

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food.Engg) 2012 Admission

Vth Semester Final Examination- January-2015

Cat. No: Fdpr.3103

Title: Oil Chemistry and Technology (2+1)

Marks: 80

Time: 3 hours

Answer the following

I Fill up the blanks

(5x 1=5)

1. _____ is saponifying the FFA presents with aqueous solution of sodium hydroxide.
2. Edible tallow is obtained from _____.
3. Mayonnaise is emulsion of _____.
4. Small quantity of material is crystallized and removes from edible oil by filtration is known as _____.
5. Butter fat has _____% of saturated fatty acids.

II Explain the following

(5x 1=5)

1. Differentiate fat and oil.
2. Define 'Free fatty acids'.
3. Differentiate immersion and percolation extraction of oil.
4. Why Hydrogenation is needed?
5. Explain the plasticizing process.

III Answer any TEN questions

(10x3=30)

1. Explain FFA.
2. What is saponification value?
3. Discuss esterification.
4. Write a note on Ghani.
5. Write a note on packed extraction tower.
6. Explain system of leaching.
7. Explain centrifugal extractor principle.
8. Write a note on oleoresin.
9. Explain fat metabolism.
10. Explain importance of iodine value.
11. Explain control of rancidity in oil.
12. Differentiate oil and essential oil.

IV Answer any SIX questions

(6 × 5 = 30)

1. Discuss in detail about chemical properties of oil.
2. Discuss cold and hot pressing of oil.
3. Explain multi stage leaching extraction of oil.
4. Discuss with neat working of oil expeller.
5. Write a note on oil refining.
6. Discuss nutritional aspects of oil.
7. Explain in detail about quality standards of oil.
8. Explain methods used for essential oil extraction.

V Answer any ONE question

(1 × 10 = 10)

1. Discuss in detail about physical and chemical properties of oil.
2. Write a detailed note on machineries used in oil milling process.
