

## 7483

## BOARD DIPLOMA EXAMINATION, (C-20) OCTOBER/NOVEMBER—2023

## DCHOT - FOURTH SEMESTER EXAMINATION

TECHNOLOGY OF VEGETABLE OILS AND FATS—II

Time: 3 Hours [ Total Marks: 80

## PART—A

 $3 \times 10 = 30$ 

**Instructions:** (1) Answer **all** questions.

- (2) Each question carries three marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- **1.** List out the requirements of a best storage of oil seeds.
- 2. What is a scaled down sample?
- **3.** Write the demerits of various solvents used in solvent extraction.
- **4.** List out the solvents used in the solvent extraction of vegetable oils from seeds.
- **5.** Mention the reasons for formation of gums in oil and fats.
- **6.** List out various processes available for production of hydrogen gas.
- **7.** What is winterization of oils?
- **8.** Write the composition of peanut butter.
- **9.** What are the advantages of palm oil and palm Kernel oil in the manufacture of margarines?
- **10.** List out the superior qualities of biodiesel.

**PART—B** 8×5=40

**Instructions:** (1) Answer **all** questions.

- (2) Each question carries eight marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- 11. What are various factors affect the solvent extraction process?

(OR)

Draw a neat sketch of vertical basket type extractor and explain the working of it.

**12.** Distinguish the mode of operation between horizontal type extractor and rotary type extractor.

(OR)

Explain molecular diffusion theory of oil extraction and list out the types of solvent extractors.

**13.** Describe the continuous alkali refining of oils with a neat flowchart.

(OR)

Draw a neat sketch of continuous deodorizer and indicate the parts.

**14.** Describe the hydrogenation of vegetable oil with a neat flowchart.

(OR)

Draw a neat sketch of conventional type hydrogenator for vegetable oil hydrogenation and indicate the parts.

**15.** Describe the peanut butter manufacturing process with a neat flow sheet.

(OR)

Describe the steps in the manufacture of margarine and also mention the uses of margarine. **Instructions:** (1) Answer the following question.

- (2) The question carries **ten** marks.
- (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **16.** The biodiesel is superior to petrodiesel with respect to environmental aspects. Do you agree with the above statement? Give reasons.

