

**DEPARTMENT OF HOME SCIENCE**  
**KURUKSHETRA UNIVERSITY KURUKSHETRA**

**Ph.D. Entrance Test (Model Paper)**  
**Paper – Ist**

**Maximum Marks: 100**  
**Duration of Exam: 1 hour**

**Note:** Attempt all the 50 questions. Each question carries 2 marks. Give your answer by marking a tick ( ) on one of the response alternatives to each question. All questions carry equal marks and there is No Negative Marking. If more than one response has been marked the question will not be scored.

**Model Questions:**

1. The enzyme used in cheese making is:
  - a. Papain
  - b. Bromolein
  - c. Lipase
  - d. Rennin
2. Proper pasteurization of milk is ensured by the absence of the enzyme:
  - a. Protease
  - b. Alkaline phosphatase
  - c. Alpha-galactosidase
  - d. Xanthin oxidase
3. Actin and myosin get permanently fixed during:
  - a. Maillard reaction
  - b. Rigor mortis
  - c. Poaching of egg
  - d. Smoking of meat
4. The main lipid present in VLDL is:
  - a. Cholesterol
  - b. Phospholipids
  - c. Omega-6 fatty acids
  - d. Triglycerides
5. The amount of glucose in 1L of WHO recommended ORS is:
  - a. 20g
  - b. 30g
  - c. 40g
  - d. 50g
6. As per ICMR (2010), the energy needs of a nursing mother during the seventh month of lactation is:

- a. +300 kcals
  - b. +420 kcals
  - c. +520 kcals
  - d. +550 kcals
7. At global level, in the overall Human Development Index, currently India ranks at:
- a. 112
  - b. 123
  - c. 134
  - d. 145
8. The number of operational Aanganwadi Centres as of October 2011 is:
- a. 11.70 lacs
  - b. 12.15 lacs
  - c. 12.86 lacs
  - d. 13.07 lacs
9. Megaloblastic Anemia is caused due to deficiency of:
- a. Iron
  - b. Folic Acid
  - c. Cynocobalamine
  - d. Proteins
10. Branched chain amino acid are:
- a. Leucine, Isoleucine, valine
  - b. Lysine, Isoleucine, Valine
  - c. Isoleucine, Thronine, leucine
  - d. Isoleucine, Methionine, Phenylalanine

**PAPER-II**  
**Subjective Paper**

**Maximum Marks: 100**  
**Duration of Exam: 2 hours**

**Note:** This paper will consist of 15 subjective questions. The candidates will be required to attempt any 10 questions. Each question shall carry equal marks. Time allotted for the second paper will be 2 hours.

**Model questions subjective type:**

Q 1. Discuss the following along with Principles and applications.

- a).
  - i. UV with visible absorption.
  - ii. Atomic omission.
- b).
  - i. Estimation of low calorie sweeteners.
  - ii. Comment on phytoestrogens.

Q 2. Explain the measurement of:

- a) Refractive Index.
- b) Gel Strength.
- c) Density
- d) Enzyme Activity

Q 3. Discuss any two nutritional programs in detail running in Haryana for improving the Nutritional status of community.

Q 4. a) Suggest nutritional management in:

- i) Glomerulonephritis.
- ii) Cirrhosis of liver.

b) What are the major concerns regarding genetically modified foods?

Q 5. a) How will you write an article in journal? Describe in detail.

b) Discuss any two statistical tools for the interpretation of results in Foods and Nutrition research along with the merits and demerits of each.