



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Fourth Semester – Spring 2025

Roll No.

Paper: General Chemistry
Course Code: CHEM-203A

(RE-CONDUCT)

Time: 3 Hrs. Marks: 60

THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions.

(15x2=30)

- i. Differentiate between molecular and atomic spectroscopy.
- ii. Name two different ores of iron and give their formula.
- iii. What do you mean by ANNEALING?
- iv. What do you mean by IODINE NUMBER of lipids?
- v. State Beer's Law.
- vi. Draw a labelled flowsheet diagram of UREA manufacturing.
- vii. What are Oligosaccharides?
- viii. What are Allowed transitions in UV Spectroscopy?
- ix. What information IR spectroscopy provides about molecules?
- x. Give two applications of UV/VIS Spectrophotometry.
- xi. Discuss secondary structure of proteins.
- xii. How Polypeptides and Proteins are differentiated?
- xiii. Give general classification of lipids.
- xiv. Why Oils get RANCID rapidly than Fats?
- xv. What is the function of CULLET in manufacturing of glass?

Q.2. Answer the following questions

(5x6=30)

- i. Write a brief note on Nucleic acids.
- ii. Give one method for the extraction of Copper from its ore.
- iii. Give manufacturing of glass via TANK FURNACE.
- iv. Explain the working of Flame Emission Spectrophotometer (Flame photometer).
- v. What is Starch? Give its function in plants and in human diet.