



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Tech. (Food Engg.) 2019 Admission**  
**V Semester Final Examination-January 2022**

**Fdpr.3103**

**Oil Chemistry and Technology (2+1)**

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

**I Fill in the Blanks**

1. Saturated fatty acids of less than eight carbon atoms are ----- at physiological temperature.
2. The presence of ----- in the neutral fat exhibits all the additive reactions.
3. When choline of lecithin is replaced by ethanolamine the product is -----.
4. More than 98% of the oil production worldwide is carried out by -----.
5. ----- is an inorganic acid used in alkali refining process.
6. ----- is a major reaction occurring during deep frying.
7. The rate of lipid oxidation increases as the temperature is -----.
8. ----- are the result of a side reaction with the catalyst of the hydrogenation process.
9. -----fluid is any substance at a temperature and pressure above its critical point.
10. A centrifugal extractor is also known as -----.

**II Write short notes on ANY FIVE of the following**

**(5x2=10)**

1. Non-essential fatty acids
2. Iodine Number
3. Rancidity
4. Flash point
5. TBA
6. Leaching
7. Feed solvent

**III Answer ANY FIVE of the following**

**(5x4=20)**

1. Write notes on antioxidants.
2. Why the fats and oils are essential?
3. List out the substitutes for butter in baking/ other products.
4. Write notes on different types of inter esterification.
5. What are the important parameters responsible for the degree of hydrogenation?
6. Give an account on chemical constituents of essential oils.
7. Explain the applications of phospholipids.

**IV Write an essay on ANY ONE of the following**

**(1x10=10)**

1. Write about traditional classification of edible fats and physico-chemical properties of lipids.
2. Give an account on metabolism of fat.

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