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School of Basic Sciences

Master of Science in Chemistry
Semester End Examination - May 2024

Duration : 180 Minutes

Max Marks : 100

Sem IV - MBS24T5102 - Industrial Chemistry*General Instructions**Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Why are metals alloyed? K1 (3)
- 2) What is stripping process in distillation? K2 (4)
- 3) What is oxidation in wastewater treatment, Explain in Detail? K2 (6)
- 4) What are some common raw materials used in the formulation of paints? K3 (6)
- 5) What role do thickeners serve in paint formulations? K3 (6)
- 6) What are 3 methods of tertiary treatment? K3 (9)
- 7) Enlist the main types of cement? K3 (9)
- 8) Write down the classification and composition of petroleum? Discuss the importance of petrochemical industry? K4 (8)
- 9) How is glass produced, explain it with graphical representation and explain various stages? K4 (12)
- 10) What are some common additives used in paint formulations, and what purposes do they serve? K5 (10)
- 11) Can you explain the optical properties of high silica glass and its importance in optical applications? K5 (15)

OR

What are the different ways to make glass? K5 (15)

- 12) What are some recent advancements in green chemistry, and how do they contribute to sustainability in industrial processes? K6 (12)

OR

Describe recent developments in catalysis technology and their applications in industrial processes. K6 (12)