

#### 4.14 HOME SCIENCE (441)

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

### SECTION A (40 MARKS)

1.	<p><b>Signs of symptoms of food poisoning</b></p> <ul style="list-style-type: none"> <li>- Nausea</li> <li>- Vomiting</li> <li>- Diarrhoea</li> <li>- Abdominal pain and cramps</li> <li>- Fever</li> <li>- Dizziness</li> </ul>	Any 4 x ½ = (2 marks)
2.	<p><b>Definition of term nutrients</b></p> <p>Elements found in foods which when absorbed into the body promote growth, maintenance and repair of the body tissues as well as boosting immunity against illnesses.</p>	Well defined = (2 marks)
3.	<p><b>Functions of raw garnishes in the presentation of meals</b></p> <ul style="list-style-type: none"> <li>(i) Gives fresh colour making the meal colourful.</li> <li>(ii) Gives fresh flavour making the meal tastier.</li> <li>(iii) Makes the food more attractive/appealing.</li> <li>(iv) Provides vitamin C.</li> </ul>	Any 2 x 1 = (2 marks)
4.	<p><b>Characteristics of foods that have been overcooked through prolonged boiling.</b></p> <ul style="list-style-type: none"> <li>(i) The foods tend to lose their flavor/taste.</li> <li>(ii) Some food nutrients are destroyed.</li> <li>(iii) Foods lose their shape/form.</li> <li>(iv) Foods may change their colour.</li> <li>(v) Foods change their texture, thus becoming mushy and soggy.</li> </ul>	Any 2 x 1 = (2 marks)
5.	<p><b>Difference between meal planning and meal management.</b></p> <p>Meal planning involves deciding what is to be eaten by individuals in order to meet their nutritional requirements while meal management involves acquiring ingredients, preparing, cooking and serving the food.</p>	Well differentiated = (2 marks)
6.	<p><b>Water borne diseases are:</b></p> <ul style="list-style-type: none"> <li>(i) Bilharzia</li> <li>(ii) Amoebic Dysentery</li> <li>(iii) Typhoid</li> <li>(iv) Cholera</li> </ul>	Any 4 x ½ = (2 marks)
7.	<p><b>Ways of sterilizing a baby's feeding equipment.</b></p> <ul style="list-style-type: none"> <li>(i) Boiling</li> <li>(ii) Using sterilizing solutions.</li> <li>(iii) Using an electric sterilizer</li> <li>(iv) Using a microwave</li> </ul>	Any 2 x 1 = (2 marks)
8.	<p><b>Meaning of ante-natal care.</b></p> <p>It is the care given to an expectant mother from the time of conception to the time of delivery.</p>	(2 marks)

9.	<p><b>Benefit of increasing iron rich foods in a mother's diet.</b>  It replaces the amount of blood lost during delivery and also during menstrual period.  To boost the blood levels used up in the formation of the foetus during pregnancy.  To prevent anaemia</p>	Any 1 =(1 mark)
10.	<p><b>Advantages of a well lit room.</b>  (i) It reduces fatigue.  (ii) It enhances clear visibility/reduces eye strain.  (iii) It enhances interior decoration.  (iv) For efficiency.  (v) Discourages breeding of pests</p>	Any 2 x 1 = (2 marks)
11.	<p><b>Limitations of burning as a method of refuse disposal.</b>  (i) Emission of smoke during burning causes air pollution.  (ii) Not all refuse can be burned.  (iii) If the refuse is not sorted out properly, some may cause explosion or injuries.  (iv) Building incinerators may be expensive.</p>	Any 2 x 1 = (2 marks)
12.	<p><b>Difference between loose and fixed dirt.</b>  Loose dirt is composed of very small, light, organic or inorganic particles which are carried from place to place by air or wind and can be easily removed while fixed dirt is organic or inorganic particles that have stuck to the surface or article and is difficult to remove.</p>	Well differentiated = (2 marks)
13.	<p><b>Benefit of consumer protection.</b>  The consumer is safeguarded from exploitation by producers, traders and even other consumers. He/she is thus able to get goods and services that are of good quality, correct quantities and at fair prices.</p>	(1 mark)
14.	<p><b>Disadvantages of buying goods by hire purchase.</b>  (i) Final cost of items is high.  (ii) May lead to overspending/impulse buying/debts  (iii) An item that is not durable may wear out before the final payment is made.  (iv) Discounts are not given.</p>	Any 2 x 1 = (2 marks)
15.	<p><b>Purposes of steeping a soiled handkerchief in cold salty water.</b>  (i) To dissolve/loosen the mucus and thus make it easier to clean the handkerchief.  (ii) To disinfect the handkerchief.</p>	Any 2 x 1 = (2 marks)
16.	<p><b>Meaning of laundry processes.</b>  Refers to the activities which clothes and articles undergo from the time they are brought dirty to the time they are clean and ready for use.</p>	(2 marks)

17.	<b>Layers formed in construction of pleats.</b> (i) Surface (top). (ii) Underfold (fold back) (iii) Base (resting place)	Any 2 x ½ = (1 mark)
18.	<b>Functions of the following pattern markings.</b> (a) Notch To match different pieces of fabric together before stitching. (b) Dart - To shape garments. - To control fullness in garments.	(1 mark)  Any 1 x1 =(1 mark)
19.	<b>Preparations done on a fabric before cutting out.</b> (i) Pre-shrinking. (ii) Graining (iii) Ironing (iv) Transferring pattern markings	Any 2 x 1 = (2 marks)
20.	<b>Reasons why cotton fabric is popularly used for table linen.</b> It; (i) Is strong and can withstand frequent washing. (ii) Takes in starch easily. (iii) Withstands high temperatures (iv) Comes in a variety of colours (v) Is easy to care for.	Any 3 x 1 = (3 marks)
21.	<b>Difference between conspicuous and inconspicuous seams.</b> Conspicuous seams are used to join two pieces of fabrics together with the stitches showing on the right (RS) of garment to give a decorative effect while inconspicuous seams are used to join two pieces of fabric together without the stitches showing on the right side (RS) of the garment.	Well differentiated = (2 marks)

**SECTION B (20marks)**

22. (a)	<p><b>Procedure for thorough cleaning white canvas shoes without shoes laces.</b></p> <ul style="list-style-type: none"> <li>- Protect the work surface (½).</li> <li>- Scrub (½) the inside (½) and outside (½) of the shoes with cold soapy water (½) using a scrubbing brush (½).</li> <li>- Rinse thoroughly (½) in warm (½) water.</li> <li>- Final rinse (½) in cold (½) water.</li> <li>- Remove excess water (½).</li> <li>- Use a sponge/piece of cloth (½) to apply whitener (½).</li> <li>- Dry (½) in a warm place (½) slightly inclined (½).</li> <li>- Turn to ensure all parts are dry (½).</li> <li>- Store appropriately (½).</li> </ul>	18 x ½ = (9 marks)
(b)	<p><b>Procedure for washing and starching a nurse's cap using boiling water starch.</b></p> <ul style="list-style-type: none"> <li>- Soak (½) the cap in cold water (½).</li> <li>- Wash in hot (½) soapy water (½) using friction (½) method.</li> <li>- Rinse in warm water (½).</li> <li>- Final rinse in cold water (½) squeeze out excess water (½).</li> <li>- Use cold water (½) and starch powder (½) to make a smooth paste (½) in a clean container (½).</li> <li>- Gradually add boiling water (½) to the paste, stirring vigorously (½) to obtain a clear (½) solution.</li> <li>- Add equal amount of cold water (½).</li> <li>- Immerse (½) the cap in the starch solution and allow it to absorb (½) the starch.</li> <li>- Squeeze out excess starch (½).</li> <li>- Dry the cap in the sun (½).</li> <li>- Iron with a hot iron (½).</li> <li>- Store appropriately (½).</li> </ul>	22 x ½ = 11 marks

**SECTION C (40 MARKS)**

23. (a)	<p><b>Forms of advertisement.</b></p> <p>(i) Print media advertising This is a form of advertising that uses printed publications/ materials such as newspapers, magazines, pamphlets, billboards and posters.</p> <p>(ii) Electronic media advertising This is a form of advertising that is created, distributed and accessed using electronics such as radio, television, films and video.</p> <p>(iii) Person to person/word of mouth This is a form of advertising where consumers are informed about existence of a product or service and they are also shown how to use and care for the product. It involves demonstrations and exhibitions.</p> <p>(iv) Celebrity advertising This is using a famous person's image to sell products or services by focusing on the person's money, popularity or fame to promote the products or services.</p>	3 x 2 = (6 marks)
---------	---	-------------------

(b)	<p><b>Benefits of providing a diet rich in vegetables.</b></p> <ul style="list-style-type: none"> <li>- Vegetables provide roughage which assists in digestion.</li> <li>- Vegetables are low in calories therefore prevent obesity.</li> <li>- Vegetables provide vitamins for protection against diseases and infections.</li> <li>- Vegetables provide minerals which are vital for strong bones and functioning of other body systems.</li> <li>- Vegetables have a variety of colour making the meal attractive and thus stimulate appetite.</li> </ul>	3 x 2 = (6 marks)
(c)	<p><b>Precautions to take to prevent the occurrence of food poisoning when handling left over foods.</b></p> <ul style="list-style-type: none"> <li>- Ensure proper preservation /storing in a clean safe place of left over foods to prevent contamination.</li> <li>- Reheated dishes should be thoroughly heated to destroy germs/bacteria.</li> <li>- Any remains from already reheated dishes should not be used again.</li> <li>- Large pieces of protein foods should be cut into small pieces to ensure proper heating on the inside.</li> <li>- Serve the reheated foods immediately to avoid exposure to micro-organisms that may cause deterioration of the food.</li> </ul>	Any 4 x 2 = (8 marks)
24. (a)	<p><b>Factors to consider when choosing a wooden clothes' drying rack.</b></p> <ul style="list-style-type: none"> <li>(i) The cost should be affordable.</li> <li>(ii) It should be smooth to avoid damaging delicate fibres.</li> <li>(iii) The design should be one that can be folded easily when not in use.</li> <li>(iv) The size should be one that can accommodate the wash.</li> </ul>	Any 2 x 2 = (4 marks)
(b)	<p><b>Points to observe on the care of a sewing machine.</b></p> <ul style="list-style-type: none"> <li>- After use, place a piece of cloth between the pressor foot and the feed dog to soak up excess oil.</li> <li>- Clean and oil the machine regularly with the oil recommended by its manufacturer.</li> <li>- Cover the machine with a cloth or its lid and then store in a clean place</li> <li>- Those learning how to stitch should be supervised during machining sessions.</li> <li>- Dust and wipe the machine before use.</li> <li>- Do not machine over pins to avoid breaking the needle.</li> </ul>	Any 4 x 2 = (8 marks)

(c)	<p><b>Effects of the following practices when laundering wool.</b></p> <p>(i) Soaking If woollens are soaked they absorb and hold a lot of water which can damage the wool fibres if exposed for too long.</p> <p>(ii) Using cold water Cold water will cause the wool fibres to shrink and therefore lose shape.</p> <p>(iii) Drying under direct sunlight. When wool is exposed to direct sunlight it weakens and if it is white it may turn yellow. Also makes wool coarse.</p> <p>(iv) Using friction method Washing woollen articles by friction method will stretch the fabric and hence lose shape.</p>	Any 4 x 2 = (8 marks)
25. (a)	<p><b>Precautions to take when using electricity in the house.</b></p> <p>(i) Socket should not be overloaded.</p> <p>(ii) Electric wires should be properly insulated to avoid accidents.</p> <p>(iii) Electric switches should not be handled with wet hands to avoid electric shock.</p> <p>(iv) Always put off electric gadgets when not in use.</p> <p>(v) The electric sockets should not be poked with objects especially metallic.</p> <p>(vi) Observe regular maintenance of electric equipment.</p> <p>(vii) Use a three pin plug or an adaptor.</p>	Any 6 x 1 = (6 marks)
(b)	<p><b>Factors to consider when building a house.</b></p> <p>(i) Site/location It should be close to social amenities such as access roads, water, electricity, sewerage system, hospital, shops and schools for convenience.</p> <p>(ii) Neighbourhood It is important to know the immediate environment for security reasons, social interactions. Avoid being near factories, airports and sewage plants for health reasons.</p> <p>(iii) Size of the family The size of the house will be determined by the number of family members, their gender, their activities, and their social orientation. Where there are children of both gender then more rooms are necessary.</p> <p>(iv) Cost Go for what one can afford, consider the cost of things such as cost of land, architect fee, legal fees, cost of materials and labour to be incurred.</p> <p>(v) Drainage Ensure the site drains well to avoid flooding during rainy season. Good drainage will also support the foundation of a house firmly.</p>	Any 4 x 2 = (8 marks)

(c) **Types of play that contribute positively to the development of a child.**

(i) **Physical play**

Activities requiring the child to use his body muscles. This includes activities such as running, jumping and climbing and will help in exercising different parts of the body muscles and thus remain physically fit.

(ii) **Imaginative play**

This helps children to act out their feelings and fantasies. For example they do role play of the grown-ups in their lives.

(iii) **Manipulative play**

This type of play enables children to use the limbs. Playing with sand, water, seeds, soils, containers gives them enjoyment and also teaches them things such as size, volume, colours and shapes of objects.

(iv) **Creative play**

This type of play helps a child to express themselves through painting, colouring, modelling and paper cutting. It helps in the coordination of hands, eyes and develops the smaller muscles of the body.

Any 3 x 2 =  
(6 marks)