BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: IMSC **SEMESTER : V**
BRANCH: FOOD TECH. **SESSION : MO/18**

SUBJECT: : IMF5005 CEREAL TECHNOLOGY

TIME: 3.00 HOURS **FULL MARKS: 60**

INSTRUCTIONS:
1. The question paper contains 7 questions each of 12 marks and total 84 marks.
2. Candidates may attempt any 5 questions maximum of 60 marks.
3. The missing data, if any, may be assumed suitably.
***4*. Before attempting the question paper, be sure that you have got the correct question paper.**
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	Define the term "Cereals" and "Pulses".	[2]
Q.1(b)	Explain about the important areas where post-harvest losses may occur.	[4]
Q.1(c)	Make the structural diagram of a Cereal grain and write about Importance of Cereals with suitable examples.	[6]
Q.2(a)	What do you mean by Bulk density and Density (ρ) of cereal grain?	[2]
Q.2(b)	What are the important applications of Physical Properties of food grains?	[4]
Q.2(c)	Describe the equipments and procedure required for the milling of wheat.	[6]
Q.3(a)	What do you mean by Milling Degree?	[2]
Q.3(b)	Differentiate between Milling of paddy and Parboiling of paddy.	[4]
Q.3(c)	What kind of products can be developed from Milled Rice? What is the Nutritional Facts of Puffed rice?	[6]
Q.4(a)	What is Malt and Malting?	[2]
Q.4(b)	Make a labeled Structure of Pearl millet (Bajra) and give its nutritional composition.	[4]
Q.4(c)	Write about steps involved in extraction of starch from corn.	[6]
Q.5(a)	Give the definition of Shortening and Creaming with suitable examples.	[2]
Q.5(b)	Differentiate between Hydration and Dehydration of Baker's yeast.	[4]
Q.5(c)	Write about the role of important ingredients like egg, salt, sugar, fat and other material of Cake in Baking qualities.	[6]
Q.6(a)	What do you mean by Impact Milling and Attrition Milling?	[2]
Q.6(b)	Differentiate between Wet Milling and Dry Milling of pulses.	[4]
Q.6(c)	Describe the process flow for processing of pulses.	[6]
Q.7(a)	Write about Pasta?	[2]
Q.7(b)	Give the brief idea on the negative effects of heat treatments on extrudates.	[4]
Q.7(c)	Describe the process for making Pasta products.	[6]

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