

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER-VI • EXAMINATION – WINTER • 2014

Subject Code: 360502

Date: 26-11-2014

Subject Name: Fertilizer Technology

Time: 02:30 pm - 05:00 pm

Total Marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q:1 (a) Explain various fertilizers with examples. 07
(b) State the name of nitrogen compounds with % N₂ contents. 07
- Q:2 (a) Write physical and chemical properties of ammonia. 07
(b) Write types of ammonia converter and explain any one. 07
OR
(b) Uses of nitrogen and ammonia. 07
- Q:3 (a) State different methods for synthesis gas production and explain manufacturing by steam hydrocarbon reforming process. 07
(b) Write physical and chemical properties of nitrogen. 07
OR
- Q:3 (a) Storage, Handling and Transportation of ammonia. 07
(b) Explain major engineering problems of manufacturing of nitric acid. 07
- Q:4 (a) Physical and chemical properties of Urea. 07
(b) Explain manufacturing of urea. 07
OR
- Q:4(a) Ammonium nitrate Manufacturing by prilling process. 07
(b) Physical and chemical properties of phosphorus. 07
- Q:5(a) Manufacturing of phosphoric acid by wet process. 07
(b) Physical and chemical properties of potash. 07
OR
- Q5 (a) Manufacturing of potassium chloride from sylinite. 07
(b) Diammonium phosphate Manufacturing. 07
