

## 5.7 HOME SCIENCE (441)

### 5.7.1 Home Science Paper 1 (441/1)

#### SECTION A (40 MARKS)

1.	<b>Separating tools used in the kitchen.</b> (a) Flour sieve (b) Tea sieve/strainer (c) Draining spoon (d) Colander (e) Conical strainer	Any 4 x $\frac{1}{2}$ = (2 marks)
2.	<b>Functions of vitamin B1 in the body.</b> - Release of energy from carbohydrates. - Stimulates growth. - Promotes appetite for food. - Aids in digestion. - Proper functioning of the nervous system. - Prevents the occurrence of Beriberi.	Any 2 x 1 = (2 marks)
3.	<b>Uses of carrots in cooking</b> - Adds colour. - Adds taste/flavour. - Improves the texture. - Improves the nutritive value. - For garnishing.	Any 4 x $\frac{1}{2}$ = (2 marks)
4.	<b>Factors that determine the choice of a cooking method.</b> - Time available. - Type of food. - Individual nutritional values. - Skill of the chef - Type of equipment available.	Any 2 x 1 = (2 marks)
5.	<b>Difference between chemical and biological raising agents.</b> Biological raising agents are microorganisms which when subjected to fermentation produce carbon dioxide and alcohol while chemical raising agents produce carbon dioxide by heating a mixture which sodium bicarbonate or baking powder has been added.	Well differentiated = (2 marks)
6.	<b>Ways of preventing skin diseases.</b> - Eat a balanced diet that is rich in vitamin A, B and C. - Wash the body daily. - Do not share personal items. - Use of medicated soaps and creams. - Sterilization. - Avoid mixing clothes of sick persons with others.	4 x $\frac{1}{2}$ = (2 marks)



7.	<b>Measures in prevention of bed sores on a bed ridden patient.</b> <ul style="list-style-type: none"> <li>- Massage the hip and back muscles.</li> <li>- Change the patient's positions regularly.</li> <li>- Ensure that the bedding is dry all the time.</li> <li>- Keep skin dry.</li> <li>- Use of a special mattress.</li> </ul>	Any 2 x 1 = (2 marks)
8.	<b>Benefits of play to a toddler.</b> <ul style="list-style-type: none"> <li>- Physical play; exercises different body muscles,</li> <li>- Manipulation play; gives enjoyment and teaches about size, volume, colour, shapes.</li> <li>- Creative play; helps a child express him/herself, co-ordination of hands and eyes.</li> <li>- Imaginative play; helps children to act about their feelings and fantasies/brain development.</li> <li>- Social play; helps the child to identify with the qualities of the people they admire. Helps to build relationships.</li> </ul>	Any 3 x 1 = (3 marks)
9.	<b>Factors that may influence the cleaning of the kitchen.</b> <ul style="list-style-type: none"> <li>- Type of food being prepared.</li> <li>- Type of surfaces.</li> <li>- Type of fuel used.</li> <li>- Frequency of use.</li> <li>- Orientation of the kitchen.</li> </ul>	Any 2 x 1 = (2 marks)
10.	<b>Ways of preventing falls in the home.</b> <ul style="list-style-type: none"> <li>- Proper maintenance of floors.</li> <li>- Tidiness in the rooms/dispose peelings appropriately.</li> <li>- Wiping spills immediately they occur.</li> <li>- Ensuring that the house is well-lit.</li> </ul>	Any 2 x 1 = (2 marks)
11.	<b>Reasons for using curtains in the living room.</b> <ul style="list-style-type: none"> <li>- For privacy.</li> <li>- For aesthetic value/decoration.</li> <li>- To filter excessive light.</li> </ul>	Any 2 x 1 = (2 marks)
12.	<b>Pieces of information that should be indicated on a certified product label.</b> <ul style="list-style-type: none"> <li>- Weight/size/quantity.</li> <li>- Name of the product.</li> <li>- Ingredients/materials used.</li> <li>- Date of manufacture.</li> <li>- Expiry date.</li> <li>- Instructions on use and storage/caution.</li> <li>- Name of the manufacturer.</li> <li>- Standard mark of quality.</li> </ul>	Any 6 x ½ = (3 marks)



13.	<b>Reasons for ironing garments in laundry work.</b> <ul style="list-style-type: none"> <li>- To remove creases.</li> <li>- To disinfect.</li> <li>- To dry the article completely.</li> <li>- To enhance appearance/bring back original form of article.</li> </ul>	Any 2 x 1 = (2 marks)
14.	<b>Difference between spotting and sponging.</b> <ul style="list-style-type: none"> <li>- Spotting is treatment given to dark-coloured garments which happen to accidentally get soiled on small areas and need immediate cleaning while sponging is treatment given to garments made from wool and clothes made of heavy dark coloured fabrics that are soiled on the surface only.</li> </ul>	Well differentiated = (2 marks)
15.	<b>Qualities of a good tape measure.</b> <ul style="list-style-type: none"> <li>- Clearly marked.</li> <li>- Firmly woven/material should not fray/does not stretch.</li> <li>- Should have metal ends.</li> </ul>	Any 2 x 1 = (2 marks)
16.	<b>Self-neatened seams.</b> <ul style="list-style-type: none"> <li>- French seam.</li> <li>- Double stitched seam.</li> <li>- Run and fell seam.</li> </ul>	Any 2 x 1 = (2 marks)
17.	<b>Ways of finishing the top edge of a pocket before attaching.</b> <ul style="list-style-type: none"> <li>- By use of a binding.</li> <li>- By use of a facing.</li> <li>- Making a plain hem.</li> <li>- By use of a piping.</li> <li>- By lacing.</li> </ul>	Any 4 x ½ = (2 marks)
18.	<b>Limitations of using silk in garment construction.</b> <ul style="list-style-type: none"> <li>- It is slippery.</li> <li>- It is delicate/frays easily.</li> <li>- It is damaged by high temperatures so will not withstand pressing as required during construction process.</li> <li>- It may spot when damp pressing during construction.</li> </ul>	Any 2 x 1 = (2 marks)
19.	<b>Points to consider when fixing fasteners on a garment.</b> <ul style="list-style-type: none"> <li>- Must be sewn on double fabric.</li> <li>- Should be sufficiently distributed/should be evenly spaced to avoid gaping.</li> <li>- Sew on after making and pressing the opening.</li> <li>- Should be well aligned.</li> </ul>	Any 2 x 1 = (2 marks)



### SECTION B (20 MARKS)

20. (a)	<b>Special cleaning of a broom: -</b> <ul style="list-style-type: none"> <li>- Wash the bristles in warm (<math>\frac{1}{2}</math>) soapy (<math>\frac{1}{2}</math>) water by flicking (<math>\frac{1}{2}</math>) them to remove dirt.</li> <li>- Rinse in warm (<math>\frac{1}{2}</math>) and then in cold (<math>\frac{1}{2}</math>) water to freshen the bristles.</li> <li>- Clean the handle (<math>\frac{1}{2}</math>) and the head (<math>\frac{1}{2}</math>) carefully depending on the material and finish used.</li> <li>- Flick (<math>\frac{1}{2}</math>) the broom to remove excess water.</li> <li>- Dry broom by either hanging/placing side ways to drip (<math>\frac{1}{2}</math>).</li> <li>- Hang on a broom rack (<math>\frac{1}{2}</math>) to store.</li> </ul>	$10 \times \frac{1}{2} =$ (5 marks)
(b)	<b>Cleaning the bedroom to be used: -</b> <ul style="list-style-type: none"> <li>- Open windows (<math>\frac{1}{2}</math>) to air (<math>\frac{1}{2}</math>) the room.</li> <li>- Strip the bed (<math>\frac{1}{2}</math>) and air the beddings (<math>\frac{1}{2}</math>).</li> <li>- Clean windows (<math>\frac{1}{2}</math>) and shake off dust (<math>\frac{1}{2}</math>) – leave to air (<math>\frac{1}{2}</math>).</li> <li>- Make the bed (<math>\frac{1}{2}</math>).</li> <li>- Close the windows (<math>\frac{1}{2}</math>) and walls (<math>\frac{1}{2}</math>) methodically (<math>\frac{1}{2}</math>).</li> <li>- Open windows (<math>\frac{1}{2}</math>) to allow in fresh air.</li> <li>- Dust all the surfaces and ornaments (<math>\frac{1}{2}</math>).</li> <li>- Tidy and arrange the room (<math>\frac{1}{2}</math>).</li> </ul>	$14 \times \frac{1}{2} =$ (7 marks)
(c)	<b>Laundering an acrylic sweater:-</b> <ul style="list-style-type: none"> <li>- Repair (<math>\frac{1}{2}</math>). worn out parts</li> <li>- Take measurements/draw outline (<math>\frac{1}{2}</math>) and record</li> <li>- Shake (<math>\frac{1}{2}</math>) to remove loose dirt</li> <li>- Wash in warm (<math>\frac{1}{2}</math>) soapy water using mild detergent (<math>\frac{1}{2}</math>).</li> <li>- Use kneading and squeezing method (<math>\frac{1}{2}</math>).</li> <li>- Avoid lifting (<math>\frac{1}{2}</math>) the sweater out of water/wash under water.</li> <li>- Rinse in warm (<math>\frac{1}{2}</math>) water severally (<math>\frac{1}{2}</math>) until the water is clear.</li> <li>- Squeeze (<math>\frac{1}{2}</math>) to remove excess water.</li> <li>- Dry flat under shade (<math>\frac{1}{2}</math>).</li> <li>- Confirm measurement (<math>\frac{1}{2}</math>)</li> <li>- Press indirectly (<math>\frac{1}{2}</math>) using a warm (<math>\frac{1}{2}</math>) iron.</li> <li>- Air (<math>\frac{1}{2}</math>) to dry completely.</li> <li>- Fold and store appropriately (<math>\frac{1}{2}</math>).</li> </ul>	$16 \times \frac{1}{2} =$ (8 marks)



### SECTION C (40 MARKS)

21. (a)	<b>Ways of avoiding wastage in the kitchen when preparing dinner.</b> <ul style="list-style-type: none"> <li>- Plan and cook meals properly according to individual needs and likes to avoid throwing away food.</li> <li>- Use correct amount of ingredients for each dish.</li> <li>- Efficient use of water - closing taps when not in use</li> <li>- Efficient use of fuel - simmering appropriately, switching off source of fuel when not in use.</li> <li>- Vary cooking methods for different dishes to make the meal appetizing and break monotony that can lead to food remains.</li> <li>- Preserve the food that remains after service.</li> <li>- Prepare food well (avoid wastage when peeling and removing stalks)</li> </ul>	Any 4 x 1 = (4 marks)
(b)	<b>Factors to consider when buying green leafy vegetables are:-</b> <ul style="list-style-type: none"> <li>- Cost: Buy vegetables according to the money available.</li> <li>- Hygiene: buy from a clean place/seller to ensure the vegetables are not contaminated.</li> <li>- Freshness: buy freshly plucked vegetables/not withered to get the maximum nutrients.</li> <li>- Insect infestation: the leaves should be free from insects/holes for food safety. avoid to contamination.</li> <li>- Colour: Vegetables should be green in colour and not yellow to get the maximum nutrients.</li> <li>- By clean vegetables to avoid contamination.</li> </ul>	Any 4 well explained x 2 = (8 marks)
(c)	<b>Problems a consumer may face while purchasing a deodorant are:-</b> <ul style="list-style-type: none"> <li>- Too many brands/substitutes to choose from. It takes a lot of time to choose from a wide variety. Also when not sure of the brands in the market one may not get value for their money.</li> <li>- Cost: limited resources/money.</li> <li>- Lack of information on the performance of the product.</li> <li>- Limited information provided by manufacturer on composition of the product.</li> <li>- Confusions/misinformation caused by advertisements. Not all advertisements reveal enough details about the product especially on the side effects.</li> </ul>	Any 4 well explained x 2 = (8 marks)
22. (a)	<b>Uses of trimmings in garment construction.</b> <ul style="list-style-type: none"> <li>- As a decoration as they come in different colours, shapes, sizes.</li> <li>- Gives a professional look when it is well tailored/fixed.</li> <li>- Emphasize style/features when fixed on appropriate parts of the garment</li> <li>- Disguise faults.</li> <li>- As a style feature e.g. lace collars.</li> </ul>	Any 3 x 2 = (6 marks)



(b)	<b>Advantages of knitted fabrics:-</b> <ul style="list-style-type: none"> <li>- Are warm therefore suitable for cold weather.</li> <li>- Crease resistant therefore can maintain original shape.</li> <li>- Is porous therefore comfortable to wear.</li> <li>- Easy to clean/laundry therefore saves time.</li> </ul>	Any 3 x 2 = (6 marks)
(c)	<b>Activities carried out in preparation for a family wash:-</b> <ul style="list-style-type: none"> <li>- Sorting: according to degree of dirt/colour of garments/articles/uses/wearers.</li> <li>- Mending/repair: to avoid further damage of the tears.</li> <li>- Emptying pockets: to avoid injuries from objects /destruction of documents that might have been accidentally left.</li> <li>- Soaking: soften dirt thus making washing easier.</li> <li>- Stain removal: to avoid spreading/fixing of the stain on the garment.</li> </ul>	Any 4 x 2 = (8 marks)
23. (a)	<b>Suitable qualities of a container for storing drinking water at home:-</b> <ul style="list-style-type: none"> <li>- Made of rust proof material.</li> <li>- Should have a well-fitting lid/cover.</li> <li>- Should be easy to clean.</li> <li>- Should keep water cool.</li> <li>- Made of material that do not impact flavour/smell into the water.</li> </ul>	Any 4 x 2 = (8 marks)
(b)	<b>Hygiene practices that a 10 year old needs to observe to maintain good health:-</b> <ul style="list-style-type: none"> <li>- Wash hands before handling/eating food.</li> <li>- Drink boiled/treated water/chlorinated clean water.</li> <li>- Wash fruits thoroughly before eating.</li> <li>- Wash hands after visiting the toilets.</li> <li>- Dispose of waste appropriately.</li> <li>- Use a clean handkerchief.</li> </ul>	Any 3 x 2 = (6 marks)
(c)	<b>Activities carried out during cleaning of a food store:</b> <ul style="list-style-type: none"> <li>- Cleaning all food containers.</li> <li>- Thorough cleaning of shelves according to type.</li> <li>- Refilling of containers/removing any expired food stuff.</li> <li>- Lining/replacing papers on shelves.</li> <li>- Rearranging containers leaving adequate spaces for air circulation.</li> <li>- Re-label containers to replace the worn out labels.</li> </ul>	Any 3 x 2 = (6 marks)