

AI-Hilal MHS,

A. BARKATHULLAH, GINGEE

Class : 8

GINGEE

Register
Number

2 4 0 5 5 4

SECOND MID TERM TEST - 2024**MATHEMATICS**

Time Allowed : 1.30 Hours]

[Max. Marks : 50

I. Choose the correct Answer.

5x1=5

- $(a - b) = 3$ and $ab = 5$ then $a^3 - b^3 = \dots\dots\dots$
a) 15 b) 18 c) 62 d) 72
- One factor of $x^3 + y^3$ is
a) $(x-y)$ b) $(x+y)$ c) $(x+y)^3$ d) $(x-y)^3$
- What sum of money will earn Rs 500 as simple interest in 1 year at 5% Per annum?
a) 50000 b) 30000 c) 10000 d) 5000
- If 5 Persons can do 5 jobs in 5 days, then 50 persons can do 50 jobs in how many days?
a) 5 b) 6 c) 7 d) 8
- The largest number of the three consecutive number is $x+1$, then the smallest number is
 $\dots\dots\dots$
a) x b) $x+1$ c) $x+2$ d) $x-1$

II. Fill in the blanks:

5x1=5

- $a^3 + b^3 = (a+b)^3 \dots\dots\dots$
- The value of y in the equation $y - 9 = (-5) + 7$ is $\dots\dots\dots$
- The solution of the equation $ax + b = 0$ is $\dots\dots\dots$
- A alone can do a piece of work in 35 days. If B is 40% more efficient than A, then B will finish the work in $\dots\dots\dots$ days.
- A side is $(x+1)$ cm then volume of the cube is $\dots\dots\dots$

III. Match the following.

5x1=5

- $\frac{x}{2} = 10$ - $x = 4$
- $20 = 6x - 4$ - $x = 1$
- $2x - 5 = 3 - x$ - $x = 20$
- $7x - 4 - 8x = 20$ - $x = \frac{8}{3}$
- $\frac{4}{11} - x = \frac{-7}{11}$ - $x = -24$

a) (i), (ii), (iv), (iii), (v)

b) (iii), (iv), (i), (ii), (v)

c) (iii), (i), (iv), (v), (ii)

c) (iii), (i), (v), (iv), (ii)

IV. Answer any ten of the following:

10x2=20

- Find the value of $(3a+4c)^2$ by using $(a+b)^2$ identity.
- Find the Value of $(98)^3$

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18. Factorise: $9x^2 - 6x - 8$.
19. Factorise: $49x^2 - 64y^2$
20. Find the value of x : $\frac{2x}{3} - 4 = \frac{10}{3}$
21. Solve: $2x + 5 = 9$.
22. A and B together can do a piece of work in 16 days and A alone can do it in 48 days. How long will B take to complete the work?
23. If the numerator of a fraction is increased by 50% and the denominator is decreased by 20% then it becomes $\frac{3}{5}$. find the original fraction?
24. How many outcomes can you get when you Toss three coins once?
25. Find the HCF of the Following 455 and 26.
26. Factorise: $16P^4 - 1$
27. 7 is added to a given number to give 19 (Convert the Statement into linear Equation)

V. Answer any 2 questions.

2x5=10

28. Factorise: $y^3 - 18y^2 + 108y - 216$
29. The length of a Rectangular field exceeds its breadth by 9 meters. If the Perimeter of the field is 154m. Find the Length and Breadth of the Field.
30. A is Thrice as Fast as B. If B can do a Piece of work in 24 Day then find the number of days they will take to complete the work together.
31. A can do a work in 45 days. He works at it for 15 days and then, B alone finishes the remaining work in 24 days. Find the time taken to complete 80% of the work, if they work together.

IV. Answer any 1 Question

1x5=5

32. Construct a Parallelogram BIRD with BI = 6.5 cm, IR = 5cm and $\angle BIR = 70^\circ$ also find its Area.
33. Construct a Rhombus ROSE with RO = 5cm and RS = 8cm. Also find its Area.