C.O.E office K.M.V-II
25/11/24 (EVE)

Exam Code: 119703 **Paper Code: 3198**
(20)

Programme: Bachelor of Science (Home Science)
Semester-III

Course Title: Developmental Stages upto Childhood

Course Code: BHSL- 3281

Time Allowed: 3 Hours **Max Marks: 60**

Attempt Five questions in all, selecting at least One question from each section. The fifth question may be attempted from any section. All questions carry 12 marks.

Section —I

1. What do you understand by physical development? What are the factors affecting physical development of a child?
2. Write in brief about two basic principles concerning physical development of child.

Section —II

3. Throw light on some motor skills during childhood.

4. What is the difference between:
   (i) Cooing and Babbling
   (ii) Stuttering and Stammering

Section —III

5. What do you understand by Social development? What is the role of a school in socialization process of a child?
6. Define moral development and explain all the important factors affecting moral development of a child.

Section —IV

7. What are emotions? Explain the characteristics of emotions.
8. Define ECCE. Explain Montessori and Kindergarten.

Exam Code: 119703 **Paper Code: 3199**
(20)

Programme: Bachelor of Science (Home Science)
Semester-III

Course Title: Basic Concepts of Economics

Course Code: BHSL-3172

Time Allowed: 3 Hours **Max Marks: 60**

Note: - Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each questions carries 12 marks.

Section A

1. (a) Explain the basic concepts of consumer Economics.
   (b) What are the various economic and non-economic activities? (6,6)
2. Explain the meaning and Characteristics of human wants. What are the forces influencing human wants? (12)

Section B

3. Write a note on different types of markets. (12)

4. Critically examine the law of diminishing marginal utility. (12)

Section C

5. Discuss the need and sources of consumer credit. Explain various legal credit instruments. (12)
6. Discuss the following :
   (a) merits and demerits of credit.
   (b) Points to be considered while borrowing. (6,6)

Section D

7. What are the various types of accounts in banking System? Explain the process of opening an account. (12)
8. Define term 'insurance'. What are various kinds of Insurance Policies? Also Discuss the role of LIC and GIC. (12)

Exam Code: 119703 **Paper Code: 3200**

Programme: Bachelor of Science (Home Science)

Semester-III

Course Title: Basic Physics

Course Code-BHSM-3393

Time Allowed: 3 Hours **Maximum Marks: 60**

Note: Attempt five questions in all, selecting atleast one question from each section. Fifth question may be attempted from any section. Each question carries 12 marks.

Section - A

1. a) Check the correctness of the equation Energy= mv^2+ ma where m is mass, v is velocity and a is acceleration of particle. (4)
   b) What are SI units. Discuss its advantages. (5)
   c) Can an object be at rest as well as in motion at same time? Explain with illustration. (3)
2. a) A ball having initial velocity 5m/s moves with a constant acceleration $2m/s^{-2}$ for a time 10sec along a straight line. Find the distance travelled in 10 sec. Calculate velocity of particle after 5 secs of its start of journey. (4)
   b) Explain the meaning of Relative Velocity, angular acceleration and Centripetal acceleration. (8)

Section - B

3. a) Comment on the statement that Friction is necessary evil. (6)
   b) What do you mean by work. Discuss about positive, Zero and negative work. (6)
4. a) Explain the working of scissor, cork opener and tong and discuss the type of lever used in these simple machines. (6)
   b) Explain dimensions and units of force, work and Power. (6)

Section - C

5. What is pressure? Derive its units and dimensions. Discuss the working of syringe and vacuum cleaner. (12)
6. Explain Archimedes Principle and discuss its role in daily life. (12)

Section - D

7. Discuss the modes of heat transmission. Describe the advantages of conductors and insulators. (12)
8. What do you mean by heat. Explain the types of expansion in solids and write the relation between these coefficients. (12)

Exam Code: 119703 **Paper Code: 3201**

Programme: Bachelor of Science (Home Science)

Semester - III

Course Title: Basic Chemistry

Course Code: BHSM-3084

Time Allowed: 3 Hours **Max Marks: 60**

Note:- Attempt five questions in all, selecting at least one question from each section. Fifth question may be attempted from any section. Each question carries 12 marks.

SECTION-A

1. (a) Explain the mole concept in terms of mass, number and volume with suitable example. Find number of moles of O_2 molecules in 64 g of O_2 gas? (6)
   (b) Discuss the essentials of a chemical equation and the steps involved in balancing a given chemical equation using the hit-and-trial method. Also, briefly describe the implications and limitations of chemical equations. (6)

   $$Fe_3O_4 + H_2 \longrightarrow Fe + H_2O$$

2. (a) What is Atomic weight and Molecular weight. Calculate the molecular weight of $C_6H_{12}O_6$ and $C_{12}H_{22}O_{11}$. (6)
   (b) Describe the concept of variable valency and why it occurs. With the example of iron forming $FeCl_2$ and $FeCl_3$, explain how variable valency is exhibited. (6)

SECTION-B

3. (a) List and explain the main postulates of Bohr's atomic model. How did Bohr's model address the stability of atoms and the emission of radiation? (6)
   (b) How many protons, electrons and neutrons are there in the following nuclei? (6)

   $^{13}C_6$, $^{16}O_8$, $^{24}Mg_{12}$, $^{56}Fe_{26}$, $^{238}U_{92}$, $^{80}Br_{35}$

4. (a) Describe the basic structure of an atom and explain how electrons, protons, and neutrons are arranged within it. Also discuss in detail nuclear model of atom. (6)
(b) Define isobars and explain how they are different from isotopes. Assign the proper symbol to the species containing number of electrons, protons and neutrons equal to 18,16,16 respectively. (6)

SECTION-C

5. (a) Using electron dot structures, illustrate the bonding in methane (CH_4) and calcium oxide (CaO). Describe how these structures depict electron sharing or transfer. (6)
(b) Define an ionic bond and explain how it is formed. Using sodium chloride (NaCl) as an example, show how electron transfer leads to ionic bond formation. (6)

6. (a) Describe the different types of chemical bonds and their characteristics. Briefly explain how these bonds differ in terms of electron sharing or transfer. (6)
(b) Define a coordinate bond and describe how it differs from a regular covalent bond. Using the ammonium ion (NH_4^+) as an example, explain how a coordinate bond is formed. (6)

SECTION-D

7. (a) Explain what hard water is, including its causes and types. Discuss how temporary and permanent hardness differ and provide examples of ions responsible for each. (6)
(b) Define the terms normality, molarity, molality, and strength of a solution. Explain how each concentration term is calculated, providing examples for clarity. (6)

8. (a) Describe the basic structural differences between natural and synthetic fibers. How does the structure of these fibers affect their properties? (6)
(b) Define pH and explain its significance in terms of water quality. How does pH indicate the acidity or alkalinity of water, and why is maintaining a neutral pH important? (6)

Exam Code: 119703 **Paper Code: 3202**
(20)

Programme: Bachelor of Science (Home Science)
Semester-III

Course Title: Housing

Course Code: BHSM-3285

Time Allowed: 3 Hours **Max Marks: 60**

Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks.

Section A

1. Define house and home. Write the various functions of home and factors affecting housing needs.
2. Write down the advantages and disadvantages of rented and owned house.

Section B

3. Explain the various types of houses with examples.
4. Write the principles of planning a house in detail.

Section C

5. Discuss about the building material which is used for the foundation, walls and floor during the construction of a house.
6. Write down about the building material which is used for electricity, sewerage and drainage in a house.

Section D

7. What do you mean by housing financing agencies? Explain about the government and non- government agencies with their terms and conditions.
8. What are the advantages and disadvantages of taking loan?

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Exam Code: 119703 **Paper Code: 3203**
(20)

Programme: Bachelor of Science (Home Science)
Semester-III

Course Title: Meal Management

Course Code: BHSM-3286

Time Allowed: 3 Hours **Max Marks: 60**

Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 12 marks.

Section A

1. Discuss the importance of Food groups classification. Write short notes on : Balanced diet, RDA and Calorie consumption unit. (12)
2. Discuss the importance of Exchange list in planning of normal and therapeutic diets, give suitable examples. Discuss the objectives of formulation of RDA. (6,6)

Section B

3. Discuss the nutritional requirement for sedentary male. (12)

4. Discuss the principles of planning meal (12)

Section C

5. Discuss in detail the physiological considerations and nutritional requirement for lactation. (12)
6. Discuss the modifications in nutritional requirements due to physiological changes for elderly (12)

Section D

7. Discuss the importance of weaning for infants. Discuss important considerations for planning meals for preschoolers. (12)
8. Breast feeding is best for optimum growth and development of infants" Comment. Discuss the disadvantages of bottle feeding. (12)

Exam Code: 119703 **Paper Code: 3204**

Programme: Bachelor of Science (Home Science) Semester: III

Course Title: Textile Science

Course Code: BHSM-3287

Time Allowed: 3 Hours **Max Marks: 60**

Note: Attempt five questions, selecting atleast one question from each section. The fifth question can be attempted from any section. Each question carries 12 marks.

Section A

Q1 (a) Explain the manufacture of cotton.

(b) Explain the physical and chemical properties of wool.

Q2 (a) Classify the textile fibers according to source.

(b) Explain the manufacture and properties of polyester.

Section B

Q3 Explain any five types of Novelty weaves.

Q4 Explain the process of Felting and Bonding.

Section C

Q5 (a) What is the importance of finishing?

(b) What are the different types of bleaches? What are their uses?

Q6 (a) Explain any three functional finishes.

(b) Explain the process of napping, sizing and desizing.

Section D

Q7 Explain the difference between dyeing and printing and types of printing.

Q8 (a) What are the principles and uses of dry cleaning?

(b) Explain the principles of washing.