QUESTION BANK FOR CHEMICAL PROCESS INDUSTRIES-II

Chapter	Question 1 (Bloom's Level)	Question 2 (Bloom's Level)	Course Outcome(s)
Chapter 1: PESTICIDES	Define pesticides and give examples of their types. (**Remember**)	Compare the environmental impact of synthetic pesticides like DDT with that of organic pesticides. (**Analyze**)	C303.1: Interpret the chemistry involved and outline the process of manufacturing.
Chapter 2: PAINTS AND VARNISHES	What are the main components of paints, and how do they contribute to its overall performance? (**Understand**)	Design a manufacturing process for a new type of varnish that is both environmentally friendly and durable. (**Create**)	C303.1: Interpret the chemistry involved and outline the process of manufacturing. C303.4: Create a flow sheet using different unit operations to get to a finished product.
Chapter 3: EXPLOSIVES	What are the different classifications of explosives? (**Remember**)	Assess the safety concerns involved in manufacturing and handling explosives like dynamite and nitroglycerine. (**Evaluate**)	C303.3: Identify the major engineering problems involved in manufacturing of organic chemicals.
Chapter 4: PLASTICS	Describe the differences in properties and uses between phenol formaldehyde and polyethylene. (**Understand**)	How would you select the most suitable plastic material for making a durable and lightweight outdoor chair? (**Apply**)	C303.1: Interpret the chemistry involved and outline the process of manufacturing. C303.2: Correlate different processes and compare the economy involved in manufacturing of useful products.
Chapter 5: SYNTHETIC FIBERS	Classify different types of synthetic fibers. (**Remember**)	Compare the manufacturing processes and properties of Nylon and Polyester fibers. (**Analyze**)	C303.1: Interpret the chemistry involved and outline the process of manufacturing. C303.3: Identify the major engineering problems involved in manufacturing of organic chemicals.
Chapter 6: RUBBER	What is the difference between natural and	In what industries would SBR and Nitrile rubber be	C303.2: Correlate different processes and compare the

	synthetic rubber? (**Understand**)	most effectively used, and why? (**Apply**)	economy involved in manufacturing of useful products.
Chapter 7: SUGAR	Describe the basic steps in the manufacturing of cane sugar. (**Remember**)	Discuss the economic and environmental implications of producing industrial alcohol from sugarcane. (**Evaluate**)	C303.2: Correlate different processes and compare the economy involved in manufacturing of useful products.
Chapter 8: OILS AND FATS	How does hydrogenation affect the properties of vegetable oils? (**Understand**)	Compare the benefits and drawbacks of different types of edible oils produced today. (**Analyze**)	C303.2: Correlate different processes and compare the economy involved in manufacturing of useful products.
Chapter 9: SOAPS AND DETERGENTS	Define soaps and detergents, and explain the difference between them. (**Remember**)	How would you optimize the manufacturing process of soap to make it more eco-friendly? (**Apply**)	C303.1: Interpret the chemistry involved and outline the process of manufacturing. C303.4: Create a flow sheet using different unit operations to get to a finished product.
Chapter 10: PHARMACEUTICAL INDUSTRY	What are the key classifications of the pharmaceutical industry? (**Understand**)	How does the process of manufacturing penicillin by fermentation impact the cost and scalability of production? (**Analyze**)	C303.1: Interpret the chemistry involved and outline the process of manufacturing. C303.3: Identify the major engineering problems involved in manufacturing of organic chemicals.