



- 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. Diagrams and chemical equations should be given wherever necessary.
 4. Illustrate your answer necessary with the help of neat sketches.
 5. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION - A

1. State the important parameters affecting degumming and neutralisation of soyabean oil in batch type process. What utilities are required for the process. **13**
- OR
2. "Pretreatment to the oil seed helps in the yield of good quality and quantity of oil" Justify the statement. **13**
3. Why it is advantages to process the soyabean oil in a continuous neutralizer explain with a neat diagram. **13**
- OR
4. Describe the working of a pressure worm expeller for the extraction of oil. Why expellers are said to be self contained units. **13**
5. Which solvent is safe and effective for the solvent extraction of oils & fats and why. Which parameters influence the process. Give a neat flow diagram for solvent extraction process. **14**
- OR
6. How the neutralised oil is bleached in a batch type bleacher. Which factors should be considered for the yield of good bleaching efficiency. **14**

SECTION - B

7. Describe the important parameters affecting the process of deodorization. How the oil & fats are deodorised in a batch type deodoriser explain with a neat diagram. **13**
- OR
8. Discuss the upgradation and preparation of value added products from soap stock. Give an account of pollution control measures in vegetable oil Refinery. **13**
9. Why the oils & fats are hydrogenated. Explain the batch type process for the hydrogenation. How the Ni catalyst is produced for the process. **13**
- OR
10. How the hydrogen gas is manufactured by electrolysis of water for the process of hydrogenation. Explain with a neat diagram. **13**
11. Give definitions of butter, margarine and shortening. How margarine is manufactured. **14**
- OR
12. Write about **any two**. **14**
 - a) Catalyst poisoning.
 - b) Lecithin.
 - c) Physical Refining.
