

## **SET 5**

### **441/1 HOMESCIENCE PAPER 1 MARKING SCHEME**

#### **1. Uses of vitamin B2**

- Assist in the release of energy from carbohydrates.
- Assist in the proper functioning of the nervous and digestive system.
- Promotes growth in children.
- Prevents occurrence of pellagra.
- Keep eyes in good condition. (1x2=2mks)

#### **2. Two dangers of water pollution**

- Causes water to smell foul and become impure.
- Affects plants and destroys aquatic life.
- It can be the main carrier of water borne disease e.g. dysentery, typhoid, cholera etc. (1x2=2mks)

#### **3. Factors to consider when choosing a washing machine**

- Size and cleansing action of the machine suitable for work expected.
- Should be affordable within ones means of income.
- Should have adequate storage space.
- Should be easy to operate and maintain.
- Should have a manual or operation instructions.
- Should be from reliable dealer for services availability.
- Should be made of rustproof materials.
- Should have a guarantee. (1x2=2mks)

#### **4. Reason for softening water for laundry**

- To make easy to lather readily with soap.
- To minimize soap usage.
- Dissolve salts in hard water tend to interfere with the washing action.
- Hard water causes roughness on the human skin.
- Dissolved salts causes discoloration of light coloured clothes. (1x2=2mks)

#### **5. Advantages of soap less detergents**

- Do not form scum when used with hard water.
- They rather easily with both cold or hot water.
- Reduces water surface tension allowing water to penetrate the fabric.
- Emulsify grease.
- Suitable for both hand and machine wash. (1x2=2mks)

6. Reason for using the following:

a. Washing soda

- Softening hard water for laundry processes.
- Used to emulsify grease removing grease stains.

b. Starch

- For stiffening fabric (cotton / linen) and articles.
- Use to make fabric and article glossy to resist dirt.
- It gives articles crisp and fresh look.

c. Fabric conditioner

- To relax fibres making them springy and soft.
- To give fabric good scent.
- To remove static electricity in polyester fabrics.
- Make articles and clothes easy to iron.

(1x2=2mks) each onward 1mk if one answer given.

7. Advantages of storing clothes and household articles properly

- To avoid getting dirty and creased.
- To make them easily accessible when using them.
- To protect them from pest e.g. moths and rats.

(1x2=2mks)

8. Importance of sedimentation in water purification

It makes solid particles in water sink at the bottom while light material float at the top for decantation.

(1x1=1mk)

9. Reason why plastics are popularly used for preserving food in a fridge.

- They do not absorb moisture making stored food soggy.
- They do not absorb smell of other food stored in the fridge.
- Can be re-used.
- Plastic bags occupy little space – not bulky.
- They are non-rusty therefore safe to use.

(1x2=2mks)

10. Fat soluble vitamins

A, D, E, and K

(award  $\frac{1}{2} \times 2$  each = 1mk)

11. Two changes that take place when an egg is boiled

- They set or coagulate.
- High temperatures make the protein tough difficult to digest.
- The shell detaches from the egg making it easy to remove.

(1x2=2mks)

12. Symptoms of scurvy

- Swollen gum that bleed easily.
- Bleeding in the skin and below finger nails.
- General malice, tiredness due to anaemia.
- Delayed healing of wounds.

(1x2=2mks)

13. Mention 2 functions of the skin.

- Protect the body from dirt and germs.
- Maintain constant body temperature
- As a sensory organ
- As excretory organ
- Essential for synthesis of vitamin D.
- Stores fat and retains body fluids.

(1x2=2mks)

14. Problem related to breastfeeding

- Sore, ripples
- Breast engorgement
- Bay's refusal to breastfeed
- Breast abscess
- Mother refusal to breastfeed
- Breastfeeding mother with HIV/AIDS

(1x3=3mks)

15. Causes of heavy and close texture in creamed cake mixtures

- Insufficient raising agent.
- Too cool an oven
- Proportion of fat to flour incorrect
- Too much liquid used.

(1x2=2mks)

16. Disadvantages of using print media method of advertising

- Some consumer may be illiterate there may not understand advert.
- Publication e.g. newspaper. Magazines, pamphlet may take long to get to the consumer.
- Consumer may read and not understand advert.

(1x2=2mks)

17. Two types of batters

- Thin batter – for pancakes
- Thick batter – for coating

(1x2=2mks)

**SECTION B: COMPULSORY**

18.a. Cleaning a plastic plate

Cleaning in warm ( $\frac{1}{2}$ ) soapy ( $\frac{1}{2}$ ) water using a soft cloth / sponge ( $\frac{1}{2}$ ). Rinse ( $\frac{1}{2}$ ) thoroughly in warm ( $\frac{1}{2}$ ) water. Dry ( $\frac{1}{2}$ ) completely with a cloth ( $\frac{1}{2}$ ) drip dry ( $\frac{1}{2}$ ) buff ( $\frac{1}{2}$ ) with a soft non-fluffy cloth.

(4mks)

b. Brush ( $\frac{1}{2}$ ) off the dust. Rinse ( $\frac{1}{2}$ ) the sole ( $\frac{1}{2}$ ) in cold water. Using warm soapy ( $\frac{1}{2}$ ) water and a scrubbing brush / maize comb ( $\frac{1}{2}$ ) scrub the inside and outside and the sole ( $\frac{1}{2}$ ). Rinse ( $\frac{1}{2}$ ) in warm ( $\frac{1}{2}$ ) water and finally in cold water ( $\frac{1}{2}$ ) to freshen. Flick ( $\frac{1}{2}$ ) to remove excess water. Apply whitener ( $\frac{1}{2}$ ) if white using a sponge or a piece of cloth, to whiten. If coloured dry in warm ( $\frac{1}{2}$ ) space under shade ( $\frac{1}{2}$ ) inclined ( $\frac{1}{2}$ ). When dry ( $\frac{1}{2}$ ) remove excess whitener ( $\frac{1}{2}$ ) using dry duster clean equipments dry ( $\frac{1}{2}$ ) and store appropriately ( $\frac{1}{2}$ ).

(10mks)

c. Arranging flowers

- Chose fresh flowers ( $\frac{1}{2}$ ) to suit occasion ( $\frac{1}{2}$ )
- Choose clean foliage ( $\frac{1}{2}$ )
- The flowers should not be in full bloom ( $\frac{1}{2}$ ) they will wither quickly ( $\frac{1}{2}$ )
- Ensure flowers are not scented ( $\frac{1}{2}$ ). Some people may allergic to them ( $\frac{1}{2}$ ). Arrange flowers that are mixed ( $\frac{1}{2}$ ). Flat and pointed flowers ( $\frac{1}{2}$ ).
- Flower vase should be  $\frac{3}{4}$  full of water ( $\frac{1}{2}$ ).
- Flower should express themselves ( $\frac{1}{2}$ ) different flower arrangement suits occasion different ( $\frac{1}{2}$ ).

(6mks)

## SECTION C

19.a. symptoms of poisoning

- Casualty may be unconscious.
- Lips may show signs of burning sensation.
- Casualty may show signs of confusion.
- Casualty pulse may be faint.
- Casualty may be pale on the face and nails depending on the effect of poison.

(1x4=4mks)

b. Factors that influence consumer buying

- Price fluctuation – price vary.
- Complementary products – when you buy one product have to buy the other e.g. bread / jam.

- Substitute product – one may sometimes be forced to buy affordable substitute
- Time and energy – lack of enough time prevent window shopping.
- Income – purchasing power depends on ones income. Mainly affected by inflation product expensive and income low. (2x4=8mks)

c. Reasons for budgeting family income

- Help family or individual live within their means.
- Families are able to priorities right, spending only available income.
- It encourages keeping relevant records which help one assess the previous budgets and in turn correct errors.
- Budget control and limit expenses.
- Budget organizes and helps one accumulative savings.
- Budget helps one meet some obligations e.g. pay off loans.

Any 4 well discussed answers award 2x4=8mks

20.a. Factors to consider when buying green leafy vegetables

- Choose vegetable that is fresh not withered.
- Should not have spots.
- Should be free of insects.
- Should be green and young. (1x4=4mks)

b. Methods of disposing excessive fullness in clothing construction.

- Pleats, gathers, tucks, easing (elastic/cord), shirring smocking. (1x6=6mks)

c. Importance of following in flour mixtures

i. Fruits

- To reserve and keep cake moist.
- Add flavor

ii. Liquid

- Milk, water, eggs
- Used bind ingredients together.
- During cooking liquid produce steam and gases when heated, expands and raises the mixture.
- Enhances the nutritive value (milk) of the product appearance and texture.

iii. Sugar

- To sweeten cake

- Soften cake
- Assist in fermentation process in yeast products providing food for the yeast.
- Improve storage quality. (for any 2 answers award 1x2=6mks)

iv. Any type of immunization given to infant before six months

- BCG
- Polio
- DPT
- Hepatitis B
- HLB – meningitis (1x4=4mks)

21.a. Importance of immunization

- Vaccines give protection against dangerous diseases likely to occur in childhood.
- Saves money that would be spent on medical services.
- Eradicates diseases.
- Helps the nation to have healthy citizens. (2x3=6mks)

b. Limitation of living in flats

- Noisy especially if walls are not sound proof.
- Climbing stairs can be tedious for children, elderly and physically challenged.
- Children elderly and physically challenged can easily fall off the stairs.
- Difficult to keep shared compound clean.
- Pest can easily crawl from one housing unit to another. (1x4=4mks)

c. Properties of cotton that make them desirable for hospital linens

- Highly absorbent therefore comfortable to wear, absorbs moisture without leaving one feeling wet and uncomfortable.
- Strong fibre can withstand frequent washing. Can withstand very extreme temperature in laundry.
- Not affected by mild acids and alkalis therefore can be safely sterilized, stain removal in laundry with strong disinfectants for hospital use.
- Does not hold static electricity hence does not cling to the body.
- Has a high dye affinity therefore a variety of colours can be used for bed linen, wear for children dull and bright colours.
- Cotton is high durable and strong therefore can stand tear and wear.

(Any 3x2=6mks)

d. Small kitchen equipments

Cups, plates, kettles, cutlery, sause pans, pans, sufurias, chopping board, trays etc

(Any appropriate small kitchen equipments ward 1mk each 1x4=4mks)