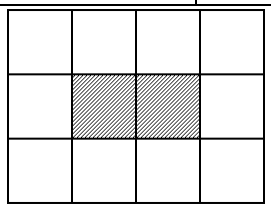
VIKAS BHARATI PUBLIC SCHOOL
SAMPLE PAPER (SESSION 2023-24)
CLASS: VI
SUBJECT: MATHEMATICS

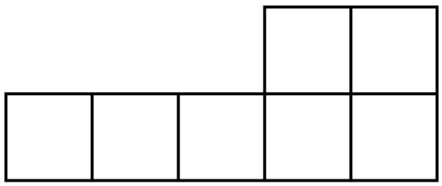
Time : $2\frac{1}{2}$ Hrs **M.M : 60**

Note: 1. This question paper contains 5 printed pages and 33 questions.
2. Read all the questions carefully.

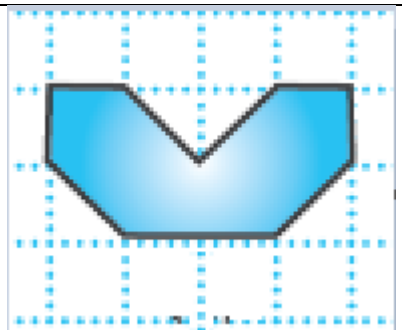
SECTION – A

All questions are compulsory. In MCQ write the correct option with complete answer.

1.		The perimeter of a regular pentagon is 85 cm. The length of its side is _____.				1
		a) 15.2 cm	b) 13 cm	c) 17 cm	d) 8 cm	
2.		The largest decimal number among 225.13, 225.103, 225.1003 and 220.131 is _____.				1
		a) 225.13	b) 225.103	c) 225.1003	d) 220.131	
3.		The LCM of 12 and 9 is _____.				1
		a) 108	b) 36	c) 12	d) 3	
4.		The ratio of the area of the shaded portion to that of the whole figure is_____. (Area of 1 square = $1cm^2$)				1
		a) 6:1	b) 12:2	c) 1:6	d) None of the	
5.		Which direction will Satish face if he starts facing east and make $1\frac{1}{2}$ revolution anticlockwise ?				1
		a) East	b) West	c) North	d) South	
6.		If 😊 represents 7 boxes of balloons, what does 😊😊😊😊😊 stands for?				1
		a) 30 balls	b) 35 balls	c)70 boxes of balls	d) 35 boxes of balls	
7.		The diagonals of a rhombus meet each other at _____.				1
		a) 30˚	b) 60˚	c) 90˚	d) 120˚	
8.		The simplest form of $\frac{24}{56}$ is _____.				1
		a) $\frac{3}{7}$	b) $\frac{5}{9}$	c) $\frac{4}{7}$	d) $\frac{6}{17}$	
9.		The value of x in 3:4 = x : 16				1
		a) 8	b) 9	c) 15	d) 12	

10.		The temperature of an object was -3˚C. Then it rose by 5 degrees, now its temperature is _____.				1
		a) 2˚C	b) -2˚C	c) 8˚C	d) -8˚C	
11.		The prime factors of 75 are_____.				1
		a) 3, 5, 7	b) 3, 5, 5	c) 15, 3, 5	d) 3, 3, 5	
12.		8.700 g - 2.526 g = _____.				1
		a) 11.226 g	b) 6.174 g	c) 6.711 g	d) 6.111 g	
13.		What fraction of a clockwise revolution does the hour hand of clock turns through when it goes from 1 to 10?				1
		a) $\frac{1}{4}$	b) $\frac{1}{2}$	c) $\frac{3}{4}$	d) $\frac{4}{4}$	
14.		The perimeter of the triangle is 36 cm. If the measure of two sides is 14 cm and 16 cm, the third side is of _____ cm.				1
		a) 4	b) 5	c) 6	d) 7	
15.		$\frac{80}{105} = \frac{16}{\quad}$				1
		a) 16	b) 21	c) 12	d) 61	
16.		**Do as directed**				
	a)	Solve : $4\frac{1}{3} - 3\frac{1}{3}$				1
	b)	The ratio of number of sides of the square to the number of edges of a cube is _____.				1
	c)	State True or False. The LCM of two coprime numbers is equal to the product of the numbers.				1
	d)	The given figure is formed by joining 6 units of square. Find the perimeter of the given figure. (side of each square is 1 cm)				1
	e)	Solve : – 14 – (– 6)				1
SECTION – B **Do any 6 questions from Q17 to Q23. Over attempt will not be marked.**						
17.		Solve : 1.9 + 0.75 – 2.4				2
18.		Give reason for the following: A rectangle can be thought of as a special parallelogram.				2

19. By counting squares , estimate the area of the figure and complete the given table. (Given the area of 1 square is 1 sq.unit) — 2



Covered Area	**Number**	**Estimated Area (Sq. unit)**
Fully filled squares	_____	_____
Half-filled squares	_____	_____

Total area = _____ sq. units.

20 There are 50 fruits in a basket. If the number of apples is 35 and the remaining are mangoes. Find the ratio of — 2

a) The number of apples to the number of mangoes.

b) The number of mangoes to the total number of fruits.

21 The ages (in years) of 20 students of class VI of a school is given below. Represent the information in the table using tally marks. — 2

11	12	12	11	13	12	13	12	11	11
12	12	10	11	11	12	12	13	12	11

22 Jiya finds the HCF of 104 and 224 as follows: — 2

$104 = 2 \times 2 \times 2 \times 13$

$224 = 2 \times 2 \times 2 \times 2 \times 2 \times 7$

$HCF = 2 \times 2 \times 2 \times 13 \times 7$

Her uncle said that the solution done by her is wrong. What should Jia do to correct the mistake she has made?

23 A sum of ₹ 560 is divided in 3 : 4. Find the larger share. — 2

SECTION – C

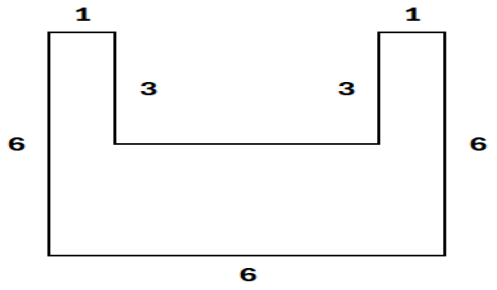
Do any 4 questions from Q24 to Q28. Over attempt will not be marked.

24. Marry takes $4\frac{3}{5}$ minutes to cross the bridge by car and Taruna takes $2\frac{1}{3}$ minutes to do the same. Who takes more time and by how much ? — 3

25. Palak sold pickles weighing 10 kg. Out of this 4 kg 700 g was mango pickle, 3 kg 50 g was lemon pickle and the rest was green chilly pickle. What quantity of green chilly pickle was sold? (Give answer in kg) — 3

26. Find the value of : — 3

$-(-77)-(66)-(-55)+22$

27.		Which costs more – fencing a rectangular field of length and breadth 18 m and 12 m respectively or fencing a square field of side 30 m? The cost of fencing is ₹ 15 per m.	3
28.		Find the area of the following figure by splitting it into rectangles. The measurements are in cm. 	3
		SECTION – D **Do any 3 questions from Q29 to Q32. Over attempt will not be marked.**	
29.		A man earns ₹ 2400 in 8 days. a) How much will he earn in 15 days? b) How many days will he take to earn ₹ 6000?	4
30.		The present age of the father is 48 years and that of his son is 18 years. Find the ratio of : a) Present age of the father to the present age of the son. b) The age of the father to the age of the son when son was 11 years old. c) The age of father after 12 years to the age of the son after 12 years. d) Age of the father to the age of the son when father was 35 years old.	4
31.		Name the following : a) Δ ABC with m $\angle$ B = 90˚and AB = BC. b) I am a quadrilateral with opposite sides equal and all angles are of 90˚. c) I am an angle equal to one fourth of a revolution. d) If P, Q, R are three points on a line such that PR = 6cm , QR = 3cm and PQ = 9cm, which point lies between other two points.	4
32.		How many envelopes can be made of a sheet of paper 125 cm by 85 cm. If each envelope requires a piece of paper of size 17 cm by 5 cm?	4
		SECTION – E **In MCQ write the correct option with a complete answer.**	
33.		Riya and her mother want to attend a marriage. So, Riya's mother went to tailor to stitch a designer dress for her daughter. Tailor told him that he needed 2 m 52 cm of cloth to stitch upper part of dress and 3 m 4 cm of cloth to stitch bottom part of dress. But the tailor had only 4 m 42 cm of cloth with him. Based on the above information, answer the following questions.	

		(i) Cloth required to stitch the upper part of the dress in metres is _____.				1
		a) 1.56 m	**b)** 2.36 m	**c)** 2.52 m	**d)** 1.63 m	
		(ii) Cloth required to stitch the bottom part of the dress in metres is _____.				1
		a) 2.04 m	**b)** 1.04 m	**c)** 4.03 m	**d)** 3.04 m	
		(iii) Total length of cloth required by tailor to make complete dress is _____.				1
		a) 5.56 m	**b)** 5.36 m	**c)** 4.36 m	**d)** 4.56 m	
		(iv) How much more cloth is needed by tailor to stitch complete dress ?				1
		a) 1.56 m	**b)** 4.32 m	**c)** 2.16 m	**d)** 1.14 m	