



परमाणु ऊर्जा शिक्षण संस्था

Atomic Energy Education Society

टर्म-1/आवधिक परीक्षा-2 2023-24 Term-I/PT-II Examination 2023 - 24

कक्षा / Class : VII

अवधि / Duration : 3Hrs.

विषय / Subject : Mathematics

अधिकतम अंक/ Maximum Marks : 80

General Instructions:

- All the questions are compulsory.
- This paper consist of four sections.
- Section A has 30 multiple choice questions of 1 mark each section B contains 4 question of 2 marks. Section C contains 6 questions of 3 marks Section D contains 6 questions of 4 marks.
- Use of calculator and other electronic devices are strictly prohibited.

SECTION—A (1×30=30Marks)

- Q1. Determine the integer whose product with (-1) is 35. (1)
- (a) -35 (b) 35 (c) Both (a) and (b) (d) None of these
- Q2. Solve: $(-15) \times [(-7) - (-1)]$ (1)
- (a) -90 (b) 90 (c) -105 (d) 105
- Q3. Find the correct option for a pair of integers whose Sum is -9. (1)
- (a) -11, -2 (b) -7, -2 (c) 7, -2 (d) 5, 4
- Q4. Which of the following does not represent an Integer? (1)
- (a) $\frac{0}{-a}$ (b) $\frac{(-9)}{3}$ (c) $\frac{20}{(-4)}$ (d) $\frac{(-12)}{5}$
- Q5. For a non-zero integer , which of the following is not defined? (1)
- (a) $\frac{a}{0}$ (b) $\frac{0}{a}$ (c) $\frac{a}{1}$ (d) $\frac{1}{a}$
- Q6. Reciprocal of the fraction $\frac{2}{3}$ is (1)
- (a) 2 (b) 3 (c) $\frac{17}{25}$ (d) $\frac{3}{2}$

Q7. $\frac{2}{5} \times 5\frac{1}{5}$ is equal to
(1)

- (a) $\frac{26}{25}$ (b) $\frac{52}{25}$ (c) $\frac{2}{5}$ (d) 6

Q8. $3\frac{3}{4} \div \frac{3}{4}$ is equal to (1)

- (a) 3 (b) 4 (c) 5 (d) 45/16

Q9. $2.5 \div 1000$ (1)

- (a) 0.025 (b) 0.0025 (c) 0.25 (d) 0.00025

Q10. The value of 0.3×1000 is _____ (1)

- (a) 30 (b) 0.00003 (c) 0.0003 (d) 300

Q11. The median of the data: 3, 4, 5, 6, 7, 3, 4 is (1)

- (a) 5 (b) 3 (c) 4 (d) 6

Q12. Collection of Information from individuals is called (1)

- (a) Data (b) Mean (c) Observation (d) Mode

Q13. The range of 6, 7, 5, 3, 4, 2, 8, 7, 6, 8, 2, 3, 5 is (1)

- (a) 3 (b) 4 (c) 5 (d) 6

Q14. Range of a data is the difference between its highest observation and (1)

- (a) second highest observation (b) lowest observation
(c) second lowest observation (d) mean

Q15. Statement for $5p = 20$ is (1)

- (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

Q16. Solution of $7n + 5 = 19$ is (1)

- (a) 1 (b) 2 (c) 3 (d) 4

Q17. Equation for statement "one third of a number plus 5 is 8" is (1)

- (a) $\frac{1}{3}X + 5 = 8$ (b) $\frac{1}{3} - 5X = 8$ (c) $\frac{5}{3} + X = 8$ (d) $X + \frac{1}{3} + 5 = 8$

Q18. The value of a in the equation is $\frac{a}{5} = \frac{7}{15}$ (1)

- (a) $\frac{7}{2}$ (b) $\frac{7}{3}$ (c) $\frac{2}{7}$ (d) $\frac{3}{7}$

Q19. The sum of two complementary angles is (1)

- (a) 90° (b) 180° (c) 270° (d) 360°

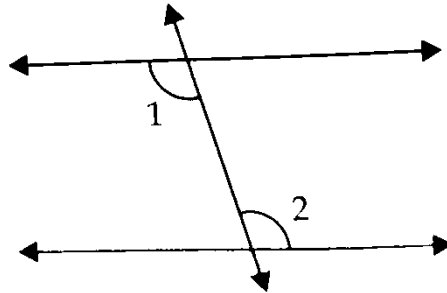
Q20. Which of the following form a Linear Pair (1)

- (a) $60^\circ, 110^\circ$ (b) $110^\circ, 50^\circ$ (c) $100^\circ, 80^\circ$ (d) $120^\circ, 70^\circ$

Q21. What will be the measure of the Supplement of 90° angle is _____ (1)

- (a) 45° (b) 90° (c) 180° (d) 270°

Q22. Name the pair of angles in the figure (1)



- (a) Interior angles (b) Corresponding angle
(c) Alternate Interior angles (d) Exterior angles

Q23. When all the sides of a triangle is unequal, then it is a _____ triangle. (1)

- (a) Equilateral (b) Isosceles (c) Scalene (d) None of these

Q24. In ABC, D is the midpoint of BC then AD is its _____ (1)

- (a) Median (b) Perpendicular (c) Diagonal (d) Side

Q25. Which one can be the sides of a triangle? (1)

- (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

Q26. In ABC, right-angled at C. AC = 6 cm, BC = 8 cm, then AB is _____ (1)

- (a) 11 cm (b) 13 cm (c) 10 cm (d) 12 cm

Q27. The difference in the measures of two complementary angles is 20° , (1)

Then the measures of angles are

- (a) $15^\circ, 35^\circ$ (b) $25^\circ, 45^\circ$ (c) $35^\circ, 55^\circ$ (d) $45^\circ, 65^\circ$

Q28. $(-12) \times (32)$ is equal to _____ (1)

- (a) -384 (b) 384 (c) -584 (d) 584

Q29. The mode of 14,17,13,15,20,13,15,14,15 (1)

- (a) 13 (b) 14 (c) 15 (d) 17

Q30. If $4x-7 = 21$, then $x =$ _____ (1)

- (a) 7 (b) 8 (c) -7 (d) -8

SECTION—B (2×4= 8 Marks)

Q31. In a Quiz competition, (2)

Team A scored -15, -10, 0 and 2 in four rounds and

Team B scored 2,-23,-15 and 10 in four rounds.

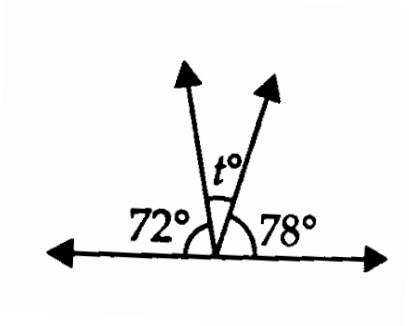
Who scored more and won the competition?

Q32. Set up an equation in the following case: (2)

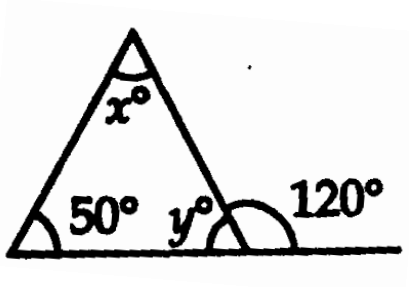
Rahim's father is three times as old as Rahim. Sum of their ages is 56. Find age of Rahim.

(Take x to be the age of Rahim)

Q33. Find the value of unknown angle "t" in the following Figure: (2)



Q34. Find value of x and y : (2)



SECTION—C (3×6= 18 Marks)

Q35. Find the mean, mode and median of the following data: 19,20,18,20,32,15,16. (3)

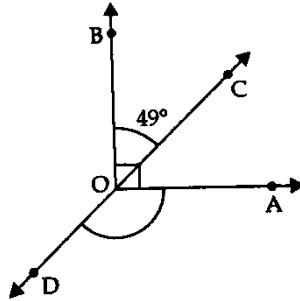
Q36. Solve the equations : (3)

(i) $5a + 3 = 48$

(ii) $4u - 7 = 21$

(iii) $\frac{9x}{8} = 27$

Q37. In Fig., OB is perpendicular to OA and $\angle BOC = 49^\circ$. Find $\angle AOD$. (3)



Q38. ABC is a triangle right-angled at C. If $AB = 25$ cm and $AC = 7$ cm, find BC. (3)

Q39. ΔPQR is an isosceles triangle with $PQ = PR$. If $\angle R = 45^\circ$. (3)

Find the measures of the other two angles.

Q40. 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 (4×6= 24 Marks)

Q41. The performance of students in 1st term and 2nd term is given. (4)

Draw a double bar graph choosing appropriate scale and answer the following:

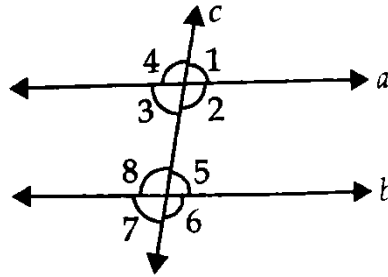
SUBJECT	1ST TERM	2ND TERM
HINDI	68	71
ENGLISH	73	66
MATHS	89	96
SCIENCE	82	86
SOCIAL SCIENCE	74	76

(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?

Q42. In the given figure, identify:

(4)



- (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.

Q43. ABCD is a quadrilateral. Is $AB + BC + CD + DA > AC + BD$? Prove it.

(4)

Q44. The perimeter of a rectangle is 40 m. The length of the rectangle is 4 m less than 5 times its breadth. Find the length of the rectangle.

(4)

Q45. Show that $a \div (b + c) \neq (a \div b) + (a \div c)$ for the following values of a, b and c.

(4)

- (i) $a = 20, b = (-5), c = 1$
- (ii) $a = (-5), b = -4, c = (-1)$

Q46. Solve the following:

(4)

- (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