

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE- SEMESTER–VIII (NEW) EXAMINATION – WINTER 2020**

**Subject Code:2183608****Date:28/01/2021****Subject Name:Chemical Process Technology****Time:02:00 PM TO 04:00 PM****Total Marks: 56****Instructions:**

1. Attempt any **FOUR** questions out of **EIGHT** questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

	MARKS
<b>Q.1</b> (a) Write a note on petrochemicals.	<b>03</b>
(b) Explain the manufacturing of benzene.	<b>04</b>
(c) Explain crude oil distillation in detail.	<b>07</b>
<b>Q.2</b> (a) Write a note on Synthesis gas	<b>03</b>
(b) Explain Linde's process.	<b>04</b>
(c) Describe the manufacture of sulfuric acid by DCDA process with a process flow diagram.	<b>07</b>
<b>Q.3</b> (a) State the uses of ammonia.	<b>03</b>
(b) What do you understand by rare gases? Discuss about any one.	<b>04</b>
(c) Explain the manufacturing of soda ash.	<b>07</b>
<b>Q.4</b> (a) Write a short note on NPK fertilizer	<b>03</b>
(b) State the merits and demerits of mercury cell process used for the manufacture of caustic soda.	<b>04</b>
(c) Describe the manufacturing of methanol.	<b>07</b>
<b>Q.5</b> (a) Differentiate between paint and varnish.	<b>03</b>
(b) Explain the manufacturing of phosphoric acid	<b>04</b>
(c) Explain the manufacturing of sugar with neat flow diagram	<b>07</b>
<b>Q.6</b> (a) Explain the engineering problem associated with manufacturing of ethylene oxide.	<b>03</b>
(b) Write a note on different types of pigment	<b>04</b>
(c) Describe the manufacturing of Urea.	<b>07</b>
<b>Q.7</b> (a) Write a note on citric acid fermentation.	<b>03</b>
(b) Explain various types of pigments.	<b>04</b>
(c) Explain the manufacturing of phenol.	<b>07</b>
<b>Q.8</b> (a) Write a note on vinyl chloride.	<b>03</b>
(b) Explain the manufacturing of butyraldehyde	<b>04</b>
(c) Describe ethyl alcohol fermentation.	<b>07</b>

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