

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

CLASS: IMSC
**BRANCH: FOOD
TECHNOLOGY**

SEMESTER : VIII
SESSION : SP/19

SUBJECT: SAF2001 CEREAL PULSES AND OIL SEEDS TECHNOLOGY
TIME: 3.00 Hrs

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.
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- Q.1(a) Write about 'oilseed production in India' and give a brief on the Vision for Agriculture in 2020 A.D. [6]
Q.1(b) Draw a neat and clean structure of Rice grain; write about structural composition and the useful parts of the grain? [6]
- Q.2(a) Explain Wheat milling process with the help of a neat flow diagram? [6]
Q.2(b) Write about the 'Flour Blending' and Additives to Improve Functional Properties? [6]
- Q.3(a) What are the reason and aims of development of puffed product from cereals? Describe the process of manufacturing of Puffed rice. [6]
Q.3(b) Write about Brown Rice, RPC and Germinated Brown Rice. [6]
- Q.4(a) Define the terms 'Primary Processing', 'Secondary Processing' and 'Tertiary Processing' of Pulses, and write a brief note on 'Pulses Processing'. [6]
Q.4(b) Describe the wet milling process of Corn and write about Hydrothermal treatment / conditioning of Corn. [6]
- Q.5(a) What do you mean by Vegetable Oils? Give the average oil content(%) of followings- (1) Groundnut, (2) Sunflower, (3) Mustard, (4) Castor, (5) Coconut and (6) Rice Bran [6]
Q.5(b) Explain the process of Soy milk preparation. [6]
- Q.6(a) Explain the importance of oilseeds in human diet. How pre - treatments help in oil extraction? [6]
Q.6(b) What do you understand by mechanical oil expulsion? Explain the press type oil expellers. [6]
- Q.7(a) Differentiate between Cold Extrusion and Hot Extrusion and why it is important in food industry. [6]
Q.7(b) What do we mean by novel foods? What are FSSAI Regulations and norms for Novel foods? [6]

:22/04/2019 M: