ATOMIC ENERGY CENTRAL SCHOOL, MYSORE Class VII Session 2025-26 MATHEMATICS HOLIDAY HOME WORK

1. Choose the correct option. a. On subtracting $8^{5}/12$ from the sum of $5^{1}/6$ and $3^{1}/4$, we get ii. 0 i. 1 iii. 2 iv. 1 2. The result of the product of 4/5, 7/9, 1/8 and a fourth fraction is 1, then the fourth fraction is ii. 7/90 iii. 2/7 iv. 5/7 i. 90/7 3. If 1/8 part of a silver coin costs ₹ 5789, then the cost of the whole coin is i. ₹ 723.63 ii. ₹ 46312 iii. ₹ 23156 iv. ₹ 11578 4. $91/144 \div 5^{5}/12 \times 8^{4}/7$ is equal to iii. 1 i. 1/7 ii. 5/7 iv. 5.Difference of 1/6 of 90 and 2/3 of 15 is i. 0 ii. 5 iii. 10 iv. 15 6. The number of pieces each of length $2^{1}/2$ cm that can be cut out from a wire of length $12^{1}/2$ cm is i. 5 ii. 6 iii. 8 iv. 3 7. Ravi spends 3/5 of his salary and saves the remaining. If his income is ₹ 15000, then his saving is ii. ₹ 9000 iii. ₹ 6000 iv. ₹ 5000 i. ₹ 10000 8. Mr. Mishra's weight on a particular month was 95¹/2 kg. If in the following month he lost 4¹/5 kg, then his new weight is i. 91³/10 kg iii. 90³/10 kg ii. 91 kg iv. 90 kg 9. 3/5, 6/10, 24/40 and 72/120 are all fractions. ii. equivalent iii. unlike iv. complete i. improper 10. Two fractions inserted between $\frac{1}{2}$ and $\frac{3}{5}$ are i. 4/7. 7/12 ii. 3/6. 4/8 iii. 4/6, 5/6 iv. 1/8, 1/16 11. The number to be multiplied by 2/5 to get 18/25 is iii. 1⁴/5 i. 4/5 ii. 36/125 iv. 9/125When a 11.positive integer is divided by a negative integer, the quotient is a. a negative integer b. a positive integer c. can be both d. cannot be determined 12. The next number in the pattern –10, –7, –4, –1, … is iv. –2 i. 0 iib. 2 iii. 3 13. (-100) - (-189) = _____ i. –289 iii. 89 iv. –89 ii. 289

14. Natural numbers less than 7 are represented as i. $x \le 7, x \in \mathbb{N}$ ii. $x > 7, x \in \mathbb{N}$ iii. $x \ge 7, x \in \mathbb{N}$ iiv $x < 7, x \in \mathbb{N}$ 15. Sum of two negative integers is always a. a negative integer b. a positive integer c. a positive or a negative integer d. none of these 16. The additive identity for integers is _____ с. —1 d. 10 a. 0 b. 1 17. The value of $20 \times 5 - 2 + 14 \div 7$ is c. 60 d. 70 b. 62 a. 100 18. 3 x2 x 1 x0 x -1 x-2 x -3 is equal to c. 0 d. 72 a 36 b. -36 19. (–1) × (–1) × … 11 times is _____ b. (–11) c. (–1) d. 1 a. 11 20. 1 ÷ *a* = 1, if *a* = _____. c. 0 d. 10 a. –1 b. 1 21. If A = (-14 + 4) and B = 4 - 14, then Ax B = ____ b. 100 c. –100 d. None of these a. 0 22. $(-72) \div [(-36) \div (-2)] =$ _____. с. —1 a. –4 b. 4 d. 1 $23.4 \div 1/5 = .$ b. 4/5 c. 20 d. None of these a. 5/4 24. Two fractions are said to be reciprocals of each other if their a. sum is 1 b. sum is 0 c. product is 1 d. difference is 1 25. ½ ÷ 1/4 = _____.

a. 4 b. 2 c. 1/2 d. None of these

State whether the following statements are true or false.

26. Sum of the positive improper fractions may be a proper fraction.

- 27. A proper fraction can be greater than 1.
- 28. The reciprocal of a mixed fraction is a proper fraction.
- 29. Two or more fractions are equivalent if their simplest form have the same denominator.

30. 2/7 < 8/11

31.
$$50\frac{1}{2} - 8\frac{1}{4} - 10\frac{1}{2}$$
 is equal to $31^{3}/4$.

32. If the weight of 30 boxes is $15^{1}/2$ kg, then the weight of 1 box is 2 kg.

33. If 5/12 part of a 60 m long stick is coloured white and the rest black, then the length of the black part is 35 m.

Fill in the blanks.

34. If 3/7 part of a total weight is 294 kg, then the total weight is _____.

- 36. $5 \left(3\frac{3}{4} + 1\frac{1}{4}\right)$ is equal to ______. Weight of each block of wood in a box is $15^{1/2}$ kg. If the number of blocks is 12, then the total weight is
- 37. If A can complete 2/3 of a work in 12 days, then he completes the whole work in _____ days.
- 38. 3/5 part of a park is occupied by a group of boys playing cricket. If the total area is 2000 sq. m, find the unoccupied area.
- 39. On a rainy day in a class of 45 students, 9 students were absent. What fraction of the students were present?
- 40. A man won a lottery of ₹ 5,00,000. He paid 1/5 part as tax to the government and 1/4 part to an orphanage. What part of the money is still left with him?

41. A pump is attached to a tank of capacity 5000 litres. The pump fills up the tank in 50 minutes. What amount of water does it fill in 1 minute? What fraction of the whole is filled in 1 minute?

- 42. Find the fraction equivalent to 29/13 whose numerator is 261.
- 43. Ram is 3/5 of Shyam's age and Shyam is 5/7 of Raju's age. If Raju's age is 21 years, find Ram's and Shyam's age.
- 44 Simplify the following:
- a. [(-8) + (-16) + (-14)] ÷ |-19|
- b. $(-3) \times (-5) + (-6) \times 5$
- c. (-15) -10 + 9 + 17
- d. 45 ÷ (-15) + 5 × (-6) × (-2)

45. Find the unknown integer 'x' satisfying the following conditions.

a. x +(|-10) = 0

b. (-x) + (-2) = 0

46. Write the following integers in ascending order.

a. 3, -3, 2, 4, -5, 6, -7, 10

b. 0, 3, -4, 2, -5, 12, -6, -11

47. Simplify and give your answer in the simplest form.

- a. (-6) × (-8) ÷ (-12)
- b. (−15) × 7 × (−3)
- c. $32 \times (-9) \times (-6)$

48. Write 8 consecutive odd integers.

- a. succeeding (-7)
- b. succeeding (-205)

49. Find the sum of each of the following using the number line.

- a. 7 and (--5)
- b. |–5| and |5|
- c. |-3| and |-4|
- 50. Subtract the sum of (-39) and 54 from the sum of (-28) and 33.