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B.E. / B.Tech. (Full Time) DEGREE ARREAR EXAMINATIONS, APR / MAY 2014

AGRICULTURAL AND IRRIGATION ENGINEERING BRANCH

Fourth Semester

AI 9253 – FOOD SCIENCE AND NUTRITION TECHNOLOGY

(Regulation 2008)

Time: 3 hours

Answer ALL Questions

Max Marks: 100

Part – A (10 x 2 = 20 Marks)

- 1) Write a note on Food Safety and Standards Act.
- 2) What is misbranding? Give few examples.
- 3) Define glycemic index and give few examples.
- 4) An adult woman 45 years old, weighing 62 kg has a temperature of 102°F. Calculate the BMR.
- 5) How is cobalt important to our body?
- 6) What are Essential and Non-essential amino acids and list a few of them?
- 7) Differentiate a juice and squash.
- 8) Expand – BIS, CFTRI, AGMARK, BVO
- 9) List 8 informations available in a pack.
- 10) What are the by products during sugarcane processing and the role of fermentation?

Part – B (5 x 16 = 80 Marks)

- 11) (i) Explain in detail how the total energy requirement of the body is calculated. (8)
- (ii) What are the characteristics of carbohydrates? How are the carbohydrates classified? Give examples. (8)
- 12) a) i) Define food and explain its constituents with few examples. (5)
ii) Describe various methods to find out adulteration in milk and honey. (6)
iii) Write short notes on pH and its application to food science. (5)
- (or)
- b) i) Explain the Essential Commodities Act and the orders covered. (10)
ii) Discuss the relation of nutrition to good health. (6)
- 13) a) i) Tabulate the Recommended Dietary Allowance of important minerals for children, males and females. (10)

ii) Write short notes on the importance of Calcium to our body. (6)

(or)

b) i) How are minerals classified? List the functions of minerals. (10)

ii) Write short notes on Child foods. (6)

14) a) i) What are the types of candies? Explain the method of preparation. (8)

ii) Write short notes on baking. Explain the method of preparing bread. (8)

(or)

b) i) What are the steps involved in the development of extruded products? (8)

ii) What are the types of cakes and explain how they are prepared? (8)

15) a) i) How are foods classified? Give examples with the brands as they are available in a super market. (8)

ii) What are the types of packaging? Discuss the various materials used for the same and their properties. (8)

(or)

b) i) Why is fermentation of food necessary? Explain the advantages of the same. (8)

ii) With your knowledge on food science, prepare a recipe mentioning the ingredients, method of preparation and its nutrient value. (8)