

FIRST TERM MODEL EXAMINATION 2020-21

STD:X

CHEMISTRY

Time:1 1/2 HRS

Marks:40

Questions 1 to 5 carries 1 marks.6 to 10 carries 2 marks.11 to 15 carries 3 marks.16 to 20 carries 4 marks.(from each section write any 4 answers)

Section-A

**1.Among the following elements ,which one show the +2 oxidation state
(Fe, Ag, K)**

**2.The most electronegative element is
(Au, F, Na)**

**3.One Avogadro number is equal to
(6.02×10^{21} 6.02×10^{22} 6.02×10^{23})**

**4. What is the GMM of 64 gm of oxygen
(2, 32, 64)**

**5.Reaction between Zn and CuSO_4 ,oxidation will happen to ----
(Cu, Zn, SO_4)**

Section-B

**6.fresh magnesium ribbon losing its luster
when kept exposed in the air for some days. Why?**

7. Calculate the number of molecules present in 90 gm of water?

8.Write any 2 examples of charle's law.

9. Can you explain why d-block elements shows different oxidation states?

10. What is the family name of elements belonging to the 17th group? What is their common valency?

Section-C

11. Calculate the mass of 112 L CO₂ gas kept at STP (molecular mass = 44). How many molecules of CO₂ are present in it?

12. The size of the air bubbles rising from the bottom of an aquarium increases. Can you explain the reason? Write any 2 practical applications of this law.

13. What happened when a 'Mg' rod is dipped in 'CuSO'₄ solution. Write down the chemical equation?

14. Write down the electronic configuration of chromium?

15. The electronic configuration of an element is $1s^2 2s^2 2p^5$. Find the block and period of the element?

Section-D

16. The molecular mass of ammonia is 17.

a) How much is the GMM of ammonia?

b) Find out the number of moles of molecules present in 170g of ammonia?

17.

Gas	Volume (L)	No. of molecules
Nitrogen	10 L	x
Oxygen	5 L	
Ammonia	10 L	---
Carbon di oxide	---	2x

a) Complete the table.

b) Which gas law is applicable here?

18. Draw a galvanic cell made of Zn and Cu. Write down the anode and cathode reactions?

19. Write the electronic configuration of Zn^{+2} . Find the group and period of Zn?

20. Write any 3 properties of d- block elements?