



QP CODE: 25024610



Reg No : .....

Name : .....

**M.Sc DEGREE (CSS) EXAMINATION, APRIL 2025**

**Fourth Semester**

M Sc APPLIED CHEMISTRY

**ELECTIVE - CH840402 - BIOCHEMISTRY OF FATTY ACIDS**

2019 ADMISSION ONWARDS

538C5CF1

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight 1 each.*

1. Write a note on caloric & non caloric functions.
2. Interpret even distribution theory.
3. Write a short note on sphingolipids.
4. Briefly explain the uses of fatty acids in a) Leather industry b) Pharmaceuticals
5. What are the important sources of oleic acid?
6. What are furanoid acids?
7. Write a note on salt formation reaction.
8. Explain the oxidation of fatty acids with chromic acid.
9. What is hydrogenation of fatty acids?
10. What is free radical polymerization?

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight 2 each.*

11. Explain the sources & classification of oils & fats.
12. Briefly explain flavor and odor contributing constituents with examples.
13. Write a note on isolation and characterization of fattyacids by TLC.
14. Explain the use of Mass spectraspectra in the structure elucidation of fattyacids.





15. Write a note on unsaturated fatty acids.
16. Write a note on (a) polyunsaturated fatty acids (b) cyclopropanoid acids
17. Briefly explain the thermal and crystal properties of fatty acids.
18. Depict the biotransformation of arachidonic acid to PG.

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Briefly explain the occurrence, chemistry and functions of (a) carotenes (b) tocopherols (c) steroids.
20. Explain nomenclature of fattyacids by IUPAC and omega reference systems.
21. What are saturated fatty acids? Explain any four naturally occurring saturated fatty acids.
22. Explain the biosynthesis of fats in plants and animals.

(2×5=10 weightage)

