



**SINDHI HIGH SCHOOL**  
**ANNUAL EXAMINATION (2024-25)**  
**SUBJECT – Mathematics**

**Class: VII**

**Date: 12/03/2025**

**Number of printed sides:**

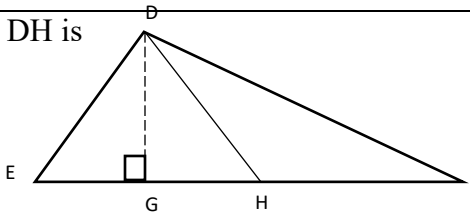
**Marks: 80**

**Reading Time: 8:15 to 8:30 am**

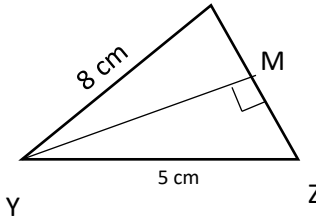
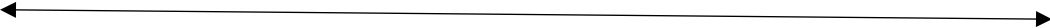
**Writing Time: 8:30 to 11:00am**

**GENERAL INSTRUCTIONS:**

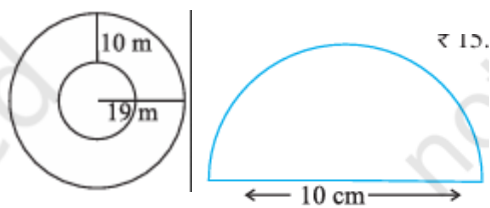
- This Question paper contains - five sections A,B,C,D and E. Each section is compulsory. However, there is some internal choice in some questions.
- Section A has 18 MCQ's and 02 Assertion Reason based questions of 1 mark each.
- Section B has 5 Very Short Answer(VSA) questions of 2 marks each.
- Section C has 6 Short Answer(SA) questions of 3 marks each.
- Section D has 4 Long Answer(LA) questions of 5 marks each.
- Section E has 3 case based integrated units of assessment (04 marks each) with sub- parts of the values of 1, 1 and 2 marks each.
- Internal Choice is provided in 2 questions in Section-B, 2 questions in Section-C, 2 Questions in Section-D. You have to attempt only one alternatives in all such questions.

	SECTION – A	
	Section A consists of 20 questions of 1 mark each.	
1	The positive rational number is a) $-\frac{3}{7}$ b) $\frac{2}{-9}$ c) 0                      d) $-\frac{4}{-5}$	1
2	Each acute angle of a right angled isosceles triangle is (a) $60^\circ$ (b) $45^\circ$ (c) $40^\circ$ (d) $55^\circ$	1
3	Fraction form of 40% in its simplest form a) $\frac{2}{5}$ b) $\frac{5}{2}$ c) $\frac{2}{4}$ d) $\frac{4}{5}$	1
4	In triangle DEF, H is the midpoint of EF, then DH is a) altitude                      b) parallel line c) perpendicular line                      d) median 	1
5	The greatest negative integer is a) 0                      b) -1                      c) -1000                      d) -9999	1
6	A fan is purchased for ₹700 and sold it for ₹650. The loss percent is a) $6\frac{1}{7}\%$ b) $7\frac{1}{7}\%$ c) $5\frac{1}{2}\%$ d) $8\frac{1}{6}$	1
7	What is the value of x if $\frac{-7}{11} = \frac{x}{66}$ a) -42                      b) 77                      c) 42                      d) -35	1

8	The area of a parallelogram is twice the area of triangles formed by one of its a) sides                      b) diagonals                      c) vertices                      d) angles	1
9	The next two numbers in the pattern -13, -9, -5, _____, _____ a) -3, -1                      b) -7, +3                      c) -1, 0                      d) -1, 3	1
10	Which rational number is in the standard form? a) $\frac{1}{-2}$ b) $\frac{-35}{40}$ c) $\frac{-5}{20}$ d) $\frac{-1}{4}$	1
11	A circle has a) no line of symmetry                      b) one line of symmetry c) two lines of symmetry                      d) unlimited lines of symmetry	1
12	50% of 1 kg is a) 5kg                      b) 500g                      c) 50g                      d) 5g	1
13	$\frac{-30}{9} + \frac{5}{9} =$ _____ a) $\frac{-35}{9}$ b) $\frac{-25}{9}$ c) $\frac{-305}{9}$ d) $\frac{-25}{18}$	1
14	The angle of rotation of an equilateral triangle is a) $360^\circ$ b) $270^\circ$ c) $180^\circ$ d) $120^\circ$	1
15	The product of two integers is (-80). If one of them is (-8), then the other integer a) -10                      b) -8                      c) 10                      d) 8	1
16	A triangle having angles $110^\circ$ , $40^\circ$ , and $30^\circ$ is called _____ angled triangle. a) acute                      b) right                      c) obtuse                      d) equilateral	1
17	How many times a wheel of diameter 14cm must rotate to go 220cm? a) 5 times                      b) 7 times                      c) 6 times                      d) 11 times	1
18	Reciprocal of -8 is a) 8                      b) 9                      c) $\frac{-1}{8}$ d) $\frac{1}{8}$	1
	<b>Assertion – Reason questions</b> In the following questions, A statement of Assertion (A) is followed by a statement of reason ( R ) a)Both Assertion(A) and Reason (R) are true and Reason( R) is the correct explanation of (A) b)Both Assertion(A) and Reason (R) are true and Reason( R) is not the correct explanation of (A) c)Assertion(A) is true and Reason( R) is false d)Assertion(A) is false and Reason( R) is true	
19	<b>Assertion:</b> $-4p^2$ and $-4p$ are like terms. <b>Reason:</b> The terms either not having same variables or those with same variables but unequal powers are called unlike terms.	1

20	<p><b>Assertion:</b> The two sides of a triangle measure 6cm and 8cm. The measure of the third side can be 7.5 cm</p> <p><b>Reason:</b> The sum of the lengths of any two sides of a triangle is greater than the length of third side.</p>	1
	<b>SECTION – B</b>	
21	Complete: (i) $-658 \div \square = -658$ (ii) $-70 + \square = 40 + (-70)$ (iii) $\square \div 6 = -5$ (iv) $(-12) - (-12) = \square$	2
22	<p>Find the area of a right angled triangle whose two legs are 12cm and 5cm respectively and hypotenuse is 13cm.</p> <p style="text-align: center;"><b>OR</b></p> <p>The perimeter of a triangle XYZ is 19cm. If two sides are 8cm and 5cm and the height YM = 3.5cm, find the area of triangle XYZ.</p> <div style="text-align: center;"></div>	2
23	<p>The points A, B, C, D, E, F, G and H on the number line are such that AB=BC=CD and EF=FG=GH. Name the rational numbers represented by G, F, B and C.</p> <div style="text-align: center;"></div> <p style="text-align: center;"><b>OR</b></p> <p>Draw the number line and represent the rational numbers <math>\frac{3}{5}</math>, <math>\frac{-7}{5}</math>, <math>\frac{9}{5}</math>, <math>\frac{-2}{5}</math> on it.</p>	2
24	After rotating by $72^\circ$ about a centre, a figure looks exactly the same as its original position. At what other angles will this happen for the figure?	2
25	List any two rational numbers between -3 and -4	2
	<b>SECTION-C</b>	
26	Solve: a) $\frac{-6}{7} \times \frac{14}{18} \times \frac{-7}{6}$ b) $\frac{-3}{8} \div \frac{5}{4}$ <p style="text-align: center;"><b>OR</b></p> a) $\frac{24}{35} \times \frac{-70}{228}$ b) $\frac{-12}{25} \div \frac{36}{-75}$	3
27	<p>(a) Classify the following as monomials, binomials and trinomials</p> <p>(i) <math>6x - 13y</math>      ii) <math>m^2 - 8m - 5</math>      iii) <math>p^2q^2 - \frac{1}{2}pq^2 + 5q^2p</math>      iv) <math>12abc^2</math></p> <p>(b) Write the co efficient of terms which contains <math>y^2</math> in the expression</p> <p style="text-align: center;"><math>3xy^2 - 9y^2 + 12x^2y</math></p>	3

28	<div data-bbox="878 379 1118 505" data-label="Image"> </div> <p>ABCD is a parallelogram. AE is the height from A to DC and AF is the height from A to BC. If DC= 14cm and AE= 6.5cm, find the area of the parallelogram ABCD. Find AF, if BC= 10cm.</p> <p><b>OR</b></p> <p>Find the perimeter of the given shape.</p> <div data-bbox="1003 693 1218 911" data-label="Image"> </div>	3
29	Verify that $a \times (b+c) = (a \times b) + (a \times c)$ for the values of $a=12$ , $b= - 4$ , $c=2$	3
30	Identify which of the following figures have both line symmetry and rotational symmetry of order more than one. Also draw lines of symmetry.	3
31	A ladder 15m long is leaning against a wall. The foot of the ladder is 9m away from the wall. Find the height upto which the ladder reaches the wall.	3
	SECTION-D	
32	<p>a) Show the terms and factors of the expression <math>x^2 - 2x</math> by tree diagram</p> <p>b) Simplify the expression <math>3a + 2b + 5a - b</math> and find the value of simplified expression if <math>a=2</math>, <math>b=1</math>.</p> <p><b>OR</b></p> <p>a) Write the algebraic expressions for the following statements:</p> <p>i) one-sixth of the product of numbers m and n</p> <p>ii) sum of numbers 'x' and 'y' subtracted from their product.</p> <p>b) Simplify the expression <math>-5 + 3p^2 - p + 9</math> and find the value of simplified expression if <math>p = 3</math></p>	5
33	<p>Find the value of the unknown x and y in the following diagrams.</p> <div data-bbox="272 2169 532 2325" data-label="Image"> </div> <div data-bbox="716 2179 1182 2314" data-label="Image"> </div>	5

34	<p>(a) Find the perimeter of the given figure</p> <p>(b) Also, find its area.</p> 	5
35	<p>a) Express the following numbers as percents:</p> <p>i) <math>\frac{13}{25}</math>                      ii) 11.24                      iii) each part of the ratio 3:2</p> <p>b) What is 30% of 900?</p> <p style="text-align: center;"><b>OR</b></p> <p>a) Out of 40 students, 8 are absent. What percent of the students are present?</p> <p>b) 65% of what number is 13?</p>	5
	SECTION E	
36	<p>A fruit seller has <math>\frac{5}{6}</math> kg oranges and he sells <math>\frac{2}{6}</math> kg to a customer. His friend helps him to calculate the remaining oranges.</p> <p>a) How much weight of oranges is left after selling?</p> <p>b) If another customer buys <math>\frac{1}{4}</math> kg of oranges from the remaining, how much is left now?</p> <p>c) If the seller receives ₹10 per <math>\frac{1}{6}</math> kg, how much will he earn from <math>\frac{5}{6}</math> kg orange ?</p>	4
37	<p>Diya deposits ₹6000 in a bank for 3 years at an interest rate of 7% per annum</p> <p>a) What is the formula for calculating simple interest?</p> <p>b) How much simple interest will she earn in 3 years?</p> <p>c) What will be the total amount after 3 years?</p>	4
38	<p>Bhuvan bought '3n' chocolates and '6p' pens to give his friends on his birthday.</p> <p>The cost of each chocolate is ₹5 and each pen is ₹ 10.</p> <p>a) Write the algebraic expression for the total number of chocolates and pens he bought.</p> <p>b) Find the cost of chocolates and pens.</p> <p>c) If n= 4 and p=5, find the total cost of chocolates and pens.</p>	4