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Paper Id: 1 8 2 6 0 1 Roll No.

B.TECH [FOOD TECHNOLOGY]
(SEM VI) THEORY EXAMINATION 2017-18
CEREALS, PULSES & OILSEED PRODUCTS

Time: 3 Hours ***Total Marks: 100***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 2 x 10 = 20

a. Discuss the major objective of milling of cereal grains.
b. Define parboiling.
c. What do you mean by Head Rice?
d. What do you understand by Safe Moisture Level for grains?
e. Differentiate between Hard wheat & Soft wheat?
f. What do you understand by Straight Run flour?
g. Give the objective of wet milling of corn.
h. Define Dextrose equivalence.
i. Classify pulses on basis of milling characteristics.
j. What do you understand by shortenings?

SECTION B

2. Attempt any *three* of the following: 10 x 3 = 30

a. Explain the significance of polishing in rice milling and discuss friction polishing method.

b. Enlist various rheological tests for assessing quality of flour and explain Farinograph.

c. Define malting and explain the process of malting with significance of each step.

d. Explain the methods used for loosening of husk milling of pulses.

e. Describe the process of hydrogenation of oils and its importance in food processing industry.

SECTION C

3. Attempt any *one* part of the following: 10 x 1 = 10

(a) Discuss the general composition of cereal grains and their nutritional importance.
(b) With the help of flow sheet explain how paddy is milled in modern rice mill.

4. Attempt any *one* part of the following: 10 x 1 = 10

(a) Explain the milling of the durum to obtain semolina.

(b) Classify macaroni products and discuss its manufacturing.

5. Attempt any *one* part of the following: 10 x 1 = 10

(a) Discuss the various products & by-products of dry milling of corn with its end uses.

(b) Discuss the manufacturing of HFCS with the significance of each step.

6. Attempt any *one* part of the following: 10 x 1 = 10

(a) Explain the wet method of pulse milling with a flow sheet.

(b) Discuss the nutritional importance of millets, and Explain the process of pearling of millets.

7. Attempt any *one* part of the following: 10 x 1 = 10

(a) How will you process solvent extracted oil into oil or fat of desired stability, consistency & suitability for human consumption?

(b) Explain the manufacturing of protein concentrates with the help of neat flow sheet.