KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2013 Admission Vth Semester Final Examination-January -2016

Cat. No: Fdpr 3103
Title: Oil chemistry and Technology (2+1)

Marks: 50.00

Time: 2 hours

State True or False

(10 x 1=10)

- 1. The melting point of a fat or oil is actually a range, not a sharply defined temperature
- 2. Coconut oil is the highest saturated fat vegetable oil
- 3. The predominant type of rancidity is oxidative rancidity
- 4. Most antioxidants are phenolic compounds
- 5. Polymorphism is not found in many long chain carbon compounds
- 6. The iodine number is a measure of the extent of saturation of the fatty acids present in a fat
- 7. Rancidity and Reversion are the same things
- 8. Rendering is a process by which fat is removed from the tissue by heat
- 9. The residue from pressing or extracting is very low in protein
- 10. Oleic acid is a saturated fatty acid

II Write short notes on any FIVE questions

(5 x 2=10)

- 1. Saponification number
- 2. Physical properties of fats and oils
- 3. Steam deodourization
- 4. Plasticity of fats
- 5. BHA and BHT
- 6. Explain EFA with examples
- 7. Solid oil

III Write short essay on any FIVE questions

(5 x 4=20)

- 1. Iodine value and its importance
- 2. Explain Screw press
- 3. Hydrogentation of oils
- 4. Reversion
- 5. Solvent extraction
- 6. Alkali refining
- 7. Inter esterification

IV Write essay on any ONE

 $(1 \times 10=10)$

- 1. What is rancidity? What are the different types of rancidity? What are the precautions to be taken when storing oils and fats
- 2. Explain (a) Margarine b) Essential oil and oleoresin c) Lipid metabolism