



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Technology) 2021 Admission
IV Semester Final Examination – August 2023

Pafe.2218

Processing Technology of Legumes and Oilseeds (2+1)

Marks: 50
Time: 2 hours

- I Fill in the blanks (10x1=10)**
1. Meals from oilseeds are used as for all classes of dairy cattle.
 2. is used to determine the specific gravity of oil.
 3. An oil press for extracting oil is also known as
 4. of oil is the temperature at which it stops shimmering and starts smoking.
 5. In solvent extraction method, the oil and miscella are moved in a fashion.
- State True or False**
6. A soxhlet extractor is a laboratory apparatus for the extraction of proteins from oilseeds.
 7. The combined degumming and neutralization process include the use of micellar solution.
 8. Among legumes, soyabean is the richest source of proteins.
 9. The peroxide number is the indicator of the unsaturation of oils and fats.
 10. An increase in the amount of aromatic compounds in the oil results in a decrease in the specific gravity.
- II Write short notes on ANY FIVE of the following (5x2=10)**
1. In oilseed processing, list the reasons for cooking or conditioning of oilseeds.
 2. Describe about the water degumming process in oil refining.
 3. What is transesterification of oil? What is the benefit of this process?
 4. Write in brief about the traditional process of sunflower seeds pretreatment prior to extraction.
 5. What is flash point of oil?
 6. What is fat-splitting processes and list some of the fat-splitting process.
 7. Describe about the methods of removing anti-nutritional compounds from legumes and oilseeds.
- III Answer ANY FIVE of the following (5x4=20)**
1. Describe about the basic steps in different refining process of oil and list the compounds that are removed in the subsequent processes.
 2. What is rancidification of oil. Describe in brief about hydrolytic, oxidative and enzymatic rancidity of oil.
 3. Write about the two major primary and secondary sources of oilseeds in terms of the edible and non-edible groups.
 4. Write in brief about the available mechanical and chemical oil extraction methods.
 5. Describe about the distillation method of oil purification.
 6. List the factors that affects the oilseed quality during storage?
 7. Describe about the principle of supercritical fluid extraction. Explain with diagram.
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Utilization of oilseed meals in food industry.
 2. Solid-liquid extraction
