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)

1. 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)

1. 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)

1. 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 slats causes discoloration of light coloured clothes. (1x2=2mks)

1. 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)

1. Reason for using the following:
   1. Washing soda

* Softening hard water for laundry processes.
* Used to emulsify grease removing grease stains.
  1. 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.
  1. Fabric conditioner
* To relax fibres living 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.

1. Advantages of storing clothes and household articles property

* 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)

1. Importance of sedimentation in water purification

It makes solid particles in water sink at the bottom while light material float at the top for decanation. (1x1=1mk)

1. 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)

1. Fat soluble vitamins

A, D, E, and K (award ½ x 2 each = 1mk)

1. Two changes that takes place when an egg is boiled

* They set or coagulate.
* High temperatures makes the protein tough difficult to digest.
* The shell detaches from the egg making it easy to remove. (1x2=2mks)

1. 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)

1. 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)

1. 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)

1. 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)

1. 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)

1. Two types of batters

* Thin batter – for pancakes
* Tick batter – for coating (1x2=2mks)

**SECTION B: COMPULSORY**

1. a. Cleaning a plastic plate

Cleaning in warm (½) soapy (½) water using a soft cloth / sponge (½). Rinse (½) thoroughly in warm (½) water. Dry (½) completely with a cloth (½) drip dry (½) buff (½) with a soft non-fluffy cloth. (4mks)

b. Brush (½) off the dust. Rinse (½) the sole (½) in cold water. Using warm soapy (½) water and a scrubbing brush / maize comb (½) scrub the inside and outside and the sole (½). Rinse (½) in warm (½) water and finally in cold water (½) to freshen. Flick (½) to remove excess water. Apply whitener (½) if white using a sponge or a piece of cloth, to whiten. If coloured dry in warm (½) space under shade (½) inclined (½). When dry (½) remove excess whitener (½) using dry duster clean equipments dry (½) and store appropriately (½). (10mks)

c. Arranging flowers

* Chose fresh flowers (½) to suit occasion (½)
* Choose clean foliage (½)
* The flowers should not be in full bloom (½) they will wither quickly (½)
* Ensure flowers are not scented (½). Some people may allergic to them (½). Arrange flowers that are mixed (½). Flat and pointed flowers (½).
* Flower vase should be ¾ full of water (½).
* Flower should express themselves (½) different flower arrangement suits occasion different (½). (6mks)

**SECTION C**

1. 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 line 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

1. 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/cod), shirring smoking. (1x6=6mks)

c. Importance of following in flour mixtures

1. Fruits

* To reserve and keep cake moist.
* Add flavor

1. 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.

1. 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)

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

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

1. 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 near, absorbs moisture without living one felling wet and uncoverable.
* 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 cause in 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)