Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION – WINTER 2013

Su	bject	Code: 141404 Date: 26-12-2013	
Su	bject	Name: Technology of Grains	
		2.30 pm - 05.00 pm Total Marks: 70	
Inst	tructio		
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Explain in detail the dry milling process of corn. Discuss the mechanical methods of oil extraction.	07 07
Q.2	(a)	What is dry heat parboiling of paddy? Discuss the conventional methods of dry heat parboiling.	07
	(b)	Explain the various factors affecting milling characteristics of pulses. OR	07
	(b)	Write short notes on:i) Supply chain of food grainsii) Soybean processing	07
Q.3	(a) (b)	Discuss the various physico-chemical properties of food grains. State the different types of rice polishers and explain the importance of rice polishing.	07 07
Q.3	(a) (b)	OR Discuss the effect of hydrothermal treatment on different properties of grains. Briefly explain the different types of wheat flour available in the market.	07 07
Q.4	(a) (b)	Explain the dehusking process of paddy using rubber roll sheller. Describe the importance of break roll and reduction roll in modern roller flour mill.	07 07
		OR	
Q.4	(a)	Draw the morphological structure of corn and explain the importance of various parts.	07
	(b)	Write the objectives of the following process: i. Wheat milling ii. Rice milling	07
Q.5	(a) (b)	Discuss the commercial scale method for milling of pulses. How the oil seeds are prepared before oil extraction? Explain in detail.	07 07
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Q.5	(a) (b)	Write comments on 'Equipments or machineries used for milling of pulses'. What is hydrogenation of oil? Describe the process of hydrogenation of oil.	07 07
