

Sardar Kaurey Khan Public Higher Secondary School Muzaffargarh

Name.....

Date: - 02 – 05 – 2020

Chemistry: - (Objective) 2nd Year Test # 2

Time: 20 min....

Marks 17

1. Which one halogen occurs naturally in a positive oxidation state?
(a) Fluorine (b) chlorine (c) bromine (d) iodine
2. A substance which can be used for etching glass ware is
(a) HF (b) HCl (c) HBr (d) HI
3. Which one noble gas is characterized by its brilliant green and orange spectral lines?
(a) Neon (b) Argon (c) Krypton (d) Radon
4. Which one reaction is not feasible energetically?
(a) $F_2 + 2Cl^{-1} \longrightarrow 2F^{-1} + Cl_2$ (b) $Cl_2 + 2I^{-1} \longrightarrow 2Cl^{-1} + I_2$
(c) $Cl_2 + 2F^{-1} \longrightarrow 2Cl^{-1} + F_2$ (d) $Br_2 + 2I^{-1} \longrightarrow 2Br^{-1} + I_2$
5. The total coal resources of Pakistan are estimated by the geological survey of Pakistan to be
(a) 180 billion tons (b) 180 million tons (c) 184 billion tons (d) 184 million tons
6. Imines contain the functional group.
(a) $>C=NH$ (b) $RCOR$ (c) $-NH_2$ (d) R_2HN
7. Ethers show the type of isomerism (a) position (b) functional group (c) tautomerism (d) metamerism
8. The linear geometry is for (a) sp^3 (b) sp^2 (c) dsp^2 (d) sp
9. When propyne is treated with aqueous H_2SO_4 in presence of $HgSO_4$ then the product is:
(a) propyl hydrogen sulphate (b) acetone (c) propanal (d) propanol
10. Which of the following compounds will not give a precipitate with Tollen's reagent? (a) 1-Butyne (b) Ethyne (c) 2-Pentyne (d) 1-pentyne
11. In wolf – Kishner's reduction, the carbonyl group of ketones is reduced to a:
(a) Methylene group (b) Vinyl group (c) Methyl group (d) Allyl group
12. As compared to boiling points of linear chain isomers, the boiling points of branched chain alkanes are
(a) higher (b) lower (c) same (d) does not depend upon branching
13. When H_2S gas is passed through the acidified solution of potassium dichromate then H_2S is oxidized into:
(a) SO_2 (b) S (c) H_2SO_4 (d) SO_3
14. Dichromates ions are converted into chromate ions in the presence of :
(a) An alkali (b) an acid (c) a base (d) air
15. Group VIB of transition elements contains: (a) Zn, Cd, Hg (b) Fe, Ru, Os (c) Cr, Mo, W (d) Mn, Te, Re
16. Oxidation number of iron in the complex $K_4[Fe(CN)_6]$ is: (a) +1 (b) +2 (c) +3 (d) +4
17. The percentage of carbon in different types of iron products is in the order of
(a) Cast iron > wrought iron > steel (b) wrought iron > steel > cast iron
(c) Cast iron > steel > wrought iron (d) Cast iron = steel > wrought iron.

Chemistry .- (Subjective) 2nd Year Test # 2

Date: - 02 – 05 – 2020

Section- II Time: 2hrs: 40 min....

22 x 2 = 44

Q. No 2 Attempt all 8 questions

8x2=16

- i. What is meant by 'activity of bleaching powder'?
- ii. What is disproportionation reaction?
- iii. Why the acidic strength of Oxyacids of halogen is in the order $HXO_4 > HXO_3 > HXO_2 > HXO$?
- iv. Why is it not possible to prepare HBr by the reaction of a metal Bromide with conc. H_2SO_4 , but HCl can be prepared by the analogous reaction?
- v. What is Freon? Give its importance
- vi. What are the transition elements?
- vii. Complete and balance $KMnO_4 + H_2SO_4 + FeSO_4 \longrightarrow$
- viii. What is the chemistry of chromyl Chloride test?

Q. No 3. Attempt all 8 questions

8x2=16

- i. What are heterocyclic compounds?
- ii. How quality of gasoline can be improved?
- iii. What is Tautomerism? Give example
- iv. From where does the energy come to excite the carbon atom?
- v. How carbonyl compounds a can be used to prepare alkanes?
- vi. How will you convert Ethene into Methanal?
- vii. What at is Markownikoff's Rule?
- viii. How Mustard gas is prepared?

Q. No 4 Attempt all 6 questions

6x2=12

- i. What is the alpha decay product of radium?
- ii. Complete and balance $XeF_4 + NH_3 \longrightarrow$
- iii. Complete and balance $KClO_3 + H_2SO_4 + H_2C_2O_4 \longrightarrow$
- iv. What is the effect of restriction of valence shell of fluorine to an octet?
- v. What is the used of Geiger counters? Also name the gas filled in it.
- vi. Write down some uses of Methane

Section- III

Note: Attempt all three questions

3x8 = 24

- Q. No 5. (a)** What is meant by functional group? Name some typical such groups containing oxygen. 4
(b) Discuss the I. Para magnetism 4
II. d – d transition
- Q. No 6. (a)** How will you synthesize the following compounds starting from acetylene? 4
* Acetaldehyde * Oxalic acid * Acrylonitrile & Benzene
(b) Describe the methods of preparation of Potassium permanganate 4
- Q. No 7. (a)** Describe Geometric isomerism with suitable examples
(b) Give a comparison between reactivity of alkanes, alkenes and alkynes