

HOME SCIENCE
Class –XII
SYLLABUS (2024-25)
(THEORY)

SECTION – A

(Food and Nutrition)

1. Food, Nutrition and Health

i. Definitions: Food, Nutrition, Health, Nutrients, Nutrient density, Malnutrition, Recommended Dietary Allowances, Nutritional Status, Functional Food, Nutraceuticals, Antioxidants, Geriatrics, Probiotics.

Functions of food

- ii. Classification of Food groups based on the recommendation of ICMR
- iii. Balanced Diet
- iv. Food Guide pyramid

2. Nutrients and nourishment

Carbohydrates, Proteins, Fats, Minerals (calcium, Phosphorus, iron, zinc, iodine, fluorine), Vitamins (A,D,E,K,B and C) and Water

- i. Functions and sources
- ii. Health effects of too little and too much of nutrients
- iii. Enhancing nutritional value of foods

3. Meal Planning

i. Meaning, importance and principles of meal Planning
ii. Planning meals for the family- Children (Infants, pre schoolers and school going children), adolescents (boys and girls), adults (men and women), pregnant women, lactating mothers and elderly.

4. Food selection, storage, preparation and preservation at home

- i. Food selection and storage
- ii. Preparation of food: Different methods of cooking
- iii. Food preservation at home – importance and methods

5. Food Safety

- i. Food hygiene
- ii. Food Adulteration
- iii. Removal of the pesticide residues from food by different methods.

6. Diet therapy

- i. Principles of diet therapy
- ii. Adaptation of normal diet for therapeutic purpose

SECTION –B (Human Development)

1. Beginning of Motherhood

- i. Signs, discomforts and warning signs of pregnancy
- ii. Antenatal care of expectant mother (diet, rest, exercise, medical check-ups and immunization)
- iii. Alternative reproductive methods (in vitro fertilization, gamete intrafallopian transfer, zygote intrafallopian transfer and Surrogacy)

2. Prenatal Physiological Processes

- i. Stages of prenatal development (germinal, embryonic and fetal)
- ii. Fetal monitoring techniques (ultrasound, chorionic villus sampling, amniocentesis and foetoscopy)
- iii. Environmental influences on prenatal development (teratogens, diseases, harmful drugs and x-ray)

3. Birth process

- i. Stages of birth process (dilation, expulsion and placental stage)
- ii. Types of child birth (natural, instrument, breech and caesarean)
- iii. Categories of new born babies (pre term, term and post-term)

4. Postnatal care of mother

- i. Meaning and purpose of postnatal care
- ii. Aspects of postnatal care
- iii. Effects of parenthood on mother, father and other family members

5. Care of newborn

- i. Characteristics of new born
- ii. Neonatal reflexes
- iii. Feeding, bathing and clothing of newborn
- iv. Immunization
- v. Developmental milestones and delays

6. Infant stimulation

- i. Mother-child interaction
- ii. Developmentally appropriate play material
- iii. Common childhood ailments

SYLLABUS (PRACTICAL) Section-A (Food and Nutrition)

1. Preparation of list of foods available in your home according to food groups.
2. Preparation of
 - a) Healthy salads
 - b) Dishes enhancing nutrition value of food (by Combination of cereals, pulses and vegetables, fermentation and sprouting)
 - c) Protein rich snacks and desserts.

3. Freezing and sun drying of blanched vegetables.
4. Preparation of ORS solution.
5. Simple tests for checking adulteration in :
 - a) Cereals : rice, semolina (suji).
 - b) Pulses : Bengal Gram (channa dal)
 - c) Milk
 - d) Tea leaves
 - e) Coriander powder
 - f) Turmeric powder
 - g) Powdered sugar
 - h) Black pepper

Section-B
(Child Development and Mother Craft)

1. Showing a documentary on neo-natal reflexes and care and management of pre-term babies (<http://www.vhai.org/ceo/filmsforchange.php>)
 2. Recording of immunization schedule of infants and children
 3. Demonstration on feeding, bathing and clothing of newborn
 4. Preparing developmentally appropriate play material
 5. Demonstration on sterilization of feeding bottles and disinfecting clothing of infants
 6. Preparation of weaning foods- liquid and semi-solids
 7. Preparation of visual aids related to developmental milestones of infancy
 8. Showing a documentary on family planning methods (<http://www.vhai.org/ceo/filmsforchange.php>)
- Films:**
- Aparajita
 - Anant
- Oriented videos:**
- Neo-Natal
 - Aaj Ki Na Samajhi Kal Ki Pareshani