

Model papers / Questions previous years.

(2m):

(2 marks)



- ① what would happen if chemical equation is not balanced. (T-23)
- ② write any two daily uses of Baking Soda.
- ③ Mention any two uses of Nanotubes.
- ④ Mention the precautions to take while conducting an experiment to prove acids to produce ions only in aqueous solutions.
- ⑤ write any two precautions to prevent corrosion of metals in your daily life.
- ⑥ write any four uses of bleaching powder.
- ⑦ List out the materials required to prove corrosion of iron occurs in presence of air and water (M-25).
- ⑧ Show the formation of N_2 molecule with a diagramme according to valence bond theory. (M-25)
- ⑨ what happens if sulphuric acid is used instead of hydrochloric acid (HCl) in the experiment of acids reacts with metals. (T-25)
- ⑩ write the required materials, chemicals for Esterification reactions (T-24)
- ⑪ Mention uses of Nanotubes which is allotropy form of carbon in daily family. (A-23)
- ⑫ List out the materials required in the experiment reactions of acids with metal (A-23)
- ⑬ Draw Lewis electron dot structures of Cl_2 and Nitrogen atom.

(4M) Model papers / Previous Year Questions (4M).

① Write the chemical equation of the reaction when hydrogen reacts with oxygen and forms water. Balance the chemical equation.

② Observe the table: * * * (A-23)

A.No.	11	12	13	14	15	16	17
Name of Element	Na	Mg	Al	Si	P	S	Cl

- ① which period does the element belong.
- ② Mention the non metals in the above.
- ③ which element has more atomic radius in the above.
- ④ From left to right how is metallic character changes.

③ Observe the table:

Sample	Milk	Gastric Juice	Distilled H ₂ O	NaOH Solution	Milk of Magnesia
pH value	6.8	1.2	7	14	10.5

- ① which of the above is neutral solution.
- ② which of the above is used to neutralize the acidity in stomach.
- ③ which is the strong acid among above.
- ④ write the colour of phenolphthalein indicator in NaOH solution.
- ④ Write any two precautions to prevent corrosion of metals in your daily life.
- ⑤ Mention the four physical methods of concentration of ore and explain any two of them.

PREVIOUS YEAR QUESTIONS:

4 marks :-

6) Observe the above table and answer.

<u>Org. comp.</u>	<u>methane</u>	<u>Ethane</u>	<u>propane</u>
	CH_4	C_2H_6	C_3H_8
<u>Formula</u>	<u>Butene</u>	<u>pentyne</u>	<u>Hexyne</u>
	C_4H_8	C_5H_8	C_6H_{10}

- a) write the general formula of Alkanes.
- b) Mention the names of unsaturated hydrocarbons.
- c) Write homologous series of Alkynes.
- d) Write the formula of Hexyne.

7) ****
write any four uses of bleaching powder (M-25, J-25, J-23, March-24).

8) Explain Aufbau principle with Example (J-24. **)

9) Write uses of washing soda in day to day life (A-23,

10) Observe the table: ** (J-23)

<u>Element</u>	<u>Electronic configuration</u>		
A	$\boxed{1V}$	$\boxed{1V}$	$\boxed{1 \ 1 \ 1 \ 1}$
B	$\boxed{1V}$	$\boxed{1V}$	$\boxed{1V \ 1V}$
C	$\boxed{1V}$	$\boxed{1V}$	$\boxed{1V \ 1 \ 1}$
D	$\boxed{1V}$	$\boxed{1V}$	$\boxed{1V \ 1V \ 1}$
E	$\boxed{1V}$	$\boxed{1V}$	$\boxed{1V \ 1V \ 1V}$

a) which of the given electronic configuration violating Hund's rule.

b) Mention the inert gas (configuration) element from given configuration.

(c) which of the given indicates oxygen electronic configuration.

(d) Mention the valence of element A.



(11) Observe the information: (M-24)

Element	Electronic configuration
Be	$1s^2 2s^2$
Mg	$1s^2 2s^2 2p^6 3s^2$
P	$1s^2 2s^2 2p^6 3s^2 3p^3$
Ne	$1s^2 2s^2 2p^6$

(a) which of the given are s Block element

(b) which of the given has least valency.

(c) which of the given is in 15th Group.

(d) which of the given are in same period.

(12) Observe the foll. table: (J-24,

I	Name of ore	Formula
1.	Bauxite	$Al_2O_3 \cdot 2H_2O$
2.	Zinc blende	ZnS
3.	Epsom salt	$MgSO_4 \cdot 7H_2O$
4.	Cinnabar	HgS
5.	Rocksalt	NaCl
6.	pyrolusite	MnO_2
7.	Galena	PbS

(a) which ores are oxides among table.

(b) How many sulphide ores are there in given table. what are they.

(c) which ores are concentrated by froth floatation method in given table

(d) which ores are extracted by electrolysis method in given table.

(13) Analyse the following table. (M-25) ***

Shell	n	L	Subshell	No. of orbitals
K	1	0	s	1
L	2	0	s	1
		1	p	3
M	3	0	s	1
		1	p	3
		2	d	5
N	4	0	s	1
		1	p	3
		2	d	5
		3	f	7

(a) Write all the subshells notations present in N shell.

(b) How many total number of orbitals present in L shell.

(c) Mention the maximum number of electrons that occupy subshell 'f'.

(6M) Model papers / PREVIOUS YEAR QUESTIONS

- ① Write postulates and limitations of Bohr Hydrogen atomic model. 
- ② List out the materials for experiment when hydrochloric acid reacts with NaHCO₃ and evolves CO₂. Write experimental procedure.
- ③ Write about the formation of N₂ and O₂ molecule with valence bond theory.
- ④ Explain any four factors which influence the electron affinity.
- ⑤ Explain how does the atomic size and Ionisation energy changes in a group from top to bottom in periods from left to right in the modern periodic Table. (5-24)
- ⑥ Mention the depending factors of ionisation energy. Explain any 4. (M-24)
- ⑦ Write the Names of any 3 types of chemical reactions of carbon compounds and give one example for each. (5-25)
- ⑧ Explain Hund's rule with electronic configuration of carbon and Aufbau principle with Moeller. (5-25)
- ⑨ Explain the cleaning action of soap to remove dirt from clothes. (5-23)

10) Hydrogen reacts with Oxygen to produce water. what will be the mass of water produced if 100g of hydrogen participated in the reaction. Calculate the number of molecules of water produced in this reaction.



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