

Q.5 What is the time period for first order reaction?

- a) 5 min b) 10 min
c) 15 min d) 20 min

Q.6 Which process is always exothermic?

- a) Evaporation b) Adsorption
c) Absorption d) None

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Write any one application of chemical engineering.

Q.8 What is laminar flow?

Q.9 List various modes of heat transfer.

Q.10 What is the unit of diffusivity?

Q.11 Which reaction is called exothermic reaction?

Q.12 Give the concept of batch process.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 What is Chemical Engineering & Chemical
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Engineer?

Q.14 Differentiate between unit operation & unit process.

Q.15 Define fluid & ideal fluid.

Q.16 Discuss Newton's law of viscosity.

Q.17 Explain Fourier's law of heat conduction.

Q.18 Give the classification of heat exchangers.

Q.19 Define mass transfer & diffusivity.

Q.20 List various equipments used for distillation in Chemical industries.

Q.21 What is the difference between homogenous & heterogeneous reaction?

Q.22 Write a note on manufacturing process of urea.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain in detail Boyle's law, Charle's law & derivation of ideal Gas Law.

Q.24 What are the various properties of fluids? Define in detail.

Q.25 Write short notes on any two of the following:-

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