



11015 : Oil & Paint Technology-I

4 OT 02

P. Pages : 2

Time : Three Hours



AW - 3078

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. Discuss the reaction, mechanism wherever necessary.
 4. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION - A

1. Give an account of systematic name, structure, sources & uses of following fatty acids. **13**
- i) Oleic acid
 - ii) Stearic acid
 - iii) Ricinoleic acid
 - iv) Linoleic acid
 - v) Linolenic acid

OR

2. Discuss about the non glyceride components of oils & fats w.r.t. **13**
- a) Having nutritional significance.
 - b) Components affecting stability.
3. Define Acid value, also state their significance. How will you determine acid value in your laboratory ? What precautions will you take ? **13**

OR

4. Define oils & fats, discuss the nutritional function of oils & fats in detail. **13**
5. Give an account of isomerisation in mixed triglyceride in detail. **14**

OR

6. Discuss about **any two**. **14**
- i) PV value
 - ii) Polymerisation reaction.
 - iii) Industrial uses of oil & fats.

SECTION - B

7. Give an accounts of natural & synthetic antioxidants with their structure in detail. 13

OR

8. Discuss the Baily's classification of oil & fats in detail. Discuss about oleic linoleic group with examples. 13

9. Define the term Rancidity of oils & fats. Describe the mechanism of autoxidation. 13

OR

10. How will you check the adulteration in oils & fats by - 13

- i) Baudouin test
- ii) Halphen test
- iii) Bellers turbidity test
- iv) Mineral oil test

11. Give an account of ISI specification of - 14

- i) Vegetable oils
- ii) Oil seeds
- iii) Vanaspati
- iv) DOC

OR

12. Discuss about any two. 14

- i) Atmospheric Oxidation
- ii) Saturated fatty acids
- iii) Phospholipids
