KENDRIYA VIDYALAYA BHU (F.S) VARANASI

HALF YEARLY EXAMINATION 2024-25

CLASS VII

SUBJECT- MATHEMATICS

Time: $2\frac{1}{2}$ HOURS   **MM: 60**

General Instructions:

1. This Question paper contains- five sections A, B, C, D and E.

2. Section A has 14 MCQ's of 1 mark each.

3. Section B has 4 Very short answer type questions of 2 marks each.

4. Section C has 5 Short Answer (SA)-type questions of 3 marks each.

5. Section D has 3 Long Answer (LA)-type questions of 5 marks each.

6. Section E has 2 sources based /case based/passage based/integrated units of assessment (4 marks each) with sub parts.
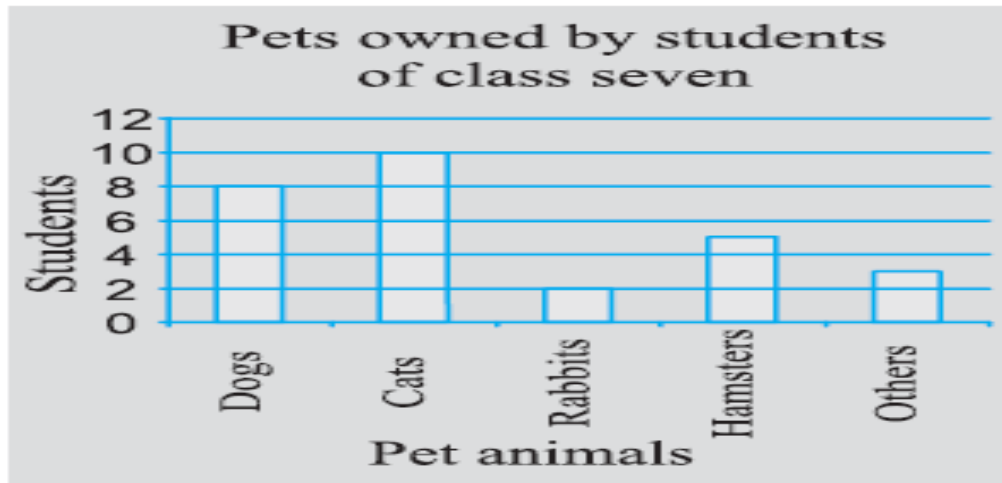
Q.N	SECTION-A	MARKS
1.	When two negative integers are multiplied, we get (a) a positive integer (b) a negative integer (c) a and b both (d) none of these.	1
2.	The sum of a positive integer and a negative integers is (a) a positive integer (b) a negative integer (c) a and b both (d) a or b	1
3.	What is 3/8 of 2.4? (a) 1.2 (b) 1.8 (c) 0.9 (d) 2.4	1
4.	1.1 × 100 is equal to (a) 11 (b) 110 (c) 111 (d) 100	1
5.	The number of tourists visiting a historical place in a week is shown in the following table : | DAY	NO. OF VISITORS
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MONDAY	65
TUESDAY	160
WEDNESDAY	98
THURSDAY	84
FRIDAY	60
SATURDAY	108
SUNDAY	69 | Answer the following related questions from 5 to 6 On which day is the number of tourists maximum? (a) Sunday (b) Wednesday c) Tuesday (d) Saturday	1
6.	What is the difference between the number of tourists visiting on Friday and Monday? (a) 10 (b) 24 (c) 38 (d) 5	1
7.	The solution of the equation 3x +4 = 1 is (a) -1 (b) 6 (c) -2 (d) 2	1
8.	The number, if sum of seven times a number and 12 is 33. (a) 1 (b) 7 (c) 3 (d) 6	1
9.	The sum of the measures of two supplementary angles is? a) 180^0 (b) 90^0 (c) 0^0 (d) 45^0	1
10.	When the sum of the measures of two adjacent angles is 90°, the angles are called?	1

	(a) Complementary (b) Supplementary (c) Co-interior (d)Linear Pair	
11.	A Triangle has? (a) 1Median (b) 2Median (c) 3Median (d) 4Median	1
12.	The exterior angle of a triangle is equal to (a)Sum of any two interior angles (b) Sum of two opposite interior angles (c) Sum of all interior angles (d) None of these	1
13.	The ages of father and son are 55 years and 25 years. The ratio of their ages is 9:2 (a) 9:2 (b) 11:5 (c) 2:3 (d) 7:3	1
14.	If the cost of 5 envelopes is 15, then the cost of 7 envelopes is (a) 15 (b) 21 (c) 25 (d) 30	1
	SECTION-B	
15.	Solve using suitable properties; -31 × 37 + 37	2
16.	Rajesh solved 2 / 11 part of an exercise while Semi solved 4/5 of it. Who solved lesser part and how much?	2
17.	Find the angle which is equal to its complement.	2
18.	Find the ratio of 5 km to 1500 m.	2
	SECTION-C	
19.	The three angles of a triangle are in the ratio 3:2:5. Find all the angles of the triangle. Classify the triangle.	3
20.	The difference in the measures of two supplementary angles is 70^0. Find the measures of the angles.	3
21.	Solve; $-3(x +\frac{2}{7}) = \frac{15}{7}$	3
22.	The marks (out of 100) obtained by a group of students in a science test are 85, 76, 90, 85, 39, 48, 56, 95, 81 and 75. Find the: (i) Highest and the lowest marks obtained by the students. (ii) Range of the marks obtained. (iii) Mean marks obtained by the group.	3
23.	Ritu ate $\frac{3}{11}$ part of an apple and the remaining apple was eaten by her brother Somu. How much part of the apple did Somu eat? Who had the larger share? By how much?	3
	SECTION-D	
24.	A shopkeeper earns a profit of Re 1 by selling one pen and incurs a loss of 40 paise per pencil while selling pencils of her old stock. (i) In a particular month she incurs a loss of Rs 5. In this period, she sold 45 pens. How many pencils did she sell in this period? (ii) In the next month she earns neither profit nor loss. If she sold 70 pens, how many pencils did she sell?	5
25.	Consider this data collected from a survey of a colony. 	Favourite Sport	Cricket	Basket Ball	Swimming	Hockey	Athletics	 |---|---|---|---|---|---| 	Watching	1240	470	510	423	250	 	Participating	620	320	320	250	105	 (i) Draw a double bar graph choosing an appropriate scale. What do you infer from the bar graph? (ii) Which sport is most popular? (iii) Which is more preferred, watching or participating in sports?	5
26.	(i) Rahul bought a sweater and saved rupees 200 when aa discount of 25% was given. What was the price of the sweater before the discount? (ii) Rupees 7000 is borrowed at 3.5% rate of interest p.a borrowed for 2 years. Find the	5

amount to be paid at the end of the second year.

SECTION-E

27.

Pets owned by students of class seven

Use the bar graph (Fig 3.3) to answer the following questions.
(a) Which is the most popular pet?
(b) How many students have dogs as a pet?
(c) Which is the least popular pet?
(d) What is the difference of most popular pet and least popular pet?

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28. In the adjoining figure, name the following pairs of angles.

    (i)   Obtuse vertically opposite angles
    (ii)   Adjacent complementary angles
    (iii)   Equal supplementary angles
    (iv)   Unequal supplementary angles   OR
    (v)   Adjacent angles that do not form a linear pair