

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