

# Adabistan-e-Soophia

Test Session (2020 – 21)

Code: 2078

Test No.: 9

Paper: Chemistry

Name: \_\_\_\_\_

Class: X Sec: \_\_\_\_\_

Syllabus: Full Book

| Question Numbers | 1  | 2  | 3  | 4  | 5  | 6  | 7  | Total | Grade | %age |
|------------------|----|----|----|----|----|----|----|-------|-------|------|
| Maximum Marks    | 12 | 10 | 10 | 10 | 09 | 09 | 09 | 60    |       |      |
| Marks Obtained   |    |    |    |    |    |    |    |       |       |      |

Remarks: \_\_\_\_\_

\_\_\_\_\_

|          |          |          |          |                      |          |          |          |          |                      |          |          |          |          |                      |          |          |          |          |                      |          |          |          |  |
|----------|----------|----------|----------|----------------------|----------|----------|----------|----------|----------------------|----------|----------|----------|----------|----------------------|----------|----------|----------|----------|----------------------|----------|----------|----------|--|
| <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | Write Correct option | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | Write Correct option | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | Write Correct option | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | Write Correct option |          |          |          |  |
| 1        | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b>             |          | 4        | <b>A</b> | <b>B</b> | <b>C</b>             | <b>D</b> |          | 7        | <b>A</b> | <b>B</b>             | <b>C</b> | <b>D</b> |          | 10       | <b>A</b>             | <b>B</b> | <b>C</b> | <b>D</b> |  |
| 2        | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b>             |          | 5        | <b>A</b> | <b>B</b> | <b>C</b>             | <b>D</b> |          | 8        | <b>A</b> | <b>B</b>             | <b>C</b> | <b>D</b> |          | 11       | <b>A</b>             | <b>B</b> | <b>C</b> | <b>D</b> |  |
| 3        | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b>             |          | 6        | <b>A</b> | <b>B</b> | <b>C</b>             | <b>D</b> |          | 9        | <b>A</b> | <b>B</b>             | <b>C</b> | <b>D</b> |          | 12       | <b>A</b>             | <b>B</b> | <b>C</b> | <b>D</b> |  |

**Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more times result in zero mark in that question.**

| Q.1 | Questions   | (A)                | (B)                     | (C)               | (D)   |
|-----|---|--------------------|-------------------------|-------------------|---|
| 1.  | General formula of alkyl radical is:  | $C_nH_{2n+2}$      | $C_nH_{2n+1}$           | $C_nH_{2n-2}$     | $C_nH_{2n}$                                     |
| 2.  | Alkanes are prepared from alcohol by a process called:                              | dehydrogenation    | dehydration             | dehalogenation    | dehydrohalogenation                             |
| 3.  | Percentage of $N_2$ and $O_2$ in our atmosphere is:                                 | 90%                | 60%                     | 75%               | 99%   |
| 4.  | Blister copper is about _____ pure copper.  | 98%                | 99%                     | 90%               | 98.9%   |
| 5.  | Formula of copper glance is:  | $CuFeS_2$          | $CuS_2$                 | $FeS$             | $Cu_2S$   |
| 6.  | The reaction of $PCl_3 + Cl_2 \leftrightarrow PCl_5$ has units:                     | $Mol^2dm^{-6}$     | $Mol^{-2}dm^6$          | $Moldm^{-3}$      | $Mol^{-1}dm^3$                                  |
| 7.  | Which cation has a greater tendency to accept electrons?                            | $K^+$              | $Ca^{2+}$               | $Ag^+$            | $Na^+$  |
| 8.  | $CO_2$ is _____ compound.   | acidic             | basic                   | neutral           | both (A) & (B)                                  |
| 9.  | If $k_c$ has large numerical value, then at equilibrium:                            | all are products   | products are negligible | all are reactants | amount of products and reactants are comparable |
| 10. | Aromatic compounds are:   | benzenoid compound | closed chain compound   | cyclic compound   | all of them                                     |
| 11. | Proteins have more than _____ amino acids.  | 20                 | 10                      | 1000              | 10,000  |
| 12. | If there will be no carbon dioxide then earth's average temperature would be about: | $15^\circ C$       | $-15^\circ C$           | $20^\circ C$      | $-20^\circ C$                                   |

## (Section - I)

**2. Write short answers to the following questions. (any five) (5×2=10)**

- i. Define reversible reactions.
- ii. What is meant by static equilibrium?
- iii. If  $Q_c > K_c$  then what will be the direction of a reaction?
- iv. Give any two macroscopic characteristics of dynamic equilibrium.
- v. Define Lewis concept of acid and base.
- vi. What is pH meter? For what purpose it is used?
- vii. Give some characteristic properties of salts.
- viii. Give reactions of acids with ammonium salts.

**3. Write short answers to the following questions. (any five) (5×2=10)**

- i. What is the difference between cyclic and acyclic compounds? Give examples in each case.
- ii. Define functional group containing carbon, hydrogen and halogen.
- iii. Define structural formula. Give structural formula of butane.
- iv. Describe hydrogenation of alkenes.
- v. Give physical properties of alkynes.
- vi. How amino acids are building blocks of proteins?
- vii. How sucrose is hydrolyzed?
- viii. What is the difference between ghee and oil?

**4. Write short answers to the following questions. (any five) (5×2=10)**

- i. What are the characteristics of atmospheric regions?
- ii. Give any two effects of ozone depletion.
- iii. Define acid rain. How does it affect aquatic life?
- iv. Describe extensive hydrogen ability of water.
- v. How temporary hardness can be removed by Clark's method?
- vi. What process occurs in ammonia recovery tower?
- vii. Define minerals and ores.
- viii. What is Haber's process?

**(Section - II)**

**Note: Give detailed answers of the following questions. (any two)**

**(9x2=18)**

5. **(a)** Define law of mass action. Give the derivation of the expression for equilibrium constant for general reaction. **(5)**
- (b)** Give preparation of soluble salts. **(4)**
6. **(a)** Give chemical reactions of Alkynes. **(5)**
- (b)** What are some uses of carbohydrates? **(4)**
7. **(a)** Describe any five water borne diseases. **(5)**
- (b)** Write a note on smelting. **(4)**