

B.Tech. (Chemical Technology) Eighth Semester (C.B.S.)  
**Special Technology - VII : (Oil Technology - VII)**  
**Technology of Oils, Fats & Surfactants**

P. Pages : 1

TKN/KS/16/7938

Time : Three Hours



Max. Marks : 80

- Notes :
1. All questions carry equal marks.
  2. Answer **any five** questions.
  3. Due credit will be given to neatness and adequate dimensions.
  4. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain the difference between Natural & synthetic wax. Give the list of available Natural waxes. **8**  
b) Give the occurrence, composition, refining & processing of Beeswax. Explain the wide uses of Beeswax. **8**
2. Write the importance of synthetic waxes. Give the detailed process for production of paraffin & Micro-crystalline wax. Explain the specification & industrial application of this waxes. **16**
3. Explain the various Thermal & chemical modification methods used for production of Drying oils. Write any one process with technical details giving proper flow Diagram. Describe detailed uses of Drying oils. **16**
4. State the importance of castor oil derivatives. Discuss in detail the process for manufacturing & purification of sebacic acid & 2-octanol with neat flow diagram. Also give chemistry for production of this product starting with castor oil. **16**
5. Write a detailed note on the following. **16**
  - i) Production of sulfated castor oil.
  - ii) Application of castor oil Derivatives.
6. Write a brief chemistry for production of Bio-Lubricants & Biodiesel. Give the process for manufacturing Fatty Alcohol & fatty Amines with neat flow diagram. **16**
7. Describe the detailed uses of fats & oil's relating to; **16**
  - i) Leather & Textile Industry.
  - ii) Food & pharmaceutical Industry.
8. Write short notes on **any four** of the following. **16**
  - i) Vegetable waxes.
  - ii) Candle making.
  - iii) Compounded waxes.
  - iv) Maleinized oil.
  - v) Dehydrated castor oil.
  - vi) Hydrogenated castor oil.
  - vii) Use of fat & oil in surfactant industry.

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