



CHEMISTRY

BOOKS - OMEGA PUBLICATION

SAMPLE QUESTION PAPER -IV (PUNJAB)

Question

1. Mass of 1 molecule .of NH_3 is _____.

A. 5.6×10^{-23} g

B. 1.4×10^{-23} g

C. 5.6×10^{-23} g

D. 7×10^{23} g

Answer:



Watch Video Solution

2. What is periodicity? What is the cause of periodicity?



 [Watch Video Solution](#)

3. Define the following terms:

Critical pressure



[Watch Video Solution](#)

4. The value of R is _____ $JK^{-1}mol^{-1}$.



[Watch Video Solution](#)

5. What is the structure of H_2O_2 ?



[Watch Video Solution](#)

6. What is the general electronic configuration" of carbon family?



[Watch Video Solution](#)

7. Draw the structure of in-organic benzene.



[Watch Video Solution](#)

8. What is the principle of chromatographic separation ? Name the different types of chromatography commonly used.



[Watch Video Solution](#)

9. What is the difference between covalent radius and van der Waals radius?



[Watch Video Solution](#)

10. Explain why carbon differs from rest of the family members.



Watch Video Solution

11. Define solubility product. How does it differ from ionic product ?



Watch Video Solution

12. What is the difference between e.m.f. and potential difference?



Watch Video Solution

13. Give general electronic configuration of p and d-block elements.



Watch Video Solution

14. Define green chemistry.



[Watch Video Solution](#)

15. Give resonating structures of CO and CO_2 .



[Watch Video Solution](#)

16. What is fog ?



[Watch Video Solution](#)

17. Give-one reaction in each case to show that

H_2O_2 is

an reducing agent



Watch Video Solution

18. Give-one reaction in each case to show that

H_2O_2 is

an reducing agent



Watch Video Solution

19. Give one reaction in each case to show that

H_2O_2 is

an reducing agent



Watch Video Solution

20. Calculate volume occupied by two moles of gas at $27^\circ C$ and under a pressure of 1 atmosphere.



Watch Video Solution

21. Define absolute zero.



[Watch Video Solution](#)

22. Distinguish between inductive and electromeric effect.



[Watch Video Solution](#)

23. Explain the following

Enthalpy of fusion



[Watch Video Solution](#)

24. Explain Enthalpy of combustion.



Watch Video Solution

25. Explain Enthalpy of neutralisation.



Watch Video Solution

26. How ionic product of water change with temperature ?



Watch Video Solution

27. Classify the following into Lewis acids or

Lewis bases giving reasons :

H_2O , BF_3 , NH_3 , SiF_4 , Ag^+ , Cl^- , CO_2 .



Watch Video Solution

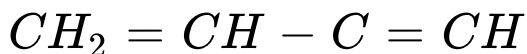
28. Give the IUPAC name of the following

$(C_2H_5)_3C - OH$



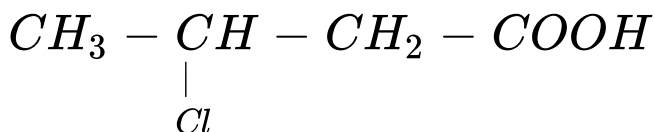
Watch Video Solution

29. Give the IUPAC name of the following



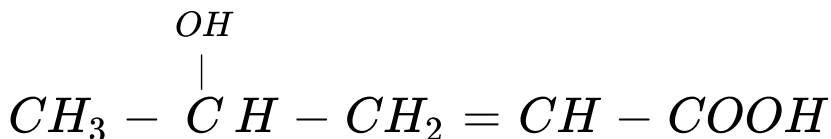
Watch Video Solution

30. Give the IUPAC name of the following



Watch Video Solution

31. Give the IUPAC name of the following



Watch Video Solution

32. Group 2 elements are denser and harder than group 1 elements. Why ?



Watch Video Solution

33. How is caustic soda manufactured ?



[Watch Video Solution](#)

34. Give the molecular orbital diagram of O_2 molecule and calculate its bond order.



[Watch Video Solution](#)

35. What is the difference between atomic and molecular orbital



[Watch Video Solution](#)

36. What is hybridisation on the basis of hybridisation explain the geometry of PF_5 .



Watch Video Solution

37. What is the difference between orbit and orbital.



Watch Video Solution

38. What is H - spectrum? How it can be explained by Bohr's Theory.



Watch Video Solution

39. Give and justify the electronic configuration of copper and chromium.



Watch Video Solution

40. What is the wavelength of light emitted when the electron in a hydrogen atom undergoes transition from an energy level with $n = 4$ to an energy level with $n = 2$?



Watch Video Solution

41. Give the mechanism of sulpho'nation and nitration of benzene.



Watch Video Solution

42. Why alkenes are more reactive than alkanes?



Watch Video Solution

43. Write a short notes on following:

Markownikov's rule



Watch Video Solution

44. Write a short notes on following:

Wurtz reaction



Watch Video Solution

45. Write a short notes on following:

Ozonolysis of alkenes



Watch Video Solution