**CLASS 10 HOME SCIENCE**

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| **Topic** | **Learning outcomds** | **Innovative/art integration, Experiential learning, Inter-disciplinary action.** |
| Unit I. Human growth and development II1. Play (birth-5 years), role of play in growth & development of children. Types of play- active, passive, natural, serious and exploratory, selection of play material for children.
2. Childhood (3 to 11 years)- Age specific milestones- Physical, motor, social, emotional, cognitive and language
3. Adolescents : Special Features- Physical and biological, motor, social, emotional, Cognitive and language

Unit II. Management of Resources: Time, Energy and Money1. Time Management- Definition and Importance
2. Time plans- Factors affecting time plan
3. Energy Management: Definition and Importance
4. Fatigue and work Simplification

Unit III. Food and Personal Hygiene1. Principles of hygienic handling and serving of food
2. Hygiene in kitchen
3. Personal hygiene of food handler
4. Hygiene during food storage

Unit IV. Meal Planning1. Concept of Meal Planning
2. Factors affecting meal planning- age, sex, climate, occupation, cost of food items, number of family members, occasion, availability of food, family traditions, likes and dislikes
3. Basic food groups given by ICMR
4. Use of food groups in planning balanced meal for self and family

Unit V. Food Safety and Consumer Education1. Problems faced by Consumer- Price variation, poor quality, Faulty weights and measures, Non-availability of goods, Misleading information, Lack of standardized products
2. Food adulteration : Concept, adulterants (Metanil yellos, Argemone, Kesari dal) and harmful effects of these adulterants on human health
3. Food Safety Standards-FSSAI (2006)

Unit VI. Care and Maintenance of Fabrics and Apparel1. Cleaning and finishing agents used in routine care of clothes
2. Stain Removal
3. Storage of cotton silk, wool and synthetics
 | Student will be able to know about the importance of play in physical, emotional, social, cognitive, motor development. He will be able to know different types of play i.e. active, passive, natural, serious, exploratory etc. Also he will gather the knowledge of selecting play material for 0-5 years child .Child will be able to understand the concept of age, specific milestonesStudent will be able to learn about physical, biological, motor, social, emotional, cognitive and language development occurring in teenage. Student will be able to learn about the benefits of time management and how to apply time plans in routine life.Student will be able to learn about the factors that effect time plan.Student will be able to learn about the importance of saving energy and working productivelyStudent will be able to learn about how to simplify work without getting fatigued.Student will learn about the principles of hygiene handling and serving of food by WHO and UNESCOStudent will learn about how the maintain hygiene in kitchenStudents will learn about personal hygiene and equipmentsStudent will learn about how to store food hygienically.Students will learn about the concept of meal planning.Student will learn about the factors affecting meal planStudent will learn about the importance of basic food groups recommended by ICMRStudent will be able to understand and how to use basic food group for self and familyChild will be able to learn the problems faced by consumers, malpractices done by traders to the consumers in a different way. Will get the knowledge of standardized marks.Student will be able to gather the knowledge about adulteration in different eatables (intentional/non-intentional)Child will be able to learn about different food safety standards.Child will able to learn about the cleaning and finishing agents that are used in routine care of clothesStudents will be able to learn how to remove different stains from different type of clothesStudents will be able to learn about how to store cotton, silk, woolen, synthetic cloths in a proper way so that they do not get damaged. | **Art integration :** Play have an effective role in strengthening the curiosity, imagination, sense of wonder and have positive skills on success.**Experiential learning:**Student will acquire the knowledge related to play through experience and reflection. Also he will be ready to face win and lose**Inter-disciplinary action:****Maths**: For example, how many types of play?**Science**: What are the different roles of play in growth and development in the body?**English**: All the content**Activity**: Make a suitable play material for children between 0-5 years**Art integration:**Different milestone help child to develop academic and social skills that are foundations for future learning, behavior and health. Also helps children to focus on learning life skills, While learning through art, child uses different senses and parts of brain, which help them connect and recall important information**Experiential Learning:** Experiential learning is significant for child’s brain development and learning. The child learn and apply their learning to pass the exams. Fun learning is highly effective method.**Inter-disciplinary:****Science**: Helps child to understand the different parts of the body.**Maths**: What is the age of early childhood/late childhoodWhat is the weight and height of the child at the age of 3 years etc.**English**: All the content.**Art integration:**Different milestone help child to develop academic and social skills that are foundations for future learning, behavior and health. Also helps children to focus on learning life skills, While learning through art, child uses different senses and parts of brain, which help them connect and recall important information**Experiential Learning:** Experiential learning is significant for child’s brain development and learning. The child learn and apply their learning to pass the exams. It helps team to struggle academically and socially.**Inter-disciplinary:****Science**: Helps child to understand the development of different parts of the body i.e. physical, biological, motor, social, cognitive, emotional and language.**Biology**: Development of harmones during development.**English**: All the content.**Activity:** List five areas of agreement and disagreement with parents, siblings and friends, and give your suggestions to improve the relationships**Art Integration:** Learns the art of planning and controlling the time spend on specific activities, to complete more work in less time by lowering stress level and also enhancing performance and satisfaction.**Experiential Learning:** It helps student to make time management and apply in routine life to make proper use of his/her leisure time and also helps in overcoming distraction.**Inter-disciplinary:****Physical education:** Games in the order of prioritizing, organizing, delegating, strategic planning and problem solving.**English**: All the content**Art Integration:** Learns the art of planning and controlling the time spend on specific activities, to complete more work in less time by lowering stress level and also enhancing performance and satisfaction.**Experiential Learning:** It helps student to make time management and apply in routine life to make proper use of his/her leisure time and also helps in overcoming distraction.**Inter-disciplinary:****Physical education:** Games in the order of prioritizing, organizing, delegating, strategic planning and problem solving.**English**: All the content**Activity**: Make a time plan to self for one day.**Art integration:** Learns the art of how to manage energy in routine life and live stress free life also how to work efficiently.**Experiential learning:**  Live stress free life by managing energy properly thus working properly.**Inter-disciplinary:****Science**: How to save energy?**English**: All the content**Art integration:** Learns the art to overcome fatigue and simplify work in routine life.**Experiential learning:**  Live stress free life by simplifying thus working efficiently.**Inter-disciplinary:****Science**: How to simplify work?**English**: All the content**Art integration:** Learns the art to navigate food safety and hygiene.**Experiential learning:**  How to maintain personal hygiene as well as the cleanliness of the equipments to be used and also the knowledge of food storage.**Inter-disciplinary:****Science**: How to manage technology and equipments for making food safe and hygiene.**Maths**: How many principles of food are there?**English**: All the content**Art integration:** Learns the art to navigate food safety and hygiene.**Experiential learning:**  How to maintain personal hygiene as well as the cleanliness of the equipments to be used and also the knowledge of food storage, how to control the pests, rodents and insects in kitchen. Role of sunlight in kitchen**Inter-disciplinary:****Science**: How to manage technology and equipments for making food safe and hygiene.**Maths**: How many principles of food are there?**English**: All the content**Art integration:** Learns the art to navigate food safety and hygiene.**Experiential learning:**  How to maintain personal hygiene as well as the cleanliness of the equipments to be used and also the knowledge of food storage, how to control the pests, rodents and insects in kitchen. Role of sunlight in kitchen**Inter-disciplinary:****Science**: How to manage technology and equipments for making food safe and hygiene.**Maths**: How many principles of food are there?**English**: All the content**Art integration:** Learns the art to navigate food safety and hygiene.**Experiential learning:**  How to maintain personal hygiene as well as the cleanliness of the equipments to be used and also the knowledge of food storage, how to control the pests, rodents and insects in kitchen. Role of sunlight in kitchen**Inter-disciplinary:****Science**: How to manage technology and equipments for making food safe and hygiene.**Maths**: How many principles of food are there?**English**: All the content**Art integration:** integrating nutritional education through art, improving healthy eating habits and choices through creative, encouragement. Art of saving money and energy**Experiential learning:**  Will implement about the knowledge of nutritive value of food to the family members and others . ICMR introduced helps in knowing about particular quantity of nutrients in a particular food.**Inter-disciplinary:****Science**: What is the nutritive value, RDA (Recommended Dietary Allowances) retain in cooking.**Maths**: How many nutrients are there in a particular food?**English**: All the content**Activity**: Plan a balanced meal for yourself**Art integration:** Learns the art to navigate food safety and hygiene according to age, sex, climate, occupation, cost of food items, number of family members etc.**Experiential learning:**  How to maintain personal hygiene as well as the cleanliness of the equipments to be used and also the knowledge of food storage, how to control the pests, rodents and insects in kitchen. Role of sunlight in kitchen**Inter-disciplinary:****Science**: How to manage technology and equipments for making food safe and hygiene.**Maths**: How many principles of food are there?**English**: All the content**Art integration:** Learns the art to navigate food safety and hygiene according to age, sex, climate, occupation, cost of food items, number of family members etc.**Experiential learning:**  How to maintain personal hygiene as well as the cleanliness of the equipments to be used and also the knowledge of food storage, how to control the pests, rodents and insects in kitchen. Role of sunlight in kitchen**Inter-disciplinary:****Science**: How to manage technology and equipments for making food safe and hygiene.**Maths**: How many principles of food are there?**English**: All the content**Art integration:** Learns about the art of making diet of self and family members.**Experiential learning:**  Will learn to pick and choose from different food groups in a proper way. Also can choose food suitable for various diseases.**Inter-disciplinary:****Science**: Different nutrients included made up of different kind of chemicals.**Maths**: How many basic food groups are there? How many calories are there in the food.**English**: All the content**Art integration:** Learns the art to be alert while purchasing and does not get cheated by the manufacturers and the producers..**Experiential learning:**  Will implement the knowledge and alertness while purchasing the required goods**Inter-disciplinary:****Science**: Knowledge about technology and equipments, so that they do not get cheated**English**: All the content**Art integration:** Learns the art to recognize adulteration in food and will have awareness of different standardized marks**Experiential learning:**  Can easily recognize adulterants added in different food stuffs and can use simple methods for detecting the adulterants.**Inter-disciplinary:****Science**: Will have the knowledge of equipments and chemical used.**Maths**: What are the type of adulterants?PFA was passed in 1964.**English**: All the contentActivity: Write a report on any five malpractices you have observed in the market and write your responsibilities as consumers in each context.**Art integration:** Learns the art to tackle the problems faced by consumers.**Experiential learning:**  Less chances of getting cheated by the shopkeepers. Also will carry knowledge about standardized marks and symbols for different products (Orignal/fake)**Inter-disciplinary:****Political Science**: What are consumer rights?What are consumer responsibilities?What is consumer protection act?**Maths**: How many consumer rights are there?**English**: All the content**Activity**: Prepare a slogan/poster to create awareness on consumer education.**Art integration:** Learns the art of cleaning/laundering clothes by different ways. Also have art to recognize the fibers and cleans accordingly.**Experiential learning:**  Can differentiate easily which cloth should be washed or dry cleaned. Also apply different methods for doing so.**Inter-disciplinary:****Science**: How to use equipments and chemical reagents.**Maths**: What quantity of reagents or chemicals to be used?**English**: All the content**Art integration:** Learns the art of removing common stains from clothes by using different methods.**Experiential learning:**  Will apply knowledge in day to day life for removing stains from clothes**Inter-disciplinary:****Science**: How to use equipments and chemical reagents.**Maths**: What quantity of reagents or chemicals to be used?**English**: All the content**Art integration:** Learns the art of storing clothes in a better way according to their thread, yarn, fiber etc..**Experiential learning:**  Will apply knowledge of storing different clothes according to fabric, keeping in mind the conditions and requirements the cloth needs.**Inter-disciplinary:****Science**: How to store clothes by using different chemicals etc.**Maths**: Quantity of chemicals to be used**English**: All the content.Activity: Remove stain from white cotton fabric: Curry, paint, ball pen, ink, lipstick, tea and coffee. |