Common Second Mid Term Test - 2024



Standard 8

Time: 1.30 Hrs.

MATHS

Marks: 50

Part - I

Choose the correct answer: A

5×1=5

- 1) (a-b) = 3 and ab = 5 then $a^3-b^3 = ____$
 - a) 15
- b) 18

- 2) The largest number of the three consecutive number is x+1 then the smallest number is b) x+1 c) x+2 d) x-1

- 3) 24 men can make 48 articles in 12 days. Then 6 men can make d) 24 articles in 6 days.

b) 12

- c) 18
- 4) Two numbers are said to be co-prime numbers if their HCF is

b) 3

- c) 0 .

- 5) Area of the parallelogram is
 - a) $\frac{1}{2}$ bh sq.unit

b) bh sq.unit

c) lb sq.unit

d) $\frac{1}{2} \times d_1 \times d_2$ sq.unit

B] Fill in the blanks:

5×1=5

- 6) The value of x in the equation x+5 = 12 is _____ 7) The linear equation in one variable has _____ solution.
 - 8) One sixth of a number when subtracted from the number itself gives 25.
 - 9) If 5 persons can do 5 jobs in 5 days, then 50 persons can do 50 jobs in __days.
- 10) F(n) = F(n-1) +____

C] True (or) False:

5×1=5

- 11) Factors of $9x^2+6xy$ are 3x, 3x+y.
- 12) Linear equation in one variable has only one variable with power 2.
- 13) 5(3x+2) = 3(5x-7) is a linear equation in one variable.
- 14) The eleventh Fibonacci number is 89.
- 15) If two persons X and Y can complete some work individually in a and b days then their one day's work will be $\frac{1}{a}$ and $\frac{1}{b}$ respectively.

Match: D]

5×1=5

- 16) 20 = 6x-4 (a+b)(a-b)
- 17) 7x-4-8x = 20 (a-b)(a-b)(a-b)
- 18) a^2-b^2
- 19) $(a-b)^3$
- $x = \frac{3}{8}$
- 20) 2x-5 = 3-x
- x = −24

TVL8M

10 12 Menu 11

PSWOR AND COME

Answer ANY SIX questions only:

 $6 \times 2 = 12$

- 21) Simplify (3x+5y) (3x-5y) by using (a+b) (a-b) identity.
- 22) Factorise: x2+14x+49
- 23) Convert the statement "7 is added to a given number to give 19" into linear equation.
- 24) One number is seven times another. If their difference is 18 find the number.
- 25) Multiply: $(4x^2+9)$ and (3x-2)
- 26) Give two examples of Inverse Proportion.
- 27) A cement factory makes 7000 cement bags in 12 days with the help of 36 machines. How many bags can be made in 18 days using 24 machines?
- 28) 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?
- 29) Find the HCF of 18 and 27.

Part - III

Answer ANY TWO questions only:

2×5=10

- 30) Find the value of x : $\frac{3x-2}{4} \frac{(x-3)}{5} = -1$
- 31) A number consists of two digits whose sum is 9. If 27 is subtracted from the original number, its digits are interchanged. Find the original number.
- 32) A is thrice as fast as B. If B can do a piece of work in 24 days, then find the number of days they will take to complete the work together.

Part - IV

Answer only ONE question:

1×8=8

- 33) a) Construct a parallelogram CALF with CA = 7 cm, CF = 6 cm and AF = 10 cm.

 Also find its area. (OR)
 - b) Construct a rhombus FACE with FA = 6 cm and FC = 8 cm. Also find its area.