

Registration No.

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Total number of printed pages - 01

B.TECH
PECH5302

6th Semester Regular / Back Examination 2015-16

FERTILIZER TECHNOLOGY

BRANCH : Chemical Engineering

Time : 3 Hours

Max Marks : 70

Question Code : W526

Answer Question No. 1 which is compulsory and any FIVE from the rest.

The figures in the right-hand margin indicate marks.

Answer all parts of a question at a place.

1. Answer the following questions : **2 x 10**
 - (a) State the percentage of nitrogen present in Urea and DAP.
 - (b) State the precautions for storage of Ammonium nitrate fertilizer.
 - (c) Write the characteristics of CAN.
 - (d) State the raw materials used for single super phosphate.
 - (e) State the chemical reactions involved in manufacture of potassium nitrate.
 - (f) State the various grades of NPK fertilizers.
 - (g) Write short note on micro nutrients.
 - (h) Write short note on nitro phosphate.
 - (i) State the importance of controlled release fertilizers.
 - (j) Differentiate between complex fertilizer and organic manures.
2. Explain the production of Urea with its agronomic details. **10**
3. Explain the production of Ammonium sulphate with its characteristics. **10**
4.
 - (a) State the specification and characteristics of Potassium nitrate. **05**
 - (b) Write briefly about di-ammonium phosphate. **05**
5. Discuss in detail about the production of triple super phosphate. **10**
6. Discuss in detail about the production of urea ammonium phosphate. **10**
7. Explain the production of any two fluid fertilizers. **10**
8. Write short notes on any **TWO**: **5 x 2**
 - (a) Coke Oven Gas
 - (b) Ammonium chloride
 - (c) Ammonium phosphate sulphate
 - (d) Secondary nutrients
