CLASS – VIII   TIME – 40 Mins.
SUB – Chemistry   M.M. – 25

Q.1. **Complete the following table**:   **[4 x ½ = 2]**

Serial no	Example	Nature of reaction
1	$NH_3 + HCl \longrightarrow NH_4Cl$	
2		Displacement reaction
3	$KNO_3 \longrightarrow KNO_2 + O_2$	
4		Double displacement reaction

Q.2. **Balance the following equation:**   **[2]**
        Copper + Conc.Sulphuric Acid $\rightarrow$ Copper Sulphate + Sulpher dioxide +Water
   Iron + Chlorine $\rightarrow$ Ferric Chloride.

Q.3**. Match the column:**   **[4X1=4]**

Column – A		Column – B
a. An alkali react with		a. $NaOH+HCl \longrightarrow NaCl+H_2O$
b. Al to form H_2		b. Au
c. Neutralisation rect.		c. $^{40}Ar_{18}$ and $^{40}Ca_{20}$
d. Symbol of Gold		d. NaOH
e. Isobars		
e. ^{12}C and ^{14}C		
f. $NaOH+Zn \longrightarrow Na_2ZnO_2 + H_2$		
g. $Ca(OH)_2$		
h. Go		

Q.4.a. Find molecular weight of $K_4[Fe(CN)_6]$.
              [Given atomic wt. K=39, Fe=56, c=12, N=14]
     b. Find out % of Fe in $K_4Fe(CN)_6$ by mass.   [2+2=4]
Q.5. Identify isotopes from the following list.   [2]

$$^2_1A, \ ^{12}_6B, \ ^{12}_5C, \ ^3_1D, \ ^{37}_{17}E, \ ^1_1F, \ ^{35}_{17}G, \ ^{31}_{15}H, \ ^{31}_{14}I$$
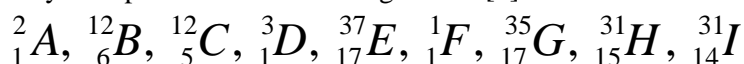
Q.6.a. Name two metallic oxides which can be reduced by
       Hydrogen.
     b. Name three metals which   [2X0.5=3]
Displace H_2 from cold water.
Produce H_2 from reaction with dil. H_2SO_4
Can not Produce H_2 on reaction with dilute acid.

Q.7. **Fill in the blanks:**   [6X0.5=3]

Serial no	Atomic no	Mass no	Proton	Neutron	electron
1	10			10	
2			1	2	

Q.8.a. Blue colour of Copper Sulphate solution fades when
       Iron fillings are added to it, why?
     b.i. Write electronic configuration of an element M
       whose atomic number is 13.

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ii. Draw its atomic diagram.   [2+(1+1)=4]
   [Mass number of M=27]

CLASS – VII   TIME –40 Mins.
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Answer all questions.

Question 1.

a. Write the formula of the compound which matches the following descriptions.
1. A monobasic organic acid.
2. An acid which is present in fizzy drink.
3. A base which does ot contain any metallic ion.
4. A salt which is used for food preservation.
5. A gas which is used for making urea.
6. A sulphur containing weak acid.   [6x0.5=3]

b. Write balanced chemical equation for the followings–
1. Preparation of nitric acid from conc. Sulphuric acid.
2. Sodium hydroxide is treated with hydrochloric acid.
3. Calcium is treated with cold water.
4. Zinc carbonate is treated with dilute nitric acid.   [4x1=4]

Question 2.

a. Correct the following statement if necessary.
1. All bases are alkalis, but all alkalis are not bases.
2. Active metal reacts with an acid to liberate carbon dioxide.
3. Water. Has maximum density at 0^0 c.
4. Hydrogen replaces helium to fill the meterological balloons.

b. Match the items of column A with those of column B   [2+5=7]

A	B.
i. oil spill	$K_2SO_4.Al_2(SO_4)_3.24H_2O$
ii.ceramic candles	a water borne disease.
iii. Alum	reduces the transmission of light into water
iv. Bleaching powder.	Water filter.
v. Typhoid fever	releases chlorine.
	$CuSO_4.5H_2O$

Question 3

Fill in the blanks-
a) Oil forms a separate layer in water and hence is ----------- in water.
b) Solubility oif a solute is the ------- amount of solute in gram that will saturate 100 gm of water at t^0c.
c) Lemon contains ------ acid.
d) When sodium hydroxide is added to ferric chloride solution a ------- precipitate will be obtained.
e) Freezing point of water ------ with increase in pressure.
f) In making mortar ------- is used.   [6x0.5=3]

Question 4. Answer the diagrammatic questions given below-   [3+3=6]
a.

b.

a) Name the salt 'X' and the gas 'Y' formed.
b) Explain why the moist red litmus paper turns blue?
c) Give a balanced equation for the formation of Y. [3+3=6]

Question.5
a) Write one use of :
   1. Sodium hydroxide
   2. Sulphuric acid
b) Calculate   the percent composition of nitrogen in Urea. Formula of Urea is $CO(NH_2)_2$. [At wt: C=12,O=16,N=14,H=1]   [1+1=2]

CLASS – VI   TIME –40 Mins.
SUB – Chemistry   M.M. – 25

Question 1. Fill in the blanks by choosing the correct words from those
    given in brackets.   [4x0.5=2]
------- is the softest mineral. (Talc, diamond, lime)
Symbol of Iron is ----- (fe,Fe.FE,fE.)
Powdering of sugar is a ----- change, (chemical, physical, irreversible, photochemical)

---------- is an example of homogeneous solid-solid mixture. (amalgum, alloy, complex, compound).

Question 2. Give one word for the followings:----------   [4x1=4]
Slow oxidation of Iron --------.
The mixture of solvent and solute:-
Slow change that result in the breaking up, crumbling and destruction of any kind of solid rock------.
Symbol of a soft metal which can be cut with a knife.----

Question 3. Match the column.   [4x1=4]

Column A	Column B
a. Evaporation of Alcohol	i. sedimentary rock
b. Metal	ii.metal nitrate.
c. compound formed with	iii.Electronegative
metal and nitric acid	iv. Physical change
d. coal	v. metal nitrite
	vi.chemical change
	vii. Metamorphic rock
	viii.electropositive

Question.4. Answer the following.   [4x1=4]
    Give an example of liquid element.
    'Aurum' is the latin name of an element. Identify it.
    State whether curding of milk is a physical or a chemical change.
    What is ore?

Question.5. Answer in your own words: -   [4x2=8]
    Give the classification of rocks.
     Or
    Why are fossil fuels considered as non – renewable.

    Why glowing of electric bulbs is a physical change.
    Or
    Burning of paper is a chemical change, why?

    (c) Write down chemical names of (any two):
    i. H_2S ii.MnO_2 iii. CaO iv. $NaNO_3$
    Or
    Write the formulae of the followings (any two)
    i. silicon carbide   ii. Sulphuric acid
    iii. Water   iv. calcium carbonate.

    (d) Name the followings (give example only)any two.
    A metal that is liquid at room temperature.

A non-metal that is liquid at room temperature.
A radioactive element.

Question6. Identify A,B,C,D,E ,F, from the following diagram.   [6x0.5=3]