

B.Tech. Sixth Semester (Food, Pulp & Paper, Oil & Paint and Petro. Tech.) (CGS)

11047 : Oil & Paint Technology - III : 6 OT 04

P. Pages : 1

Time : Three Hours



AU - 2818

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. 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. Explain in details about pretreatment handling, conditioning & storage of oil seeds. Why these slips are important prior to extraction of oil. **13**

OR

2. How the oil is extracted by mechanical expression? Describe a pressure work expeller & its working. **13**

3. Describe a batch type degumming & neutralization process for soybean oil with a neat diagram. Which Parameters influence this process. **13**

OR

4. Give a flow diagram of continuous neutralizer and explain the process. How will you estimate caustic requirement and neutralization losses. **13**

5. Explain in details the batch type bleaching process of oils & fats with the help of a neat diagram. Which factors should be taken into account in this process. **14**

OR

6. How do you select a safe & effective solvent for solvent extraction of oils and fats. Describe the working of a solvent extraction plant with a neat diagram. **14**

SECTION - B

7. Differentiate between batch type & continuous type bleacher. Give the utilities for both type. What are bleaching chemicals. **13**

OR

8. Discuss the upgradation & preparation of value added products from soap stock-Give an account of pollution control measures in vegetable oil refinery. **13**

9. Describe various Parameters which influence the process of deodorization. How the batch type deodorization process is carried out explain with a neat diagram. **13**

OR

10. Distinguish between butter, margarine & pure ghee. Give their specifications. How margarine is produced? **13**

11. How vegetable oils & fats are hydrogenated explain the process in details. What is selectivity of hydrogenation. **14**

OR

12. Write about **any two**. **14**
- i) Nickel catalyst for hydrogenation.
 - ii) Dehydrated castor oil.
 - iii) Physical refining.
