



Indian Women Scientists' Association

Vashi, Navi Mumbai

IWSA Ganit Pratiyogita 2025

Class- VII CBSE

Time: 2.00 pm – 3.30 pm

Date: 30th November, 2025

Total Marks: 100

Instructions

1. There are a total of 50 questions. Each question carries 2 marks. There is no negative marking.
2. Each question has been given four optional answers a, b, c, and d. On the given answer sheet write **only one option** (either a, b, c, or d) which according to you indicates the correct answer to the question asked.
3. Writing more than one option as an answer to any question in the answer sheet, will give you a zero mark for that Question.
4. Use only a blue pen to make any entry on the answer sheet.
5. You will not be allowed to leave the examination hall without signing and submitting your answer sheet.
6. The blank paper provided can be used for your rough calculations. This is not to be submitted. You may take the question paper and rough sheet home after the exam.
7. Use of Calculators, or any other electronic gadgets, during the exam is strictly prohibited.

Questions

1. If the numbers $\frac{4}{7}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{5}{9}$ are arranged in ascending order, then the average of the two middle rational numbers,
a) $\frac{4}{9}$ b) $\frac{71}{63}$ c) $\frac{2}{9}$ d) $\frac{71}{126}$
2. What percent of a day is 18 min?
a) 1.25% b) 2.5% c) 1.50% d) 0.25%

3. Which of the following is true?

- a) $(-8) + (-4) > (-8) - (-4)$
- b) $(-8) + (-4) < (-8) - (-4)$
- c) $(-8) + (-4) = (-8) - (-4)$
- d) None of these

4. A shopkeeper earns a profit of Rs 1 on each pen and loses 40 paise on each pencil. He sells 45 pens and some pencils, with a total loss of Rs 5. How many pencils did he sell?

- a) 120
- b) 150
- c) 125
- d) 100

5. When 7 is added to 7 times a number and 70 is subtracted from it the answer is zero. So the number is:

- a) 7
- b) 11
- c) 10
- d) 9

6. What number should be subtracted from both the terms of the ratio 15:19 in order to make it 3:4?

- a) 4
- b) 3
- c) 2
- d) 6

7. The angles of a triangle are in the ratio 1:2:6. The triangle is:

- a) a right-angled triangle
- b) an acute angled triangle
- c) an obtuse angled triangle
- d) you cannot make such a triangle

8. Find $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \frac{-14}{9}$

- a) $\frac{1}{2}$
- b) $-\frac{1}{2}$
- c) $-\frac{1}{7}$
- d) $\frac{5}{9}$

9. Find the missing number if a certain rule is followed row wise.

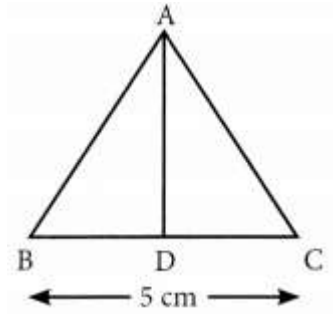
9	5	2	P
14	1	4	S
3	8	?	V

- a) 11
- b) 16
- c) 12
- d) 8

10. . Evaluate: $(-16) \div [(-13) + (-3)] / (-60) \div (-60)$

- a) 1
- (2) -1
- (3) 2
- d) -2

11. Find AD in the following figure, if area of $\triangle ABC$ is 6 cm^2 .



- a) 3 cm b) 4 cm c) 5 cm d) 2.4 cm

12. Raima has three boxes whose total weight is 218.25 Kg. If the weight of the first box is 30.28 Kg more than the second box and the third box weighs 48.55Kg , then find the weight of the second box.

- a) 75.25Kg b) 65.25Kg c) 69.71Kg d) 70.50Kg

13. The value of $0.15 - 0.015 + 0.0786 - 0.0768$

- a) 0.0101 b) 0.0164 c) 0.1320 d) 0.1368

14. If $(2^{4a-3} + 10) \div 6 = 7$, then a is

- a) -1 b) 0 c) 1 d) 2

15. What is the perimeter of the rectangle whose length is 40cm & a diagonal is 41cm?

- a) 164cm b) 162 cm c) 81 cm d) 98 cm

16. In a test 4 marks are given for every correct ans and -2 marks for every incorrect ans. Rini answered all the questions and scored 26 marks though she got 9 correct answers. Raj also answered all the questions and scored 2 marks though he got 5 correct answers. How many questions did each answer incorrectly?

- a) 10,8 b) 5,9 c) 9,18 d) 4,10

17. If $(\frac{2}{3})^x = (\frac{3}{2})^4$, then $x =$ _____

- a) -8 b) 4 c) -4 d) 2

18. Vikash wants to plant flowers on the ground in the form of a rhombus. The diagonals of the rhombus measure 42 cm and 56 cm. Find the perimeter of the field.

- a) 150 cm b) 140 cm c) 130cm d) 120cm

19. If $(\frac{1}{2})^x \times (\frac{1}{2})^{x-1} = (\frac{1}{2})^{11}$, then $x =$

- a) 7 b) 6 c) 4 d) 2

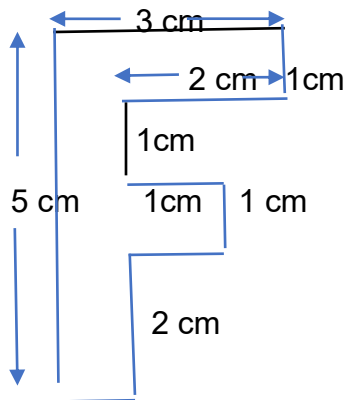
20. When a certain number m , is divided by 5 and added to 8, the result is equal to 3 m subtracted from 4. The value of m is

- a) $\frac{5}{4}$ b) $\frac{3}{6}$ c) $-\frac{5}{4}$ d) $\frac{5}{6}$

21. If 184 is divided into two parts such that one-third of one part exceeds one seventh of the other part by 8, then the greater part is

- a) 72 b) 110 c) 112 d) 114

22. If the area of the given fig is one third of the area of a parallelogram of base 6cm, then find the height of the parallelogram.



- (a) 6cm b) 4 cm c) 3cm d) 8cm

23. A shopkeeper offers a 10% discount on the marked price of his articles and still makes a profit of 20%. What is the actual cost of the article marked Rs.500 for him?

- a) Rs 350 b) Rs 375 c) Rs 400 d) Rs 300

24. A sum of money, at compound interest, yields Rs. 200 and Rs. 220 at the end of first and second year respectively. The rate % is:

- a) 20 b) 15 c) 10 d) 5

25. In a coconut grove, $(x+2)$ trees yield 60 coconuts per tree per year, x trees yield 120 coconuts per tree per year, and $(x-2)$ trees yield 180 coconuts per tree per year. If the average yield per year per tree is 100, find x .

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

26. The dimensions of a room are $10\text{m} \times 8\text{m} \times 3.3\text{m}$. How many men can be accommodated in this room if each man requires 3 cubic metre of space?

- a) 99 b) 88 c) 77 d) 75

27. Which of the following is greater than 16.3%?

- a) 163 out of 1000 b) 113 out of 250
c) 8 out of 50 d) 39 out of 750

28. Find the area of a verandah 2.25 m wide constructed outside a room 5.5 m long and 4 m wide.

- a) 36sq.m b) 63sq.m c) 64sq.m d) 84sq.m

29. If the sum of interior angles of a regular polygon is 540° . Find the name of the polygon.

- a) Quadrilateral b) Pentagon c) Hexagon d) Septagon

30. A square pyramid always has

- a) Four lateral faces, which are parallel to each other
b) Four lateral faces, which are congruent equilateral triangles and a rectangular base
c) Two bases which are congruent and parallel
d) Four lateral faces, which are congruent isosceles triangles and a square base

31. If $0.2(2x-1)-0.5(3x-1) = 0.4$, what is the value of x ?
 a) $1/11$ b) $-1/11$ c) $3/11$ d) $-3/11$
32. The present population of a town is 25,000. It grows at 4%, 5% and 8% during first year, second year and third year respectively, the population after 3 years is
 a) 29,484 b) 24,576 c) 28,696 d) 30,184
33. Which of the following statements, is false?
 a) Zero is neither a negative integer nor a positive integer.
 b) Zero is less than every positive integer
 c) Zero is larger than every negative integer
 d) Farther a number from zero on the left, larger is its value.
34. A wire is bent to form a square of side 10 cm. If the same wire rebent into a rectangle of length 12 cm, it's breadth is
 a) 8cm b) 7cm c) 9cm d) 10cm
35. Which of the following is true?
 a) $1000^0 > 100^0$ b) $1000^0 < 100^0$ c) $1000^0 = 100^0$ d) None of the above
36. The number of edges of a triangular pyramid is
 a) 8 b) 6 c) 5 d) 3
37. 44. Standard form of expression of 79403.75 is
 a) 79.40375×10^3 b) 7.940375×10^4
 c) 794.0375×10^2 d) 7.940375×10^6
38. If "HOUSE" is coded as "IQVUF", how is "TABLE" written?
 a) UCCNF b) TBCME c) UBCNE d) UBCLF
39. Which of the following are not equivalent rational numbers?
 a) $\frac{1}{4}$ and $\frac{-8}{32}$ b) $\frac{-3}{4}$ and $\frac{9}{-12}$ c) $\frac{25}{30}$ and $\frac{15}{18}$ d) $\frac{32}{56}$ and $\frac{4}{15}$

40. Sum of $a-b+ab$, $b+c - bc$ and $c-a-ac$ is

- a) $2c-ab-ac-bc$ b) $2c+ab -ac-bc$
b) $c) 2c +ab +ac+bc$ d) $2c -ab+ac +c$

41. The mean weight of 100 students in a class is 46kg. the mean weight of boys is 50 and that of girls is 40 kg. Therefore, the number of boys is

- a) 50 b) 60 c)70 d) 65

42. A mother and her two daughters got a room constructed for Rs75000; the elder daughter contributed $\frac{3}{8}$ of her mother's contribution while the younger daughter contributed $\frac{1}{2}$ of her mother's contribution. How much is elder daughter's contribution?

- a) Rs 40000 b) 20000 c) 25000 d)15000

43. For which of the following figures , diagonals are equal

- a) Trapezium b) Rectangle c) Parallelogram d) Rhombus

44. One fourth of a pole is painted red, two fifth is painted blue and the remaining 21 m is painted green. Find the height of the pole.

- a) 40 m b) 60 m c) 80 m d) 100 m

45. Indian cricket team won 4 more matches than it lost with New Zealand If it won $\frac{3}{5}$ of its matches how many matches did India play

- a) 8 b) 12 c) 16 d) 20

46. One of the sides and the corresponding height of a parallelogram are 3 cm and 1 cm respectively. The area of the parallelogram is

- a) 1 cm^2 b) 3 cm^2 c) 6 cm^2 d) 12 cm^2

47. It is not possible to construct a triangle when its sides are :

- a) 8.3 cm, 3.4 cm, 6.1 cm b) 5.4 cm, 2.3 cm, 3.1 cm
c) 6 cm, 7 cm, 10 cm d) 3 cm, 5 cm, 5 cm

48. A batsman scored the following number of runs in six innings: 35, 30, 45, 65, 39, x. If the mean runs scored by him is 39, find x.

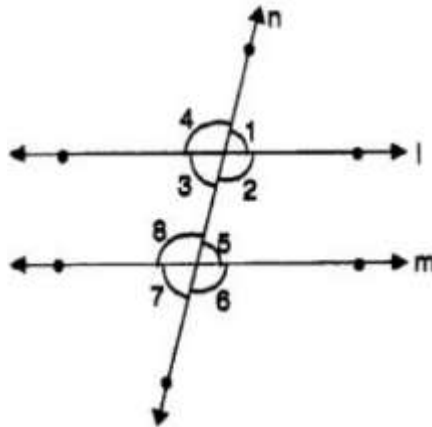
a) 20

b) 38

c) 37

d) 40

49. In the following figure, a transversal cuts two parallel lines l and m respectively and the angles thus formed are marked. If $\angle 1$ is an acute angle, then, which of the following statements is false?



a) $\angle 1 + \angle 2 = 180^\circ$

b) $\angle 2 + \angle 5 = 180^\circ$

c) $\angle 3 + \angle 8 = 180^\circ$

d) $\angle 2 + \angle 6 = 180^\circ$

50. The mean of 6, y, 7, x, and 14 is 8. Which of the following is true?

a) $x+y = 13$

b) $x-y = 13$

c) $2x+3y = 13$

d) $x^2+y = 1$