

chemicals?

- 14 What is the primary chemical structure of cellulose? [K] [1, 2, 4]
- 15 What types of nanomaterials can be synthesized using CVD? Provide two examples. [U] [5]
- 16 How would you apply pollution control technologies to reduce emissions in a chemical manufacturing plant? [A] [1, 2]

(4 × 3 = 12)

Part C

Short Essay Type Questions

Answer any four questions.

Each question carries seven marks

- 17 Evaluate the impact of isomerization on fuel quality and engine performance. [An] [2, 4]
- 18 "Analyze how fluctuations in raw material prices and energy costs affect the economics of a chemical process. What strategies can be used to mitigate these impacts?" [An] [1, 2]
- 19 Evaluate the diverse applications of mica in modern industries and assess how its properties influence these uses. [U] [1, 2, 3]
- 20 Explain the Kroll process for titanium extraction. [U] [1, 3]
- 21 Explain the importance of pollution control measures in industrial processes and how they contribute to sustainable development. [U] [1, 2]
- 22 Classify nanomaterials based on their dimensions and by citing suitable examples. [U] [5]

(4 × 7 = 28)

END OF THE QUESTION PAPER
