

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV • EXAMINATION – SUMMER • 2014

Subject Code: 141404**Date: 23-06-2014****Subject Name: Technology of Grains****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) Define parboiling and explain the properties of parboiled rice. **07**
 (b) Why refining is required for crude oil? Explain briefly the process of oil refining. **07**
- Q.2** (a) Discuss the important features of supply chain of food grains in India. **07**
 (b) Explain the processing of deoiled cake with respect to various protein rich products. **07**
- OR**
- (b) Describe the mechanical methods of oil extraction. **07**
- Q.3** (a) Explain the commercial method of pulse milling. **07**
 (b) Explain the mechanism involved in paddy separation using tray separator. **07**
- OR**
- Q.3** (a) Describe the modern method of pulse milling. **07**
 (b) Enlist the different grades of flour and briefly explain their utility. **07**
- Q.4** (a) Explain the size reduction process of wheat grains in modern wheat milling. **07**
 (b) Explain the turbo milling of wheat. **07**
- OR**
- Q.4** (a) Write short notes on: **07**
 i) Steeping of corn
 ii) Byproducts of corn milling industry
 (b) Briefly explain the various unit operation involved in rice milling. **07**
- Q.5** (a) Write short notes on: **07**
 ii) Soybean processing
 iii) Oil hydrogenation
 (b) Explain the maturation process of wheat flour and state its significance. **07**
- OR**
- Q.5** (a) Write short notes on: **07**
 i) Cleaning of oilseeds
 ii) Factors affecting solvent extraction of oil
 (b) Explain the commercial importance of corn milling with suitable examples. **07**
