INDIAN SCHOOL AL WADI AL KABIR

Final Examination (2023-24)

Class: VI	Sub: MATHEMATICS	Max Marks: 80
Date: 07/03/2024	Set-I	Time: 3 hours

Instructions:

Section A: Multiple Choice Questions (Q.1 to Q.15) & Source based Question (Q.16)

Section B: Short Answer Questions of 2 marks each (Q.17 to Q.21)

Section C: Long Answer Questions (Type – 1) of 3 marks each (Q.22 to Q.27)

Section D: Long Answer Questions (Type – 2) of 4 marks each (Q.28 to Q.33)

& Case study Questions (Q.34 & Q.35) of 4 marks each.

NOTE: This question paper consists of 6 printed pages.

Section A: Multiple Choice Question (Q.1 to Q.15) of **1** mark each								

Section A: Multiple Choice Question (Q.1 to Q.15) of **1** mark each

1. The area of a rectangular piece of cardboard is 144sq.cm and breadth is 8cm.The length of the cardboard is:

A	24cm	**B**	12cm	**C**	36cm	**D**	18cm

2. Maria's school bag weighs 2kg 25g. The weight of the bag can be expressed as:

A	2.250kg	**B**	2.025kg	**C**	2.205kg	**D**	2.0025kg

3. The cost of a book is ₹72.The cost of 'p' books is:

A	₹ 72p	**B**	₹ (p−72)	**C**	₹ $(\frac{p}{72})$	**D**	₹ (p +72)

4. The property used in 23 ×195 = 195 ×23 is:

A	Associative property	**B**	Distributive property	**C**	Commutative property	**D**	Identity

5. The simplest form of the ratio 24:36 is:

A	4:9	**B**	2:3	**C**	3:2	**D**	8:9

6.	The mixed fraction $3\frac{2}{5}$ can be written as improper fraction as:							
	A	$\frac{10}{5}$	**B**	$\frac{16}{5}$	**C**	$\frac{5}{17}$	**D**	$\frac{17}{5}$
7.	Identify the equation with a variable:							
	A	$5x < 28$	**B**	$3x + 11 = 32$	**C**	$8x + 5 \neq 24$	**D**	$2x - 1 > 12$
8.	The value of 82.28 – 53.123 is:							
	A	29.157	**B**	29.107	**C**	30.195	**D**	21.197
9.	The expression for the statement 9 less than four times a number (take the number as y) is:							
	A	$9y - 4$	**B**	$9 - 4y$	**C**	$4y - 9$	**D**	$4 - 9y$
10.	The predecessor of the smallest 5-digit number is:							
	A	10000	**B**	10001	**C**	9999	**D**	9990
11.	The equivalent fraction of $\frac{7}{9}$ is:							
	A	$\frac{14}{27}$	**B**	$\frac{21}{27}$	**C**	$\frac{42}{45}$	**D**	$\frac{35}{54}$
12.	The perimeter of a regular hexagon with side 8 m is:							
	A	48m	**B**	40m	**C**	24m	**D**	56m
13.	In 17:25::34:50, the extreme terms are:							
	A	17 and 34	**B**	17 and 25	**C**	17 and 50	**D**	25 and 34
14.	0.08 can be expressed as fraction as:							
	A	$\frac{3}{5}$	**B**	$\frac{2}{25}$	**C**	$\frac{8}{15}$	**D**	$\frac{3}{8}$
15.	There are 24 boys and 21 girls in a class. The ratio of number of boys to number of girls is:							
	A	7:8	**B**	6:7	**C**	8:7	**D**	6:8

Q16.	Source based Question -5 Marks
	Aditi and her friend Arati were playing in their leisure time. They decided to play guessing game. It promotes independent thinking, boosts confidence, and nurtures a love for mathematics.

I	Aditi told her younger sister is 7 years younger than her brother. If brother's age taken as 'y' years. The age of younger sister is:						
	A	7y	**B**	y +7	**C**	y − 7	**D**	$\frac{y}{7}$

II	Arati's father's age is 5 more than 3times her age. If Arati's age is taken as' x' years, her father's age is:						
	A	3x +5	**B**	5x +3	**C**	3x +3	**D**	5x +5

III	Arati's mother is 4 years younger than her father. Her mother's age is:						
	A	5x+4	**B**	3x +4	**C**	3x +1	**D**	3x− 4

IV	Aditi's uncle's age is 2 less than 8 times her age. If Aditi's age taken as 'n' years, her uncle's age is:						
	A	2 – 8n	**B**	2n – 8	**C**	8 – 2n	**D**	8n − 2

V	If Aditi's present age is 'p' years, her age after 10 years will be:						
	A	10p	**B**	p+10	**C**	p − 10	**D**	−p +10

Section B: Short Answer Questions (Type – 1) of **2** marks each (Q.17 to Q.21)

17.	Check whether 30,45,16 and 24 are in proportion or not?
18.	Rohit spent $\frac{4}{9}$ of his pocket money on book, $\frac{1}{9}$ on a newspaper and $\frac{2}{9}$ on recreation. Find the total fraction of his pocket money he spent.
19.	Find the sum by suitable rearrangement: 837 +208+363 +102

20.	Mamta had 12.65 m long cloth. She cut 7.80 m of cloth from this for making a curtain. How much cloth is left with her?
21.	Find the perimeter of the given figure.

| 22. | Find the solution of the equation, t +10= 26 by completing the given table: |

t	10	12	14	16	18
t+10					

23	Nidhi's father decided to give her a gift worth ₹25,000 on her birthday. Out of this, he bought a bicycle for ₹5500, a pair of shoes for ₹1250 and a music system for ₹10200. The rest he gifted to Nidhi in the form of a deposit in Sukanya Samriddhi Yojana. How much money did he deposit for her?

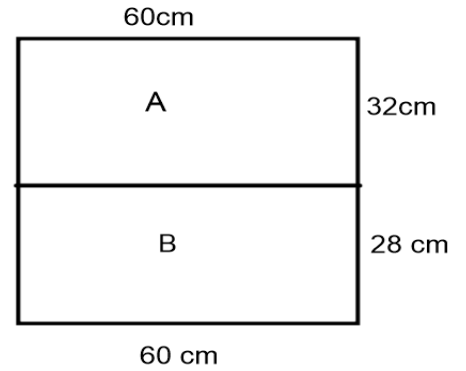| 24.	Dipesh opened his piggy bank and he counted the money. He had ₹ $25\frac{1}{2}$. He bought a pen for ₹$13\frac{1}{4}$.How money left with him?

25	Observe the shapes given in the box and find the ratio of 1) Number of rectangles to the number of circles. 2) Number of triangles to the total number of shapes. 3) Number of circles to the number of polygons.

26.	Aman has a land of length 40 m and breadth 28 m. Find the area of land. He wants to level the land for cultivation. How much does he have to pay for this if one sq.m costs ₹ 55?
27	Karen is a fruit juice seller. To make a fruit drink, he added 46.5 litres of orange juice to 35.5 litres of water. Find the total quantity of fruit drink he prepared. He sold the fruit drink at ₹20 per litre, find the amount he collected by selling the fruit drink.

Section D: Long Answer Questions (Type – 2) (Q.28 to Q.33)

& Case study (Q.34 &35) of **4** marks each

28.	I) Find by distributive property: 2896 ×28 +2896 ×72 II) Find by suitable rearrangement: 351 ×4×2×25
29.	Roy and Dony went for jogging. Roy took two rounds around a square park of side 70m. Find the distance covered by him. If Dony went once around a rectangular park of length 180m and breadth 115m, how much distance he covered? Who covered more distance and by how much?
30.	Sonia wrote $4\frac{1}{2}$ pages of her story on Saturday and $2\frac{1}{8}$ pages on Sunday. What is the number of pages did she write in two days? How many more pages did she write on Sunday than Saturday?
31.	Raj bought fruits weighing 10 kg. Out of this, 2kg 250g apples,1kg 150g grapes ,4kg 800g mangoes and the rest is oranges. What is the weight of oranges?
32.	The weight of 12 bags of wheat is 300 kg. I) What is the weight of such 20 bags of wheat. II) Also find the ratio of weight of 12 bags to weight of 20 bags of wheat.
33.	Choose the solution from the values given in the bracket of the given equation. Show that the other values do not satisfy the equation: m − 8= 5; (10, 12, 13, 17)

34.	**Case Study-1**	60cm

34. Case Study-1

On the occasion of Republic Day, the school organized a poster making competition for students of class 6. The topic was 'National Integration'. Each child was given a square sheet of paper with side 60 cm. They had to make a border of the entire sheet by using colour tape. Then Midhun divided the sheet into two parts, A and B, as shown in the figure. He coloured part A with blue colour and part B with yellow colour to show different cultures. Based on the information, answer the following questions:

Figure: Square 60cm wide. Part A (32cm) on top, Part B (28 cm) on bottom. Width labeled 60 cm.

   I. What is the length of colour tape used for making the border of the sheet? (1m)
   II. Find the perimeter of part A. (1m)
   III. What is the area of portion coloured with yellow colour? (2m)

35. Case Study-2

In a school library there are 550 books of fiction, 320 poetry books, 180 travelogues and 50 autobiographies. Based on the information that answer the following answers.

   I. What is the ratio of number of fictions to poetry books? (1m)
   II. What is the ratio of number of travelogues to autobiographies? (1m)
   III. What is the ratio of number of fictions to total number of books? (1m)
   IV. What is the ratio of number of travelogues to poetry books? (1m)

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