B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

PERIODIC TEST-II 2025-26
CHEMISTRY (043)

Class: XI **Time: 1 hour**
Date:07 .11.25 **Max Marks: 25**

Section A

1. (b) Li 2. (a) H^+ ions. 3. (c) H_2O_2 4. (c) gas 5. (c)

Section B

6. (a) CuO is reduced and H2 is oxidised (b) Fe_2O_3 Reduced CO is oxidised

7. In the reactions given below, identify the species undergoing oxidation and reduction:

(a) H_2S oxidation Cl_2 Reduction

(b) $3Fe_3O_4$ reduction Al (s) oxidation

8. Residual charge on atom and +6

9. From the equation q = n C ΔT, we can say: At constant pressure P, we have qP = n CPΔT This value is equal to the change in enthalpy, that is, qP = n CPΔT = ΔH Similarly, at constant volume V, we have qV = n CVΔT This value is equal to the change in internal energy, that is, qV = n CVΔT = ΔU We know that for one mole (n=1) of an ideal gas, ΔH = ΔU + Δ(pV) = ΔU + Δ(RT) = ΔU + R ΔT Therefore, ΔH = ΔU + R ΔT Substituting the values of ΔH and ΔU from above in the former equation, CPΔT = CVΔT + R ΔT

Section C

10. Step 1 find the O N Step 2 find the OHR and RHR

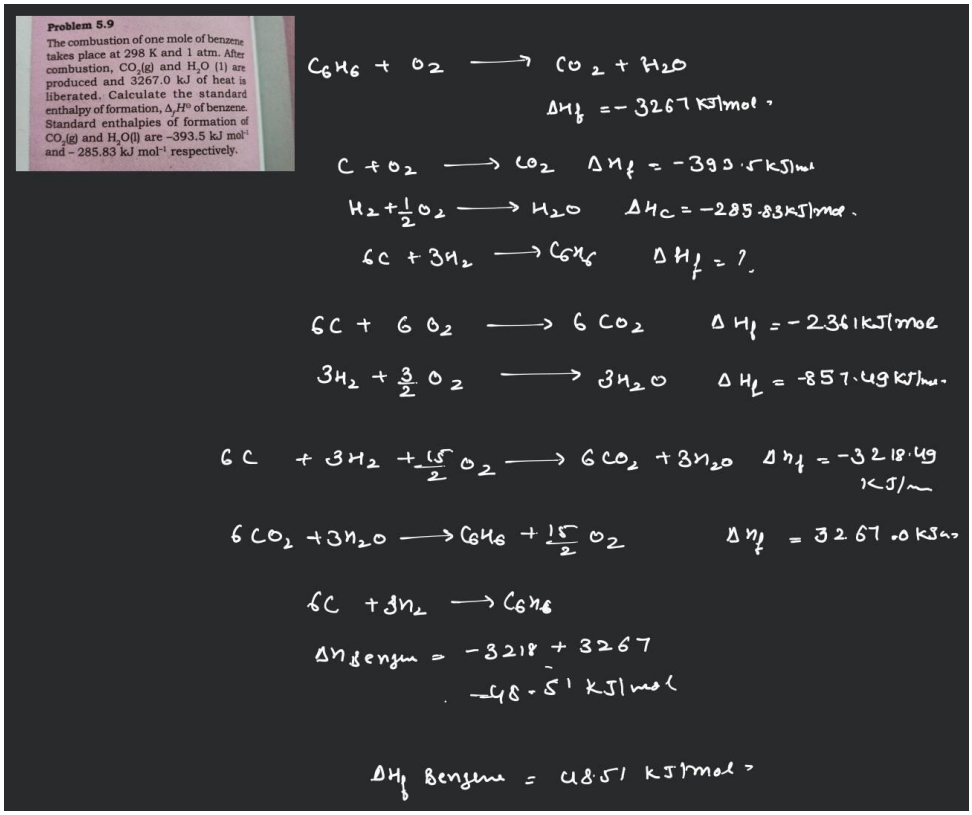
Step 3 balance electron by OH- ion Step 4 balance O by H2O

Step 5 balance electron by comparing both the equation.

11. Step 1 find the O N Step 2 find the OHR and RHR

Step 3 balance O by H2O Step 4 balance Hydrogen by H+ ion

Step 5 balance electron by comparing both the equation.

12. 

13. : (a) Exchange both energy and matter (b) Exchange only energy not the matter (c) Neither Exchange energy nor matter

**********ALL THE BEST**********