

CHINMAYA MATHEMATICS OLYMPIAD

## SAMPLE PAPER

## (5)

Please fill the following details immediately Name: $\qquad$
Hall Ticket No.: $\qquad$

* 50 Questions *
* Time Allowed : 120 Minutes *
* D o 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.

## G eneral 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
7) $40 \times 20 \times 30 \times 0$ is equal to a] 240000 b] 24000
c] 0
d]240
$\square$
2)The cost of a notebook is Rs. 390. What does it cost for 7 such books?
a] 2730
b] 2830
c] 2130
d] 2230
$\square$
8) Which of these following number is not a multiple of 4 ?
a] 8432
b] 7634
c] 5444
d]4384
$\square$
9) The answer of one of the following options is 10 . Which is that?
a] 17-5 + 2
b] $17+2-5$
c] 17-(5+2)
d] $(17-5)+2$

5)Identify the numbers which are non co-primes. a] 11,19
b] 93,32 c] 93,30
d]50,39

10) The predecessor of smallest 8 - digit number is

| a] $99,99,999$ | b] $99,99,991$ |
| :--- | :--- |
| c] $10,00,00,000$ | d] 1,00,00,000 |


7) $21 \div 7+16-5 \times 3$
a] 9
b] 8
c] 4
d] 2
$\square$
8)Two prime numbers which differ by 2 are $\qquad$ . a] Composite number b] Twin prime number c] Even number d] Prime number

9) H.C.F of 36 and 63 is a]19 b]10
c]9
d]18

10)Complete the pattern

11) Absolute value of - 58 is a]58
b]-58
c]0
d]1
12)The set of negative numbers and whole numbers are called $\qquad$ .

13)Add a] 60
$68+(-68)+68+(-8)$
b]68 c]70
d] 50
$\square$
14) Six friends (A , B , C , D, E and F) are sitting in a circle and are facing the centre of the circle. $A$ is between $B$ and $C$. D is between $E$ and $F . B$ and E are opposite to each other. Who is sitting opposite to C ?
a] $E$
b]A
c] $D$
d] F

15) A polygon is a 2-D closed figure made of a] 2 line segments
b]more than 2 line segments
c] less than 2 line segments

d]exactly 3 line segments
16) One million is 1 followed by a] 6 zeros b]4 zeros
c] 5 zeros d] 7 zeros

17) Which of the following is a prime triplet?
a] $5,7,9$
b]7, 9, 11
c] $3,5,7$
d] all of these

## ROUGH WORK

18) If $99 \times 99=9801$ and $999 \times 999=998001$, then 9999800001 is the product of ?
a] $99999 \times 99999$
b] $9999 \times 9999$
c] $99999 \times 9999$
d] $999999 \times 99999$

19) Expressing 16 as a sum of two odd primes, we get
a] $1+15$
b] $9+7$
c] $3+13$
d]all of these
$\begin{array}{rccc}\text { 20) } 1000-111+11+10 \text { is } \\ \text { a] } 900 & \text { b] } 910 & \text { c] } 901 & \text { d] } 1109\end{array}$

20) What is $\frac{301}{129}$ in the lowest terms?
a] $\frac{2}{5}$
b] $\frac{13}{17}$
c] $\frac{7}{3}$
d] $\frac{9}{4}$
$\square$
22)Find the fourth product in the following pattern :

$$
6 \times 7=42
$$

$66 \times 67=4422$
$666 \times 667=444222$
a] 44442222
b] 4442222
c] 444442222
d]444422


## ROUGH WORK

23)The perimeter of an equilateral triangle of side 5 cm is
a] 5 cm
b] $5 \times 5 \mathrm{~cm}$
$\square$
c] $3 \times 5 \mathrm{~cm}$
d $] 10 \mathrm{~cm}$
24) Meera had a measuring tape with cm markings.

She had to measure 12 inches. She measured
a] 15 cm
b] 30 cm
c] 40 cm
d] 50 cm
$\square$
25) Which number completes the puzzle?

## $5,7,11,13,17$, <br> $\qquad$


a] 23
b]19
c] 21
d] 20
26) Insert the appropriate sign

| $20 \%$ of 90 | $\square$ | $90 \%$ of 20 | b |  |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{a}]>$ | $\mathrm{b}]<$ | $\mathrm{c}]=$ | $\mathrm{d}]+$ | $\square$ |

27)IX + XV + XX = a] 45
b]35
c] 76
d] 44

28) Which of the following statements is true? a] $68<18$
b] $45<37$
c] $87<39$
d]16<61

29) Vini can type 28 words per minute. At this rate, how many words can Vini type in 5 minutes?
a]140
b]130
c]143
d]141

30) There are 7405 students in a school. Out of these 2668 are boys. How many girls are there in that school?
a]4737
b]4537
c]3273
d]3372

31)What will be the next in the series?

258, 308, 458, ...... , ........... ,......
a]588,688,788 b]788, 588,988,
c]689, 590, 791 d]508, 658, 708

32)Perimeter of a circle is called its

| a] circumference | b]area |
| :--- | :--- |
| c] diameter | d] radius |


33) The sum of the 4 angles of a quadrilateral is a] $180^{\circ}$ b] $360^{\circ}$
c] $90^{\circ}$
d $] 60^{\circ}$


ROUGH WORK
34) In ascending order : $\frac{1}{4}, \frac{1}{9}, \frac{1}{6}, \frac{1}{3}$ will be
a] $\frac{1}{4}, \frac{1}{6}, \frac{1}{9}, \frac{1}{3}$
b] $\frac{1}{9}, \frac{1}{6}, \frac{1}{4}, \frac{1}{3}$
c] $\frac{1}{4}, \frac{1}{9}, \frac{1}{3}, \frac{1}{6}$
d] $\frac{1}{3}, \frac{1}{9}, \frac{1}{6}, \frac{1}{4}$
35) Find the value represented by $\square$ in the 6 - digit number 458 ㅁㅁ. The number is the smallest and is divisible by 3,4 and 5 .
a] 100
b] 105
c] 101
d]125

36)Playing dice generally come in the shape of a] rectangle b] square c] cube d] cuboid

37)The longest chord of a circle is
a] angle
b]arc
c] diameter
d]radius
38) If 5 cm and 6 cm are the two sides of a triangle, then the length of third side may be
a] 4 cm
b] 11 cm
c] 12 cm
d] 30 cm
$\square$
39)A set of a circle with a common centre and different radii are called
a] concentric circle
b]radii
c] designs
d]pattern

40)What is the figure inside the circle called?
a] Kite
b] Square
c] Rectangle
d] Rhombus

41)Volume of a cuboid with I $=5 \mathrm{~cm}, \mathrm{~b}=3 \mathrm{~cm}$, $\mathrm{h}=8 \mathrm{~cm}$ is
a] 120 cm
b] 40 cc
c] 15 cc
d] 220 cm

42) $0.002 \times 0.05$ is equal to
a] 0.00100
b]0.01000
c] 0.0001 d] 0.001

43) Find the pair of months whose sum is 62 days?
a] January- February
b] A pril- May
c] July-A ugust
d] October-N ovember
44) In $780 \times a=1716 \times b$, find the smallest value of $a$ and $b$.
a] $a=11, b=5$
b] $a=2, b=1$
c] $a=5, b=11$
d] $a=1, b=2$
45) The HCF of two co-prime is
a] 1
b] >then them
$\square$
c] < then them
d]0
46)A vessel contains 5 litre of milk. If 1 litre 550 ml milk is taken out of it, how much milk is left in the vessel?
a] 31550 ml
b] 31450 ml
c] 31460 ml
d] 31560 ml

47) The angle between two perpendicular line is a] $180^{\circ}$ b] $30^{\circ}$
c] $90^{\circ}$
d] $60^{\circ}$
$\square$
48) $A$ is a prime number. $A+6$; $A+8, A+12$; $A+$ 14 are also prime numbers. What is $A$ ?
a] 9
b]5
c] 7
d] 3
$\square$
49)The number of year on a decade is a] 5
b]10
c] 15
d]20
50) Round off 497.78 to the nearest tenth
a] 497.7
b] 497.8
c] $497.79 \quad$ d] 497.77


## ROUGH WORK

