

Guess Paper – 2014
Class – XI
Subject – Chemistry

Instructions-

(i) Solve/answer all the questions.

(ii) Q. No. 1 to 8 will carry one mark.

(iii) Q. No. 9 to 15 will carry two marks. (iv) Q. No. 16 to 20 will carry three marks.

(v) Q. No. 21 to 27 will carry four marks. (vi) Q. No. 28 to 30 will carry five marks.

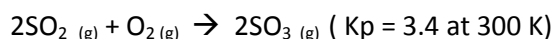
- =====
1. Explain the law of **conservation of mass**?
 2. Define **Element**.
 3. How many atoms are present in 0.7 gm of N_2 ?
 4. Write the all four **Quantum number** for atomic No. 19?
 5. State **Dobereiner's triads**, giving examples?
 6. Define **covalent bond** .
 7. Explain **Critical temperature** .
 8. Define **Boyle 's law** .
 9. What is **heat of neutralization** ?
 10. Give **conjugate acids** of the followings.
 HCO_3^- , O^- , NH_3 , N_3^-
 11. Define **First Law Of Thermodynamics** .
 12. A swimmer coming out water from a pool is covered with a film of water weighing 80 gm. How much heat must be supplied to evaporate this water? ΔH vap of water = 40.70 kj per mole?

13. What is **acidic buffer** solution ?
14. Define **Le Chatelier's Principle** with example .

OR

How much quantity of sodium hydroxide is required to prepare N/20 NaOH 250 ml solution?

15. Determine the Kc for the Reaction at 300 K.

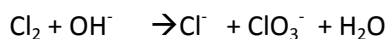


16. What is distillation?

OR

What is **ozonolysis** ?

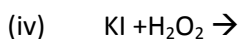
17. Balance the equation by ion electron method



18. How will you remove **Permanent hardness of water** Give one method?
19. What do you understand by **10 volumes H₂O₂**.
20. What will you prepare by **Solvay Process** Give only equations?
21. What is the role of **Gypsum** in cement? How will you convert Gypsum in to plaster of Paris?
22. Draw the Structure of Inorganic Benzene, DiBorane , BF₃, PCl₅.

OR

- (i) Why the diamond is too hard? Explain on the basis of its structure.
- (ii) What is inductive effect? Explain with example.
23. Balance & complete the following equation
- (i) $\text{BF}_3 + \text{LiH} \rightarrow$
- (ii) $\text{B}_2\text{H}_6 + \text{H}_2\text{O} \rightarrow$
- (iii) $\text{NaOH} + \text{CO}_2 \rightarrow$



24. Write the formula of Acetone, Ethanol, 2,3 dimethyl propane, Ethoxy ethane, Glycerine & Phenol?
25. What is Standard **Hydrogen Electrode** .If Zn metal is placed in Cu SO₄ solution what will happen Explain?
26. (i) What is **Photo chemical Smog** ?
 (ii) How the **Acid Rain** is harmful to **TAJ**?
27. (i) What is **Bio Chemical Oxygen Demand** ?
 (ii) How will you control **global warming**?

Or

Calculate the Enthalpy of formation of benzene, given the standard enthalpy of Combustion of benzene to be -3266kj per mole and standard enthalpy of formation of CO₂ (g) and H₂O(l) to be -393kj per mole and -286 kj per mole ?

28. (i) What is Hund's Law? Explain with example.
 (ii) Combustion of fossil fuel creates the respiratory track infection due harmful gases released during the process, which type of fuel you will suggest to avoid such problems.
29. Write following Conversions-
- (i) Phenol to Benzene
 (ii) Benzene to Toluene
 (iii) Methyl Bromide to Ethane
 (iv) Sodium Ethanoate to Methane
 (v) Ethyl Chloride to Ethane
30. (i) Noble gases tend to be less reactive. Explain?
 (ii) What is photoelectric effect?

(iii) Draw the molecular orbital diagram of F_2

Or

- (i) First ionization enthalpy of 'Mg' is more than that of 'Na' but second ionization enthalpy of 'Mg' is less than that of 'Na'.
- (ii) ter. -Carbonium ion is more stable than primary .Why ?
- (iii) A sample of H_2 gas has volume 906 cm^3 at 27°C . Calculate the temperature at which it will occupy 500 cm^3 of volume.

*****End*****

Paper Submitted By:

Name: Gyan Prakash

Email: gyanchem@yahoo.com

Phone No. 09602506926