

STD 10 FIRST TERM EXAMINATION
CHEMISTRY

Maxmark:40
Time:90 Min

SECTION A

Answer any 5 questions. Each question carries 1 score (5x1= 5)

1. The maximum number of electrons that can be accommodated in the f subshell is
2. Find the block of the element X belongs to . X - $1s^2 2s^2 2p^6 3s^2 3p^6 3d^3 4s^2$
3. Like the d block elements most of the elements inblock show variable oxidation states.
4. 4g Hydrogen =GMM
5. Mathematical form of Charle's law is
6.mole of molecule means 6.022×10^{23} molecules

SECTION B

Answer any 4 questions. Each question carries 2 score (4x2=8)

7. What will be the mass of 224 L of HCl at STP? (At.mass H -1,Cl -35.5)
8. Write the gaslaw relates with
 - a. The hydrogen balloon bursts when it reaches at high altitude
 - b. The balloon bursts when it is placed in sunlight for some time
9. Write any 2 characteristics of the element Z - $1s^2 2s^2 2p^6 3s^2 3p^6$
10. Some 12th group elements are called pseudo transition elements; why? Which block does these elements belongs to?
11. Fe - $1s^2 2s^2 2p^6 3s^2 3p^6 3d^6 4s^2$ The electronic configuration of Iron is given write the electronic configuration of Fe^+ in the compound $FeCl_3$

SECTION C

Answer any 5 questions. Each question carries 3 score (5x3=15)

12. R - $[Ar] 3d^1 4s^2$ write the complete subshell configuration , atomic number and group of the element R
13. complete the table

Atomic mass	Mass in gram	No of atom
12	(a)	$1 \times N_A$
(b)	3	$3 \times N_A$
16	80	(c)

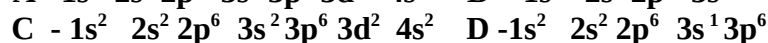
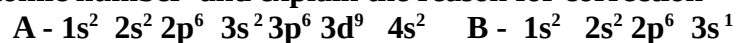
14. Find the no of atoms in 67.2 L CO_2 at STP
15. Write the subshell configuration of ${}_{29}\text{Cu}$; write the speciality of this configuration
16. M - $1s^2 2s^2 2p^6 3s^2 3p^4$ Write the group number, valency & period of the element M
- 17 Find the exact chemical formula of the compound AB and the oxidation state of A & B when they are in that compound (valency of A- 1 , B - 2)

SECTION D

Answer any 3 questions. Each question carries 4 score

(3x4= 12)

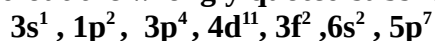
18. Check the electronic configuration and make correction if is necessary without changing its given atomic number and explain the reason for correction



19. Complete the table considering a particular gas at constant temperature and state the gaslaw with its mathematical form

Pressure(atm)	(a)	3	9
Volume (L)	1	6	(b)

20. Find out the wrongly quoted subshells and state the reason



21. Go through the symbolic periodic table and find the answers of the following questions

1																		18	
	2													13	14	15	16	17	
A		3	4	5	6	7	8	9	10	11	12		E					G	
	B		C											F					H
					D														

- What are the transition elements in this table?
- Which is the element having +1 oxidation state?
- Which element having 4 electrons in the outer most shell?
- Which element having highest ionisation energy in the P block?
