

P. Pages : 1

Time : Three Hours

**AW - 3160**

Max. Marks : 80

- Notes :
1. Answer **three** question from Section A and **three** question from Section B.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Illustrate your answer necessary with the help of neat sketches.
 4. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION – A

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|-----------|---|----|
| 1. | Describe Low temperature crystallization of fatty acids. Give examples. | 13 |
| OR | | |
| 2. | Define Solid Fat Index. What are dilatometric measurements. | 13 |
| 3. | Explain urea addition technique. How pure fatty acids are obtained by this technique. | 13 |
| OR | | |
| 4. | Discuss the principles of N.M.R. in the analysis of oils & fats. | 13 |
| 5. | What are glyceride theories. Explain in details. | 14 |
| OR | | |
| 6. | State the principles of U.V. & I.R. for the analysis of oils & fats. How I.R. is important in this technique. | 14 |

SECTION – B

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|-----------|--|----|
| 7. | Describe Thin layer chromatography and its application for analysis of oil & fats. | 13 |
| OR | | |
| 8. | What are Essential fatty acids. State their role in human diet. | 13 |
| 9. | Define R.M. & P. values. How these values are estimated in the laboratory. | 13 |
| OR | | |
| 10. | Describe various stages of bio-synthesis of fatty acids. What are phospholipids? | 13 |
| 11. | What are metallic soaps. Give their manufacturing process & industrial applications. | 14 |
| OR | | |
| 12. | Write about any two . | 14 |
| | a) Lipase hydrolysis. | |
| | b) G.L.C. Technique. | |
| | c) Rancidity in oils. | |
