11	Which of the following is an example of Artificial Intelligence? (a) A simple calculator (b) A voice assistant like Siri or Alexa (c) A wall clock (d) A torch light	1
12	A traditional washing machine that runs for a fixed, preset time and always gives the same result, no matter what, is an example of: (a) Artificial Intelligence (b) Automation (c) Machine Learning (d) Reinforcement Learning	1
13	A photograph of your pet stored on a phone is an example of: (a) Numerical data (b) Text data (c) Image data (d) Sound data	1
14	A fitness app records how many steps you walk every day and shows a weekly total. What type of data is mainly being collected? (a) Text data (b) Numerical data (c) Image data (d) Sound data	1

B	SECTION-B Fill in the Blanks (All questions are compulsory)	10x1=10
15	The next number in the pattern 3, 6, 9, 12, ____ is _____.	1
16	A _____ angle measures more than 90° but less than 180°.	1
17	Lines that cross each other at a point are called _____ lines.	1
18	The sum of all the angles on a straight line is always _____ degrees.	1
19	When designing a sloping roof to allow rain to slide off, the angle formed with the flat ceiling inside the house must be a/an _____ angle.	1
20	A number that has only two factors — 1 and itself — is called a _____ number.	1
21	A chart that uses rectangular bars to compare values across categories is called a _____ chart.	1
22	The test used to check whether a machine can "think" the way a human does is called the _____ Test.	1
23	Raw facts and figures that can be processed to get useful information are called _____.	1

24	Data that already has a correct, predefined label or tag assigned to it is called _____ data.	1
C	Section-C: Short Answer (All questions are compulsory)	8x2=16
25	Look at the pattern: 1, 3, 6, 10, 15, ... Find the next TWO terms and briefly explain the rule you used.	2
26	Give ONE real-life example each of an acute angle and an obtuse angle that you can observe around you.	2
27	Explain, with a reason, why the number 1 is NOT considered a prime number.	2
28	During a plantation drive, Class 6 planted 20 trees, Class 7 planted 15 trees, and Class 8 planted 25 trees. Represent this data in a simple table with proper column headings.	2
29	State ONE advantage of showing data using a bar chart instead of writing the numbers in a paragraph.	2
30	State TWO differences between Automation and Artificial Intelligence.	2
31	An email system is trained using many emails already labelled "spam" or "not spam". Which type of learning is most suitable? Give one reason.	2
32	A student wants to find out which fruit is most liked by her classmates. Suggest ONE suitable method and STEPS, she could use to collect this data.	2
D	Section-D: Think & Apply (All questions are compulsory)	5 x 4 =20
33	A local baker is arranging fresh cupcakes in a shop window. The first row has 4 cupcakes, the second row has 8, the third row has 12, and the fourth row has 16. a) If this arrangement pattern continues, how many cupcakes will be placed in the 6th row? b) Write down the mathematical multiplication rule used to find the number of cupcakes in any given row.	2+2
34	You are given four digits: 3, 6, 8, and 9. a) Construct the largest possible four-digit even number using each of these digits exactly once. b) Calculate the mathematical difference between your newly created number and the smallest four-digit number you can construct with the same four digits.	2+2
35	Consider the following data collected about the primary mode of transport used by 50 students to commute to school: School Bus (20), Family Car (15), Bicycle (10), Walking (5). a) Construct a simple bar graph for this dataset. b) Identify the most popular mode of transport and calculate what percentage of the total students use it.	2+2

36	There are three types of Machine Learning. a)Name three types of machine learning. b)Give a short description of the working mechanism for each type of machine learning. c)Give example for each machine learning types.	1+2+1
37	A school survey finds: Bus - 12 students, Walking - 8 students, Cycle - 5 students, Car - 3 students. (a) Organise the information in a simple table. (b) Which mode is most common? (c) How many students were surveyed in total? (d) Suggest one simple chart that could represent this data clearly.	1+1+1+1

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