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| LOGO | Federal Board HSSC-I ExaminationScience for Home EconomicsModel Question Paper |

Version Number

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**SECTION – A**

Time allowed: 15 minutes Marks: 10

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| Note: Section-A is compulsory. All parts of this section are to be answered on the separately provided OMR Answer Sheet which should be completed in the first 15 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil. |

**Q.1 Choose the correct answer i.e. A / B / C / D by filling the relevant bubble for each question on the OMR Answer Sheet according to the instructions given there. Each part carries one mark.**

1. What is the soluble part of cytoplasm?

A. Protoplasm B. Gel

C. Sol D. Cytosol

2. During which stage of prophase 1 the process of crossing over takes place?

A. Diplotene B. Pachytene

C. Zygotene D. Leptotene

3. Anything that occupies space and has mass is called?

A. Substance B. Element

C. Matter D. Mixture

4. According to which theory NH3 cannot be classified as a base?

A. Lewish theory B. Bronsted – Lowry theory

C. Arrhenius theory D. All of these theories

5. Which compounds are defined as the hydrocarbons and their derivatives?

A. Organic B. Inorganic

C. Ionic D. Covalent

6. Proteins are classified into types:

A. 3 B. 4

C. 5 D. 2

7. Bile from liver helps in the digestion of lipids through:

A. Salivary amylase B. Peristalsis

C. Emulsification D. Lubrication

8. What is the normal range of pH in human blood?

A. 7.4 B. 7.5

C. 8 D. 7.2

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9. The floor of the chest is called:

A. Alveoli B. Bronchioles

C. Diaphragm D. Pleural cavity

10. ∆H for endothermic reaction is:

A. Positive B. Negative

C. Zero D. None of these

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Time allowed: 2.15 hours Total Marks: 40

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| Note: Sections ‘B’ and ‘C’ comprise two pages and questions therein are to be answered on the separately provided Answer Book. Use supplementary answer sheet i.e., sheet B if required. Write your answers neatly and legibly. |

**SECTION – B** (Marks 24)

Q.2 Attempt any **EIGHT** parts from the following. All parts carry equal marks. (8 × 3 = 24)

i. What are the salient features of cell theory?

ii. Lysosomes are cytoplasmic organelles:

 (a) Describe the function of lysosome in the cell. (2)

 (b) Lysosomes are rich in which enzyme? (1)

iii. Cytoskeleton provides support to the cell:

 (a) What are the main proteins present in it? (1)

 (b) Describe the structures and functions of Microtubules Microfilaments? (2)

iv. Write a note on Fats.

v. What are the types of blood vessels present in our circulatory system? Describe them.

vi. (a) Define the neutralization reaction with example. (1)

 (b) Write a complete and balanced chemical equation for a neutralization reaction. (2)

vii. (a) What is cellulose? (1)

 (b) What is an ester? Write a chemical reaction forming an ester. (2)

viii. Write down the functional group and general formula for the following:

 (a) Alkane (b) Aldehyde (c) Ketone (d) Ether

ix. What are the types of neurons? Describe their function.

x. Draw a labeled diagram of nephron.

xi. Differentiate between exothermic and endothermic reactions.

**SECTION – C** (Marks 16)

**Note:** Attempt any **TWO** questions. All questions carry equal marks. (8 × 2 = 16)

**Q.3** (a) What was the Lewis concept of acids and bases explain with examples? (4)

 (b) Quote some uses of salts. (2)

 (c) Write equations showing the ionization of the following as Bronsted – Lowry acids: (2)

 (i) NaOH (ii) NH4

**Q.4** (a) Draw and explain the different phases of Mitosis. (4)

 (b) What is the importance of Meiosis? (2)

 (c) Differentiate between Necrosis and Apoptosis. (2)

**Q.5** (a) Write a comprehensive note on the important Endocrine glands. (6)

(b) What is feedback mechanism? Discuss the types of feedback mechanism. (2)

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| Description: LOGO | Federal Board HSSC Examination Science for Home EconomicsPractical Model Question Paper |

**Time allowed: 3 hours Total Marks: 25**

1. Titrate NaOH against HCL. (5)

2. Determine the boiling point of water. (5)

3. Lab performance. (5)

Viva Voce = 5 Marks

Practical Note Book = 5 Marks

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