

Note: Attempts all questions. Carrying of mobile phones during examinations will be treated as a case of unfair means. Marks are indicated against each question in bracket.

1. Define Bioavailability and Bio-accessibility (2) COI
2. Define starter culture? What are the possible role of starter culture and give a overview of microorganism used in the starter culture (3) COII
3. Describe the classification of diary starter culture based on (4) COII
 - a. Growth temperature
 - b. Number of strain in the culture
 - c. Inoculation method
4. Soy based fermentation food has been used worldwide, write down the nutritional content of soybean? Define functional food and discuss the positive influence of it on few diseases? (3) CO I & III
5. Write a striking difference between (3) COII
 - a) i. Fire tube and water tube boiler, ii. Extremely fired and internally fired boiler
 - b) Explain importance and advantages of size reduction operations in food processing industry?
6. Write a comprehensive note on
 - i) Mont boiler emphasizing on types of various component and their working? (3) COII
 - ii) Discuss design and working operation of any three of following equipment?
 - a) Roller mill b) Standard cubing equipment c) Pulping equipment d) Plate mill(3) CO II
7. It is found that energy required to reduce particles from a mean diameter of 1 cm to 0.3 cm is 11Kj/kg. Estimate the energy requirement to reduce the same particles from 0.1 cm to 0.01 cm assuming: a) Kick's law b) Rittinger's law (4) COII