

CLASS-10 (26/5/20)

\*Hindi

\* Doordarshan ke labh Hani Vishay per ek nibandh likhiye.

Sanket Bindu- durdarshan ka Arth aur Parichay, durdarshan ki upyogita, durdarshan ki lokpriyata ke karan, durdarshan se hone wali haniyan, Nishkarsh.

\*SCIENCE

Chemistry

1... What type of reaction is represented by the digestion of food in our body?

2.... What is antioxidant ?why are they added to fat and oil containing foods?

3.... What type of reaction are represented by the following equation?

a..  $\text{CaCO}_3 \Rightarrow \text{CaO} + \text{CO}_2$

b...  $\text{CaO} + \text{H}_2\text{O} \Rightarrow \text{Ca(OH)}_2$

C...  $\text{CuSO}_4 + 2\text{NaOH} \Rightarrow \text{Cu(OH)}_2 + \text{Na}_2\text{SO}_4$

4..... What is Redox reaction explain with examples?

\*MATHS

Do it from the attached image.

\*ENGLISH

ANSWERS of Exercise-10

1. at , in

2. beside , on

3. under , on

4. beside

5. front

6. on

7. in

8. under

9. over

10. over

11. in

12. into

13. beside

14. between

15. on ,in

16. in ,in

17. on, in

18. in , on , below.

19. on , at ,at

20. in ,in

25/may X (maths)

Ex.1. Find the nature of the roots of the quadratic equation  $4x^2 - 5x + 3 = 0$ .

Sol<sup>n</sup>:-  $4x^2 - 5x + 3 = 0$

$a=4, b=-5, c=3$  on comparing with standard form of quadratic eq<sup>n</sup>.

$$D = b^2 - 4ac$$

$$= (-5)^2 - 4 \times 4 \times 3 = -23 < 0$$

$\therefore D < 0$ , hence, the given equation has no real roots.

Ex.2 Find the values of  $k$  for which the quadratic equation  $2x^2 + kx + 3 = 0$  has two real equal roots.

Sol<sup>n</sup>:-  $a=2, b=k, c=3$  for real equal root  $D=0$

$$\begin{aligned} D &= b^2 - 4ac \\ &= k^2 - 4 \times 2 \times 3 \\ &= k^2 - 24 \end{aligned} \quad \Rightarrow \quad \begin{aligned} k^2 - 24 &= 0 \\ k^2 &= 24 \\ \boxed{k = \pm 2\sqrt{6}} \end{aligned}$$

Ex.3 show that equation  $2x^2 - 6x + 3 = 0$  has real roots.

Sol<sup>n</sup>:-  $a=2, b=-6, c=3$

$$D = b^2 - 4ac$$

$$= (-6)^2 - 4 \times 2 \times 3$$

$$= 36 - 24 = 12$$

$\Rightarrow \underline{D > 0} \Rightarrow$  So the given equation has real roots.