

**Practice Paper – I (2021-22)**  
**Class-XI**  
**Chemistry (Subject Code -043)**  
**(Marking scheme)**

**Instructions-**


**All questions carry equal marks.**

- **Section A : first 20 questions will be considered for evaluation.**
- **Section B : first 20 questions will be considered for evaluation.**
- **Section C : first 05 questions will be considered for evaluation.**
- **There is no negative marking.**

**Section A**

1. C, Orientation
2. A, mole of nitrogen gas =  $1.4/28=0.05$  moles =  $6.022 \times 10^{23} \times 0.05 \times 2 = 6.022 \times 10^{22}$
3. A, Na
4. D,  $ClF_3$
5. C,  $CH_4$
6. D,  $KMnO_4$
7. C, Sigma bond = 12 , Pi bond = 3
8. A, functional isomers
9. B,  $H_2O$  is bent
10. C, 4s
11. B,  $P > Cl > N > F$
12. C, Due to resonance  $CH_2=CH-CH_2^+$  is more stable.
13. C, 3- Ethyl-1,1- dimethylcyclohexane
14. B, Protium
15. B,  $\lambda = \frac{h}{mv}$
16. B,  $2 H_2O_2 \longrightarrow 2H_2O + O_2$
17. B,  $O_2^{2-}$
18. B, Two,  $n-l-1=2$   
 $4-1-1=2$
19. D,  $Fe_2O_3$
20. D, 

↑		↑	↑	↑
2s		2p		
21. C, valence electron
22. D,  $n^2$   $4^2=16$
23. C, group of 7,8,9. It is called hydride gap.
24. A, a pair of electrons to donate

25. B, mole fraction.
26. A, nitrogen, due to half filled electronic configuration and small size.
27. A, The complete balanced equation is  $IO_3^- + 5I^- + 6H^+ \longrightarrow 3H_2O + 3I_2$
28. D,  $CH_3-CH=CH_2$ , Due to presence of  $\alpha$ -H
29. A,  $C_2D_2 + Ca \longrightarrow C_2D_2 + Ca(OD)_2$
30. B, In 14 g of  $N_2$   
Mole of  $O_2 = 16/32 = 0.5$   
Mole of  $N_2 = 14/28 = 0.5$   
Equal moles carry equal no. of molecules of  $N_2$  and  $O_2$
31. D,  $Fe^{+3}, Mn^{2+}$   
both have (Ar)  $3d^5$
32. B, (ii) and (iii)
33. C,  $O_2^+ > O_2 > O_2^-$  More bond order and more stability.
34. C
35. C,  $SnCl_2$  acting as a reductant.
36. B 
37. D, 0.5 mole of  $CH_4$
38. B, Its property of catenation.
39. A,  $\lambda = h/mv$   
 $= 6.62 \times 10^{-34} / 0.1 \times 100$   
 $= 6.62 \times 10^{-33} \text{ m}$
40. B, three isomers
41. C, Unbinilium, Ubn
42. D  $CH_3-\underset{\text{Cl}}{\underset{|}{\text{CH}}}-\underset{\text{Br}}{\underset{|}{\text{CH}}}-\text{CHO}$
43. C, n l  $m_l$   
3 2 -2
44. A, alkali metals
45. C, Assertion is correct but reason is false.
46. C, Assertion is correct but reason is false.
47. C, Assertion is correct but reason is false.
48. B, Both A and R are true but R is not correct explanation of assertion.
49. A, Both A and R are true, And Reason is the correct explanation of assertion.
50. C, (i)-C, (ii)-D, (iii)-B, (iv)-A
51. C, stoichiometric-Ionic hybrid; Non-stoichiometric-metallic hydride
52. A, s-orbital: spherical shape ; p-orbital: dumbbell shape
53. C, inductive effect
54. D, resonance effect
55. A, halogens