

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. E. Sem. – IV - Examination –June- 2011

Subject code: 141404

Subject Name: Technology of Grains

Date:10/06/2011

Time: 10.30 am – 01.00 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) Why does the grain cracks during milling? Suggest the proper method to avoid the grain cracking. **07**
(b) Discuss the CFTRI method of pulse milling. **07**
- Q.2** (a) Enlist different paddy separators and explain any one. **07**
(b) Discuss solvent extraction of soybean oil. **07**
- OR**
- (b) Discuss protein isolates. **07**
- Q.3** (a) Explain in detail the wet milling of corn. **07**
(b) Explain turbo milling of wheat. **07**
- OR**
- Q.3** (a) Distinguish between whole meal flour and straight run flour. **07**
(b) Explain following terms. **07**
1. Sphericity 2. Angle of repose 3. Terminal velocity
4. Separation process 5. Grinding 6. Extraction rate
7. Separation rate.
- Q.4** (a) Describe grinding process and give flow diagram of peanut butter manufacturing. **07**
(b) Discuss the effect of various factors on change of food properties. **07**
- OR**
- Q.4** (a) Briefly explain the various unit operations of modern rice mill. **07**
(b) Discuss in detail the hydrogenation process of oil. **07**
- Q.5** (a) Draw the structure of corn and write the importance of each part. **07**
(b) What is parboiling? Explain dry heat parboiling. **07**
- OR**
- Q.5** (a) Write short notes on following. (Any two) **07**
i. Refining of oil ii. Dry milling of pulses
iii. Oil extraction.
(b) Discuss the general principles of milling. **07**
