B.E (FTBE) THIRD YEAR, FIRST SEMESTER SUPPLMENTARY EXAMINATION 2018

FOOD PROCESS TECHNOLOGY -II

Time: 3 hrs **Full Marks: 100**

Use separate Answerscript for each part

(50 marks for each part)

PART - I (50 MARKS)

Answer Q1 and **Any Two** from the rest

Q1. Fill in the blanks: **10 × 1 = 10**

a. Temperature of formation of trans fatty acids is .....
b. Earthy odor of oils are due to.....
c. .....constitute the hydrophilic core in reverse micelles in oil processing.
d. A large number of contact stages are needed if flakes/solvent ratio is .....
e. .....is an example of a hard oil.
f. The final content of P in the oil should be .....
g. .....centrifuge is used in oil processing.
h. Palm stearin can be separated from palm olein by the process of .....
i. Mango kernel is an example of....type of speciality fat.
j. Deodorized oils have .....% FFA.

Q2. Distinguish between (any four): **4 × 5 = 20**

a. Horizontal moving basket extractor vs. Vertical moving basket extractor
b. Disc huller vs. Bar huller
c. Pre-bleaching vs. Post-bleaching
d. CBS vs. CBR speciality fats
e. Yield of oil and cake from groundnuts (48% oil and 5% moisture) pressed to leave 8% oil in cake (7% moisture) considering moisture loss vs. considering no moisture loss

Q3. Explain the working principle of (any four) **4 × 5 = 20**

a. De-Smet extractor
b. Oilseed cooker
c. Heat exchanger in shortening manufacture
d. Expeller press
e. Picker unit

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Q4. Write short notes on (any four): **$4 \times 5 = 20$**

a. Lecithin recovery from soybean
b. Disadvantages of chemical refining
c. Acid-water degumming
d. Pervaporation for IPAWA dehydration
e. Process that produces new fats without altering its degree of saturation

Ex/FTBE/T/314/2018(S)

B. FTBE 3RD YEAR 1ST SEM SUPPLEMENTARY EXAM, 2018

Food Process Technology-II

Time: 3 hours FM: 100

PART II (50 Marks)

(Answer question no. 1 and any two of other questions: 10+20x2=50)

1. a) how rate of drying changes with the composition of food?
   b) Discuss working principle of dough ball making machine (any one)?
   c) What do you mean by angel of repose?
   d) Discuss the working principle of polisher.

   2.5x4=10

2. Determine the values of c & n from the Henderson equation from following data obtained from thin layer paddy drying studies
   RH= 35% t= 60^0 C, M_e = 12.5%
   RH= 55% t=60^0 C M_e = 17.5 %
   Discuss the Dobhapa methods of parboiling and methods developed by Jadavpur University. 10+10=20

3. Discuss the methods of wet milling process of corn. What is the difference between hullar and sheller rice milling machine discuss with working principle?

   10+10=20

4. Discuss the working principle of ferinograph. What are the functions of the different ingredients used for bread making? 10+10=20