

**Chemistry (Objective)**

(Group-III)

Rwp-12-2-23

Note: Write Answers to the Questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or Pen ink on the answer sheet provided.

1.1. Which compound is the most reactive one?

- (A) Benzene (B) Ethane (C) Ethene (D) Ethyne

2. Grignard's reagent produce alkane by reacting with all except:

- (A)  $H_2O$  (B)  $NH_3$  (C)  $HCHO$  (D)  $C_2H_5OH$

3. Which enzyme is involved in fermentation of starch?

- (A) Diastase (B) Zymase (C) Urease (D) Maltase

4. Which alcohol upon oxidation gives acetone?

- (A) 2-propanol (B) 2-methyl-2-propanol (C) Methanol (D) Ethanol

5. Which of the following compound will react with tollen's reagents?

- (A)  $CH_3 - \overset{\overset{O}{\parallel}}{C} - H$  (B)  $CH_3 - \overset{\overset{O}{\parallel}}{C} - CH_3$  (C)  $CH_3 - \overset{\overset{O}{\parallel}}{C} - OH$  (D)  $CH_3 - \overset{\overset{O}{\parallel}}{C} - CH_2 - CH_3$

6. Which reagent is used to reduce acetic acid to ethyl alcohol?

- (A)  $H_2/Ni$  (B)  $H_2/Pt$  (C)  $NaBH_4$  (D)  $LiAlH_4$

7. The rate of reaction is directly proportional to which concentration of enzyme?

- (A)  $[Enzyme]^2$  (B)  $\sqrt{[Enzyme]}$  (C)  $[Enzyme]$  (D)  $[Enzyme]^3$

8. Phosphorus helps in the growth of:

- (A) Root (B) Leave (C) Stem (D) Seed

9. To avoid the formation of toxic compounds with chlorine which substance is used for disinfecting water:

- (A) Ozone (B) Alums (C) Chloramines (D)  $KMnO_4$

10. Pick the element having least ionization energy value:

- (A) Nitrogen (B) Oxygen (C) Fluorine (D) Neon

11. When gypsum ( $CaSO_4 \cdot 2H_2O$ ) is heated too strongly, it gives:

- (A) Plaster of Paris (B) Dead burnt (C) Does not affect (D)  $SO_2$  gas

12. Tincal is a mineral of:

- (A) Al (B) B (C) Si (D) C

13. Which catalyst is used in contact process?

- (A)  $Ag_2O$  (B)  $Fe_2O_3$  (C)  $SO_3$  (D)  $V_2O_5$

14. The anhydride of  $HClO_4$  is:

- (A)  $Cl_2O_7$  (B)  $Cl_2O_5$  (C)  $Cl_2O_3$  (D)  $ClO_2$

15. Bidentate ligand is:

- (A) Hydroxo (B) Cyano (C) Oxalato (D) Ammine

16. The phenomenon of isomerism occurs among ethers is:

- (A) Chain isomerism (B) Position isomerism (C) Functional group isomerism (D) Metamerism

17. The catalyst used for the conversion of acetone into propane is:

- (A)  $N_2H_4/KOH/200^\circ C$  (B)  $Pd(BaSO_4)/Quinoline$  (C)  $Na/Liq. NH_3 - 33^\circ C$  (D)  $Zn - Hg/HCl$