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10. Express 4x^2y^2 as power of product.
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- 11. Find the value. $\sqrt{121} \sqrt{81}$
- 12. Write two platonic Solids.
- 13. If $3 \times 7 \times 11 = 231$ find which triangular number is 231.
- 14. Find the value. $(-1)^{2022} (-1)^{2021}$
- 15. If $P = \{Letters in the word "CANADA"\}$ write the element of P.
- 16. Simplify 50 0.12 x 10.
- 17. Perimeter of a square is 5a units. write the algebraic expression for the length of a side of the square.
- 18. Find the value $2^3 x 3^2$
- 19. If a regular solid has 6 vertices and 12 edges what is the name of that solid?
- 20. Find the angle of x.



(20x2 = 20 Marks)



b. Which square number is the sum of $1+3+5+\ldots+45+45$.

c. Find the Value.

i.
$$\sqrt{3 \times 3 \times 5 \times 5}$$

ii.√324

(2+4+2+2+2=12 Marks)

03. a. AE is a straight line in the given figure.



- i. What is the supplement of AÔC.
- ii. If $a+b=50^{\circ}$, Find the value AÔB.
- iii. Find the value of $D\hat{O}E$.
- b. The straights lines AB and CD are intersect at point O.



- i. Find the angle of x.
- ii. Find the angle of y.

iii. Find the magnitude of AÔC

(2+2+2+2+2+2=12 Marks)

04. a. Construct a cube and two square pyramids such that the area of the base of square pyramid and area of a face of cube are equal. Construct a composite solid by pasting square pyramids on opposite faces of the cube. Find the number of vertices, faces and edges for the composite solid.

b. In a regular dodecahedron.

i. What is the shape of a face.

ii. Verify Euler's relationship for this solid.

b. Factorize.

i. $x^2 + x$

ii. $4m^2n - 6mn^2 + 10mn$

(3+2+4+1+2=12 Marks)

Things	Mass	Price (Rs)
Flour	1 kg	а
Sugar	500 g	b
Dhal	1 kg	С
Peanut	250 kg	d

05. a. given information shows in the notice board of a shop.

Write an algebraic expression for the followings.

i. The price of 1 kg of flour and 1 kg of sugar.

ii. The price of $\frac{1}{2}$ kg of sugar and $\frac{1}{2}$ kg of dhal.

iii. A person gave Rs. 1000.00 to the shop keeper to buy 200g of sugar and 200g of peanut find the balance he received.

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b. Solve by removing the brackets.
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i. 3 (5a - 2) - 14

ii. 5m(m+2) - 3m(m-3)

c. If x=2, y=-1 and z=5 Find the value of $4xy^2z^3$

(2+2+2+2+2=12 Marks)

06. a. i. Write 900 as the product of prime number.

ii. Write 900 as the product of powers of the prime number.

iii. write question (ii) as powers of product.

b. Simplify.

i. 12t 782kg + 20t 537kg

ii. 8t 75 kg x 12

iii.15t 21 kg ÷ 9