KENDRIYA VIDYALAYA SANGATHAN LUCKNOW REGION SESSION ENDING EXAMINATION [2023-2024] SUB- MATHEMATICS CLASS VII

TIME: 2 ½ hrs.			MM: 60
General Instructions:			
1 (0)	1 0	D. C 1D.	

- 1. This question paper has four sections A, B, C and D.
- 2. Section A has 15 Multiple Choice questions carrying 1 mark each.
- 3. Section B has 5 questions carrying 2 marks each.
- 4. Section C has 5 questions carrying 3 marks each.
- 5. Section D has 5 questions carrying 4 marks each.
- 6. Internal choices are provided in 2 questions of section B, 2 questions of section C and 2 questions of section D.
- 7. All questions are compulsory.

SECTION -A

			O.	-011011 A			
	make one		1 1	() mi	1 1	(1) P' 1 1	
l.	(a)One ha	lit (b)) two halves	(c) Three	halves	(d) Five halves	1
2.	$\frac{2}{3}$ of 18 is						1
	(a) 12	(b) 18	((c) 14	(d) 1	6	1
3.	State the propert If $a \parallel b$, then $\angle 4$	-	the following s	statement?			1
	(1/2) (4/3) (5/6) (7/8)	$\rightarrow a$					
	(a) Corresponding(c) Vertically opposition	osite angles	(d) N	Alternate inter None of these	ior angles		
	The Rational nu	mber $\frac{21}{28}$ in stan	dard form is,				1
			- (c)	$\frac{3}{4}$ (d) $\frac{2}{3}$	<u>!</u>		
-	The rational number (a) $\frac{10}{15}$	nber $\frac{-2}{3}$ with de (b) $\frac{2}{15}$	enominator 15 i (c) $\frac{3}{15}$	(d) $\frac{-10}{15}$			1
	· /	()	· /	base of the par	rallelogram d) 8 m	is 20 meter then	1
	The region occu (a)Volume	` /	d figure is calle	d its:) None of t	nese	1
	The value of the	` /	` /	*	,		1
	(a)1	(b) 0		(c) -1	(d)	2	
	0.1× 51.7 is (a) 5.17	(b) 0.517	(c) 5	17 (d)	none of t	hese	1
0.	The value of 5 ³ (a)15	is (b) 125	(c)) 5	(d) 3		1

11.	The exponential form of 216 is,					
	(a) 6^3 (b) 3^6 (c) 5^3 (d) 2^3	1				
12.	Number of line of symmetry in a regular hexagon is (a)4 (b) 6 (c) 5 (d) 3	1				
13.	In the picture given below, the sum of dots facing up on both dice is 6. What would be the	-				
	sum of dots facing down?	1				
1.4	(a) 7 (b) 8 (c) 9 (d) 10					
14.	The number of faces in the given solid are	1				
	(a) 10 (b) 8 (c) 9 (d) 11					
15.	The other name for the line of symmetry of a circle is (a) diameter (b) radius (c) chord (d) sector SECTION -B	1				
16.	Solve: $\frac{1}{4} + \frac{5}{6}$					
	OR	2				
17.	Find the product of 0.025 and 3.5. Find the angle which is equal to its complement.					
	OR	2				
18.	Find the angle which is equal to its supplement Rahul pays Rs500 in advance on his account at a sports club. Each time, he visits the club, Rs 10 is deducted from the account. How much balance (in Rs.) is left in Rahul's account					
10	after x visits					
19.	Express the following in exponential form: (a) $5 \times 5 \times 7 \times 7 \times 7$ (b) $a \times a \times a \times c \times c \times c \times c \times d$					
20.	What cross-section do you get when you give a					
	(i) Vertical cut to a round apple(ii) Horizontal cut to a die	2				
	SECTION -C					
21.	ABC is right angled at A. AD is perpendicular to BC. If AB = 5 cm, BC = 13 cm and AC = 12 cm, Find the area of \triangle ABC.	3				
22	B D 13 cm					
22.	(i) Find the product of $\frac{-7}{5}$ with its reciprocal.	3				
	(ii)Find: $\frac{-2}{5} - (\frac{-3}{5})$,				
	OR					
	Represent the following on a number line					
	(a) $\frac{5}{6}$ (b) $\frac{-4}{3}$					

23.	Simplify $\frac{12^3}{6^2} \times \frac{9^3}{8^3} \times \frac{4}{9}$	3			
24.	Look at English alphabets given in the box and answer the questions given below	3			
	B, C, Q, M, K, P, O				
	(i) Which of the alphabets listed above have a vertical line of symmetry?				
	(ii) Which of the alphabets have a horizontal line of symmetry?				
	(iii) Which alphabets have no line of symmetry?				
	OR				
	Give three examples of shapes with no line of symmetry (Draw figures).				
25.	The dimensions of a cuboid are 5 cm, 3 cm and 2 cm. Draw an oblique sketch of this cuboid.	3			
	SECTION -D				
26.	In the adjoining figure, identify	4			
	$ \begin{array}{c} & 4 \\ & 4 \\ & 2 \end{array} $ $ \begin{array}{c} & 8 \\ & 6 \end{array} $ $ \begin{array}{c} & 6 \end{array} $ $ \begin{array}{c} & 6 \end{array} $				
	(i) The pairs of alternate interior angles.(ii) The pairs of interior angles on the same side of the transversal.(iii) The line c is called a				
27.	From a rope 15 m long, $4\frac{2}{3}$ m is cut off and then $\frac{3}{5}$ th m from the remaining part is cut off	4			
	again. Find the length of the left part of the rope.				
28.	A gardener wants to fence a circular garden of diameter 21 m. Find the length of rope he needs to purchase, if he makes 2 rounds of fence. Also find the cost of rope, if it costs				
	Rs. 4.00 per meter. (Use $\pi = \frac{22}{7}$)				
	OR				

A circular flower bed is surrounded by a path 4m wide. The diameter of the flower bed is

Draw an isometric sketch of a cuboid whose dimensions are 4cm, 3cm and 2 cm

4

4

66 m. What is the area of this path? (Use π = 3.14)

 $2(a^2 + ab + b) + 3 - ab + 2b$

29.

30.

Find the value of the following expressions for a = 3, b = 2. (i) $a^2 + b^2$ (ii) $a^2 - b^2 + 2ab$

OR Simplify the expression and find its value when a = 5 and b = -3.