

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2020 COURSE)

B.Tech.Sem - IV CHEMICAL :SUMMER- 2022

SUBJECT : CHEMICAL TECHNOLOGY

Day : Wednesday

Time : 10:00 AM-01:00 PM

Date : 22-06-2022

S-24443-2022

Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat labelled diagrams **WHEREVER** necessary.
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Q.1 For the following unit operations draw the schematics and mention its uses- (10)
Evaporator, Thickner, Screw conveyer, Reactor, Distillation column.
Give the examples for the following unit processes-
Hydrogenation, Oxidation, Halogenation, Polymerization.

OR

Q.1 Illustrate the various sectors/ industries under the umbrella of chemical process (10)
industries. Also mention its importance and uses.

Q.2 Describe manufacturing of Ammonia using Haber Bosch process with a neat (10)
process flow diagram.

OR

Q.2 Draw the neat process flow diagram for the production of Urea. Mention (10)
engineering problems involved in the process.

Q.3 Write short notes on: (10)
i) Natural Glycerin ii) Oil purification

OR

Q.3 Write short notes on: (10)
i) Soaps and detergents ii) Extraction of oil from seeds

Q.4 Justify the importance of Fermentation industry with a suitable example. (10)

OR

Q.4 Describe any one method for the production of Starch and Illustrate it's various (10)
applications.

Q.5 Describe the types of Terpenes and mention its various applications. (10)

OR

Q.5 What are plant pigments? Illustrate the types and used of plant pigments. (10)

Q.6 Describe production Vinyl chloride with neat block diagram or process flow (10)
diagram. Mention its applications in Chemical process industries.

OR

Q.6 Describe the production of Phthalic anhydride and justify its importance in (10)
chemical process industries.

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