



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Engg.) 2015 Admission
V Semester Final Examination-January-2018

Fdpr.3103

Oil Chemistry and Technology (2+1)

Marks:50
Time:2hours
(10x1=10)

I Choose the correct answer

- 1 The percentage of husk, bran and bran oil received from rice milling are respectively
a 20, 5 and 25 b 5, 10 and 30 c 20, 5 and 40 d 20, 10 and 20
- 2 The process of addition of edible oil and water to pulse during milling process is to improve:
a Softness b Hardness c Shine and color d None of the above
- 3 In dry milling process prior to treatment with oil the following operation is done:
a Polishing b Grading c Conditioning d Pitting
- 4 In a solvent extraction process, the output of oil is -----that by mechanical expression:
a Higher than b Lower than c Equal to d None of the above
- 5 In solvent extract the quantity of oil left in cake is:
a 2 % b 1.5 % c 1.0 % d 0 %

Fill in the blanks

- 6 Number of double bonds in Oleic acid is -----
- 7 The boiling point of n-Hexane is: -----
- 8 Hydrolysis of fats and oils in the presence of a base is used to make-----
- 9 Women have -----level of HDL than Men
- 10 The higher temperatures are critical when processing oilseeds whose oil is-----sensitive.

II Write Short notes on ANY FIVE of the following

(5x2=10)

- 1 What are the two important factors that affect the rate of oil extraction?
- 2 Differentiate between Steam and Alkali refining.
- 3 Write two advantages and disadvantages of supercritical fluid extraction method.
- 4 Differentiate between oils and fats.
- 5 What is peroxide value of fat? Name factors which influence peroxide value.
- 6 Enlist the major sources of vegetable oils and their composition.
- 7 List the various methods used for extraction of oil.

III Answer ANY FIVE of the following

(5x4=20)

- 1 What are essential fatty acids? Name them. Explain the nutritional role of essential fatty acids.
- 2 Write a short note on transacids.
- 3 Explain how the traditional method 'Ghani' used in oil processing.
- 4 What are Screw Presses?
- 5 Write a note on constructional features of Bollmann extractor along with a diagram.
- 6 Discuss the functions of main classes of lipoproteins.
- 7 Explain the process of deodorization.

IV Write an essay on ANY ONE of the following

(1x10=10)

- 1 Write a detailed note on Solvent extraction plant. Also draw a Process Flow Chart of Solvent Extraction of oil.
2. Discuss physical and chemical properties of fats in detail.
