

**ALLIED CHEMISTRY-II**

**EVEN SEMESTER**

**UNIT-I      INDUSTRIAL CHEMISTRY**

**Section-A (2 Marks)**

1. Name the important air pollutants.
2. Name any four primary air pollutants.
3. Give any two uses of freons.
4. What is meant by fertilizers.
5. Write the uses of carbontetrachloride and saccharin.

**Section-B (5 Marks)**

1. Discuss the sources and effects of water pollution.
2. What problems are created by soil pollution.
3. Discuss the sources and effects of air pollution.
4. Write a short note on urea and triple superphosphate.
5. Write the preparation and properties of premonosulphuric acids.
6. What are freons? How are they obtained? Mention an application of freons.

**Section-C (10 Marks)**

1. Discuss the preparation and mode of action of detergents.
2. How are the following fertilizers manufactured?
  - a. Superphosphate
  - b. Urea
3. Outline the preparation and properties of Caro's acid. Write the structure and its uses.
4. Write a detail note on air and water pollution and its control measures.

**UNIT-II      PHARMACEUTICAL CHEMISTRY**

**Section-A (2 Marks)**

1. Give some examples for preservatives.
2. What are colouring agents.
3. Define analgesics.
4. Explain the term antiseptics. Give an examples
5. Define diabetes.
6. What are antipyretic drugs? Give an examples

**Section-B (5 Marks)**

1. Write a short note on antipyretics.
2. Write a short note on sweetening agents.
3. Write short notes on anesthetics.
4. Write a brief note on the treatment of cancer.

**Section-C (10 Marks)**

1. Write a note on AIDS and its treatment methods.
2. Discuss the general symptoms, prevention and treatment of cancer.
3. Write the cause and treatment of cancer and diabetes.
4. Discuss in detail about pharmaceutical agents.

**UNIT-III AMINO ACIDS AND PROTEINS**

**Section-A (2 Marks)**

1. What are polypeptides.
2. Define isoelectric point.
3. What are aminoacids?
4. Write any two biological functions of protein.

**Section-B (5 Marks)**

1. What are the biological functions of proteins.
2. Discuss the structure and biological functions of chlorophyll.
3. Write a note on the structure and biological functions of RNA.
4. How are amino acids classified .

**Section-C (10 marks)**

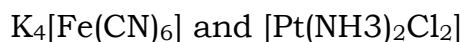
1. Describe the preparation, properties and structure of glycine.

2. What are nucleic acids? Discuss the structure and biological functions of DNA and RNA.
3. Give an account of classification of proteins based on physical properties and biological functions.
4. Explain in detail about proteins.

#### **UNIT-IV      INORGANIC CHEMISTRY**

##### **Section-A   (2 Marks)**

1. Define bond order.
2. What is meant by chelation.
3. What is EDTA? Give its structure.
4. Give the basic structure of silicates.
5. What is bond order? Give the bond order of nitrogen molecule.
6. Write the IUPAC names for the following.



##### **Section-B   (5 Marks)**

1. Draw the M.O diagram of oxygen.
2. Illustrate the difference between bonding and antibonding MO.
3. Explain Werner's theory of coordination.

##### **Section-C   (10 Marks)**

1. Draw the M.O diagram of  $\text{N}_2$  and  $\text{O}_2$  molecule.
2. Discuss the preparation and properties of silicates.
3. Explain in detail about haemoglobin, chlorophyll.

#### **UNIT-V   MEDICINAL CHEMISTRY**

##### **Section-A   (2 Marks)**

1. Define Rh factor?
2. Write any two symptoms of jaundice.
3. Write any two uses of tulasi.
4. Define blood pressure.

5. Give the composition of blood.

**Section-B (5 Marks)**

1. Explain in detail about Rh factor.
2. Discuss about hyper and hypho tensions.
3. Write a short note on cholera and malaria.
4. Write a short note on kizhanelli.
5. Write a short note on semparuthi.

**Section-C (10 Marks)**

1. Discuss in detail about blood.
2. Discuss in detail about symptoms, causes and drugs of filarial, jaundice, malaria.
3. Discuss in detail about medicinal plant uses.