SHRI GULABRAO ESHWARA KHANDVE EDUCATIONAL FOUNDATION,

JAGADGURU INTERNATIONAL SCHOOL, LOHEGAON PUNE

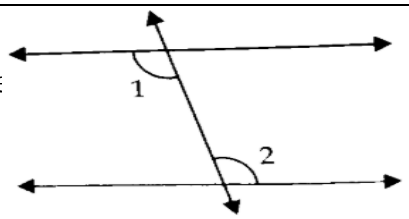
Term-1 Exam (2024-2025)

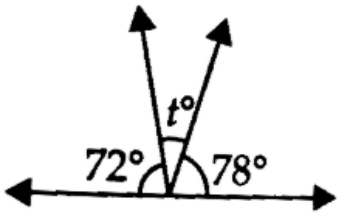
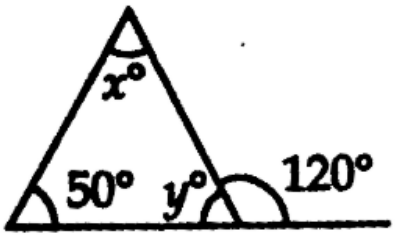
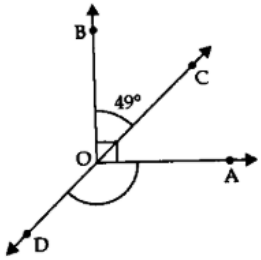
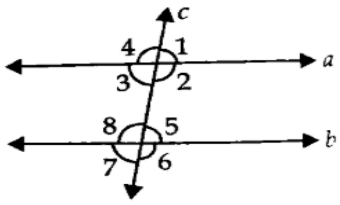
Class: VII A | **Subject: Mathematics**
Date:23/09/2024 | **M.M.: 80**
Roll No. : | **Time.: 3 Hrs**

General Instructions:

(i) This Question paper has 5 Sections A-E. Section-A has 20 MCQ's carrying 1 mark each.
(ii) Section-B has 5 questions carrying 2 marks each.
(iii) Section-C has 6 questions carrying 3 marks each.
(iv) Section-D has 4 questions carrying 5 marks each.
(v) Section-E has 3 case based integrated units of assessment (4 marks each) with sub-parts of the values 1,1and 2 marks.
(vi) All the Questions are compulsory.
(vii) Draw neat figures where required.

S.No.	Section - A	Marks
1.	Determine the integer whose product with (-1) is 35. (a) -35 (b) 35 (c) Both (a) and (b) (d) None of these	1
2.	Solve:(-15)× [(-7) -(-1)]= (a) -90 (b) 90 (c) -105 (d) 105	1
3.	Find the correct option for a pair of integers whose Sum is -9. (a) -11, -2 (b) -7,-2 (c) 7,-2 (d) 5,4	1
4.	Reciprocal of the fraction $\frac{2}{3}$ is (a) 2 (b) 3 (c) $\frac{17}{25}$ (d) $\frac{3}{2}$	1
5.	$\frac{2}{5}$ x $5\frac{1}{5}$ is equal to (a) $\frac{26}{25}$ (b) $\frac{52}{25}$ (c) $\frac{2}{5}$ (d) 6	1
6.	$2.5 \div 1000 =$ (a) 0.025 (b) 0.0025 (c) 0.25 (d) 0.00025	1
7.	The value of 0.3 ×1000 is_____ (a) 30 (b) 0.00003 (c) 0.0003 (d) 300	1
8.	The median of the data: 3, 4, 5, 6, 7, 3, 4 is (a) 5 (b) 3 (c) 4 (d) 6	1
9.	The range of 6, 7, 5, 3, 4, 2, 8, 7, 6, 8, 2, 3, 5 is (a) 3 (b) 4 (c) 5 (d) 6	1
10.	Statement for 5p = 20 is _____. (a) If a number p is multiplied by 5 it gives 20 (b) If you multiply a number p by 5 you get 20 (c) Both (a) and (b) (d) None of these	1

11.	Solution of $7n + 5 = 19$ is _____. (a) 1 (b) 2 (c) 3 (d) 4	1
12.	Equation for statement "one third of a number plus 5 is 8" (a) $\frac{1}{3}x + 5 = 8$ (b) $\frac{1}{3} - 5x = 8$ (c) $\frac{5}{3} + x = 8$ (d) $x + \frac{1}{3} + 5 = 8$	1
13.	The sum of two complementary angles is (a) 90° (b) 180° (c) 270° (d) 360°	1
14.	What will be the measure of the Supplement of 90°angle is ____. (a) 45° (b) 90° (c) 180° (d) 270°	1
15.	The mode of 14,17,13,15,20,13,15,14,15 (a) 13 (b) 14 (c) 15 (d) 17	1
16.	Which one can be the sides of a triangle? (a) 5 cm, 4 cm, 9 cm (b) 9 cm, 6 cm, 14 cm (c) 7 cm, 8 cm, 15 cm (d) 4.3 cm, 5.2 cm, 9.8 cm	1
17.	In ABC, D is the midpoint of BC then AD is its_____ (a) Median (b) Perpendicular (c) Diagonal (d) Side	1
18.	Name the pair of angles in the figure (a) Interior angles (b) Corresponding angle (c) Alternate Interior angles (d) Exterior angles 	1
19.	**Assertion: The range of the weights (in kg) of a students of a class given below is: 49, 60, 47, 50, 47, 59, 58, 45, 53 is 15.** **Reason: Range = Highest observation – lowest observation = 60 – 45 = 15.** (a) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion (b) Both Assertion and Reason are correct and Reason is not the correct explanation for Assertion. (c) Assertion is true but the reason is false. (d) Both assertion and reason are false.	1
20.	**Assertion: A proper fraction is a fraction whose numerator is smaller than its denominator.** **Reason: 4/3 is a proper fraction.** (a) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion. (b) Both Assertion and Reason are correct and Reason is not the correct explanation for Assertion. (c) Assertion is true but the reason is false. (d) Both assertion and reason are false.	1
	SECTION- B	
21.	In a Quiz competition, Team A scored -15, -10, 0 and 2 in four rounds and Team B scored 2,-23,-15 and 10 in four rounds. Who scored more and won the competition?	2

22.	Set up an equation in the following case: Rahim's father is three times as old as Rahim. Sum of their ages is 56. Find age of Rahim. (Take x to be the age of Rahim)	2
23.	Find the value of unknown angle "t" in the following Figure: 	2
24.	Find value of x and y : 	2
25.	Show that a ÷ (b + c) ≠ (a ÷ b) + (a ÷ c) for the following values of a, b and c. For a = 20, b = (- 5), c = 1.	2
	SECTION - C	
26	Find the mean, mode and median of the following data: 19,20,18,20,32,15,16.	3
27.	Solve the equations : (i) 5a + 3 = 48 (ii) 4u - 7 = 21 (iii) $9x/8 = 27$	3
28.	In Fig., OB is perpendicular to OA and ∠ BOC = 49°. Find ∠ AOD. 	3
29.	ABC is a triangle right-angled at C. If AB = 25 cm and AC = 7 cm, find BC.	3
30.	ΔPQR is an isosceles triangle with PQ= PR. If ∠ $R = 45°$. Find the measures of the other two angles.	3
31.	Find: (i) $\frac{1}{3}$ of $2\frac{3}{4}$ (ii) $\frac{3}{4}$ of 16 (iii) $\frac{3}{4}$ of 36	3
	SECTION - D	
32.	In the given figure, identify: (i) The pairs of corresponding angles. (ii) The pairs of alternate interior angles. (iii) The pairs of interior angles on the same side of the transversal. (iv) The vertically opposite angles. (v) The pair of linear pair 	5

<table>
<tr><td>33.</td><td>Solve the following:
(A) Two angles of a triangle are 30° and 80°.Find the third angle.
(B) Find: (i) 2.3×4.35 (ii) 10.05×1.05</td><td>5</td></tr>
<tr><td>34.</td><td>Construct the frequency distribution table for the data on heights (cm) of 20 boys using the class intervals 130 - 135, 135 - 140 and so on. The heights of the boys in cm are: 140, 138, 133, 148, 160, 153, 131, 146, 134, 136, 149, 141, 155, 149, 165, 142, 144, 147, 138, 139. Also, find the range of heights of the boys.</td><td>5</td></tr>
<tr><td>35.</td><td>ABCD is a quadrilateral. Is AB + BC + CD + DA >AC + BD? Prove it</td><td>5</td></tr>
<tr><td colspan="3">SECTION - E</td></tr>
<tr><td>36.</td><td>Which is greater: $\frac{2}{7}$ of $\frac{3}{4}$ or $\frac{3}{5}$ of $\frac{5}{8}$</td><td>4</td></tr>
<tr><td>37.</td><td>The performance of students in 1st term and 2nd term is given. Draw a double bar graph choosing appropriate scale and answer the following:
(i)In which subject, has the child improved his performance the most?
(ii) Has the performance gone down in any subject? If yes, name the Subject and by how much?
<table><tr><th>SUBJECT</th><th>1 ST TERM</th><th>2 ND TERM</th></tr><tr><td>ENGLISH</td><td>73</td><td>66</td></tr><tr><td>HINDI</td><td>68</td><td>71</td></tr><tr><td>Math</td><td>89</td><td>96</td></tr><tr><td>Science</td><td>82</td><td>86</td></tr><tr><td>Social Science</td><td>74</td><td>76</td></tr></table></td><td>4</td></tr>
<tr><td>38.</td><td>A shopkeeper earns a profit of ₹ 1 by selling one pen and incurs a loss of 40 paise per pencil while selling pencils of her old stock.
(i) a ÷ (-b) = _____ where b ≠ 0.
(ii) 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?

a) 1000 pencils b) 10 pencils c) 50 pencils d) 100 pencils</td><td>4</td></tr>
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