

CHINMAYA

MATHEMATICS

OLYMPIAD

SAMPLE PAPER

6

Please fill the following details immediately.

Name: _____

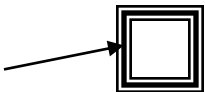
Hall Ticket No.: _____

❖ 50 Questions ❖

❖ Time Allowed : 120 Minutes ❖

- ❖ Do not open this question paper until the signal is given.
- ❖ Please check the CLASS printed on the cover page and the inside is same when you open the booklet.

General Instructions:

- 1) All questions are compulsory and carry equal marks.
- 2) There is no negative marking.
- 3) There is only one correct answer hence write one choice only.
- 4) Please avoid cutting/overwriting etc.
- 5) Return the paper to the invigilator at the end of the examination.
- 6) Write the correct option in the given box. 

- 1) What least number should be added to 1330 to get a number exactly divisible by 43?
a] 46 b] 1 c] 3 d] 7
- 2) How many times the digit '3' appears in numbers from 1 to 100?
a] 18 b] 19 c] 20 d] 21
- 3) The sum of the prime numbers between 90 and 100 is
a] 188 b] 281 c] 376 d] 97
- 4) At 9 o'clock the angle formed between the hands of a clock is called?
a] Complete angle b] Reflex angle
c] Zero angle d] None of these
- 5) A man walked 3km towards North then 8 km towards South. His position at the end of the walk is?
a] 5 km towards East b] 3 km towards South
c] 8 km towards North d] 5 km towards South
- 6) Solve $\{12-80\div[70-5(96\div4-4\times3)]\}$
a] 116 b] 4 c] 18 d] 16

ROUGH WORK

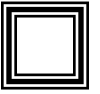
7) A motorist travels 90 km distance with the speed of 60 km/hr and the next 40 km distance with the speed of 40 km/hr. What is his average speed during the journey?

a] 52 km/hr

b] 100 km/hr

c] 45 km/hr

d] 48 km/hr



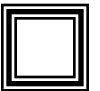
8) The length of a rectangle is three times its breadth and the area of rectangle is 147 m^2 . What is the length of the rectangle?

a] 7 m

b] -21 m

c] 21 m

d] 14 m



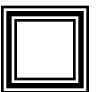
9) Complete the series 5,10,20,40, _____

a] 80

b] 60

c] 70

d] 90



10) 10 workers can build wall in 8 days. How long would it take for 16 workers to build the same wall?

a] 3 days

b] 2 days

c] 6 days

d] 5 days



11) If $40.07 \times 1.43 = 57.3001$, Then $4.007 \times 143 = \underline{\hspace{2cm}}?$

a] 507.3001

b] 57.3001

c] 573.001

d] None of these



ROUGH WORK

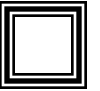
12) The average of 10 numbers is 7. If each number is multiplied by 12, then what is the average of the new set of numbers?

- a] 7 b] 19 c] 82 d] 84



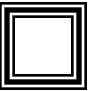
13) In a school the ratio of the number of boys and girls is 8:5. If there are 160 girls. What is the total number of students in the school?

- a] 200 b] 250 c] 260 d] 416



14) How many centuries are there in 1565 years?

- a] 15 b] 56 c] 5 d] 65



15) A dealer wishes to make a profit of 25% by selling an article. At what price should he sell the article, if the cost price is Rs.200?

- a] Rs.220 b] Rs.225 c] Rs.250 d] Rs.150



16) The value of $96 \div 4 + 1020 - 982 = \underline{\hspace{2cm}}?$

- a] 24 b] 38 c] 62 d] 72



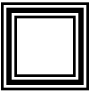
ROUGH WORK

- 17) The greatest 4 digit number exactly divisible by 12, 15, 20 and 35 is _____
- a] 9999 b] 9660 c] 9832 d] 9860
- 18) The cost of 12 apples is Rs.96. What will be the cost of 15 apples?
- a] Rs.12 b] Rs.102 c] Rs.120 d] Rs.140
- 19) In a right angle triangle if an angle measures 35° , then the measure of other angle is _____.
- a] 65° b] 55° c] 45° d] 30°
- 20) What number am I?
I am a 2 digit even number.
I am a common multiple of 6 and 7.
I have a total of 8 factors.
- a] 35 b] 42 c] 36 d] 84
- 21) The rectangle has a breadth of 6 m and an area of 72 m^2 . What is the length of the rectangle?
- a] 2 m b] 12 m c] 30 m d] 432 m

ROUGH WORK

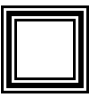
22) A fruit seller had 69875 oranges. He packed them in boxes, with each box containing 325 oranges. Find the number of boxes?

- a] 225 b] 315 c] 215 d] 205



23) Which of the following is not associated with the circle?

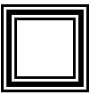
- a] Centre b] Chord
c] Diagonal d] Diameter



24) What number should replace the ?. So that the sum of the number horizontally, vertically or diagonally be the same.

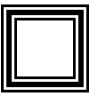
10	13	4
3	?	15
14	5	8

- a] 9 b] 12 c] 7 d] 6



25) Write 616 as a product of two numbers of which at least one number is a prime number?

- a] 616×1 b] 56×11 c] 4×154 d] 8×77



ROUGH WORK

- 26) If $15x - 12 = 12x + 12$, then what is the value of x ?
- a] 3 b] 8 c] 1 d] 0
- 27) How many circles can be drawn through three non-collinear points x , y and z ?
- a] 3 b] 2 c] Infinite d] 1
- 28) The value of 80975 ml in litres is
- a] 8.0975 l b] 809.75 l
c] 8097.5 l d] 80.975 l
- 29) I am a prime number. I am factor of 65 but not a factor of 60. Who am I?
- a] 13 b] 15 c] 17 d] 19
- 30) Which of the following statements is true?
- a] $-22 < -44$ b] $-22 > -44$
c] $22 > 44$ d] $-44 > 22$
- 31) How many one thirds are needed to make 10 whole cups of water?
- a] 10 b] 20 c] 30 d] 60

ROUGH WORK

32) Which of these fractions is closest to 0?

a] $\frac{3}{4}$

b] $\frac{5}{12}$

c] $\frac{2}{3}$

d] $\frac{5}{6}$



33) Which of the following is the prime factorization of 140?

a] $2 \times 2 \times 2 \times 3 \times 7$

b] $2 \times 2 \times 3 \times 5$

c] $2 \times 2 \times 5 \times 7$

d] $2 \times 3 \times 5 \times 5$



34) The area of floor of a room is 54 m^2 . Find the volume of the room if the height of the room is 4m ?

a] 108 cu.m

b] 216 cu.m

c] 216 sm

d] 864 cu.m



35) If $x=9$ & $y=12$. Find $\sqrt{x^2+y^2}$

a] 14

b] 17

c] 21

d] 15



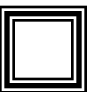
36) An area bounded by chord and minor is called

a] minor segment

b] minor arc

c] major segment

d] semicircle



ROUGH WORK

37) Product of two integers is -48 . If one of the integer is -6 then the other is

- a] $+1$ b] $+288$ c] 0 d] $+8$



38) The product of a fractional number and its multiplicative inverse is

- a] 0 b] 1
c] Number itself d] none of these



39) If the cost of 15 pens is Rs.148.50. What will be the cost of 1 pen?

- a] Rs.12.80 b] Rs.8.90
c] Rs.10.90 d] Rs.9.90



40) The perimeter of a square is 144 m, then the side of the square is _____

- a] 34 m b] 36 m
c] 44 m d] 38 m



41) Find the value of 'a' in $6(2a-1)+8 = 14$.

- a] -1 b] $+1$ c] 12 d] 9



ROUGH WORK

- 42) The ratio of the least prime number to the least composite number is _____
a] 1:2 b] 2:3 c] 1:4 d] 1:3
- 43) The sum of a number and one fourth of it is 40.
What is the number?
a] 28 b] 32 c] 34 d] none of these
- 44) Find the smallest such number which when divided by 5,6,7 & 8 leaves a remainder 3, but is exactly divisible by 9.
a] 1477 b] 847 c] 2520 d] 1683
- 45) If $A:B = 3:4$ and $B:C = 5:6$, then $A:C$ is equal to
a] 5:8 b] 1:2 c] 3:8 d] 5:9
- 46) The ratios of angle of triangle are 1:3:5. Find the difference between the measure of largest and smallest angles.
a] 20° b] 100° c] 60° d] 80°

ROUGH WORK

- 47) If a scooter runs 320 km on 5 litres of petrol. How much petrol will be needed for 160 km run?
a] 2 litres b] 3 litres c] 2.5 litres d] 3.5 litres
- 48) Complete the series 0.2, 0.04, 0.008, _____
a] 0.00016 b] 0.0016 c] 0.016 d] 0.16
- 49) Cost of table is more than chair by Rs.350. If the cost of 3 chairs and 4 tables is Rs.2450. What is the cost of a table?
a] Rs.500 b] Rs.150 c] Rs.300 d] Rs.450
- 50) An athlete runs daily 5 rounds of the ground having radius 350 m. How many km does athlete runs daily?
a] 45 km b] 35 km c] 11 km d] 32 km

ROUGH WORK