

MARKING SCHEME

HOME SCIENCE

SECTION A: [30 MARKS]

1. (a) **Identification:** Diagram A – L-shaped layout; Diagram B – U-shaped layout. (2 mks)
(b) **Factors:** Size of the family, available space, position of doors/windows, type of fuel used. (Any two - 2 mks)
(c) **True/False:** True. (1 mk)
(d) **Definition:** The practice of maintaining cleanliness and safety in the area where food is prepared to prevent contamination. (1 mk)
2. (a) **Group:** Protective foods (Vitamins and Minerals). (1 mk)
(b) **Learner:** Cherono is correct. (1 mk)
(c) **Distinction:**
Fortification: Adding nutrients to food that were not originally there (e.g., Iodine in salt). (1 mk)
Enrichment: Replacing nutrients lost during processing (e.g., B-vitamins in white flour). (1 mk)
(d) **Signs:** Night blindness, dry/scaly skin, frequent infections. (Any two - 2 mks)
3. (a) **Item:** Sanitary towel / Pad. (1 mk)
(b) **Practices:** Change pads frequently, bathe at least twice a day, wash hands before and after changing, wrap and dispose of pads correctly. (Any three - 3 mks)
(c) **Importance:** Prevents body odor, reduces risk of infections, and boosts self-esteem/confidence. (2 mks)
4. (a) **Parts:** X – Slide Plate; Y – Balance wheel. (2 mks)
(b) **Identification:** Backstitch (1 mk)
(c) **Classification:** (i) Temporary; (ii) Permanent. (2 mks)
(d) **Rule:** Use a matching thread; start with a knot/backstitch; keep stitches uniform in size. (Any one - 1 mk)
5. (a) **Injury:** Burn (caused by dry heat/oil). (1 mk)
(b) **Items:** Sterile gauze, adhesive tape, antiseptic (if skin is not broken), burn cream. (Any two - 2 mks)
(c) **Action:** Place the affected area under cool running water for at least 10–20 minutes. (2 mks)
(d) **Disposal:** Place in a leak-proof bag/bin; incinerate if contaminated with body fluids. (1 mk)

SECTION B: [50 MARKS]

6. (a) **Signs:** Visible mold (green/black spots), unpleasant smell, slimy texture. (Any two - 2 mks)
- (b) **Comparison:** Boiling involves immersing food in boiling liquid (100°C); Steaming involves cooking food in the steam rising from boiling water (no direct contact with water). (4 mks)
- (c) **Advantages:** Conserves nutrients (steaming), makes food easy to digest, requires little attention, economical on fuel. (Any three - 3 mks)
- (d) **Difference:** Spoilage is the decay of food making it undesirable (visible); Poisoning is the contamination by toxins/bacteria that causes illness (often invisible). (3 mks)
7. (a) **Type:** Traditional (mud/thatch). (1 mk)
- (b) **Matching:** I—B; II—A; III—D; IV—C. (4 mks)
- (c) **Procedure:** Open windows, sweep floor, dust surfaces high-to-low, tidy items, empty bin, close windows. (4 mks)
- (d) **Waste Water:** Use a soak pit, kitchen garden irrigation (if safe), or a French drain. (3 mks)
8. (a) **Fibres:** Learner 1 – Wool (protein); Learner 2 – Cotton (cellulose). (2 mks)
- (b) **Name:** Bleach or Stain Remover. (1 mk)
- (c) **Description:** Soaps are made from natural fats/oils; Soapless detergents are synthetic and work well in hard water. (2 mks)
- (d) **Steps:** Sort, soak (optional), wash in hot soapy water, rinse in warm then cold water, blue/stiffen, dry in sun, iron while damp. (5 mks)
- (e) **Characteristics:** Non-absorbent, strong, dries quickly, sensitive to heat, does not crease easily. (Any three - 3 mks)
9. (a) **Seam:** French Seam or Open Seam. (1 mk)
- (b) **Fullness:** Darts, Gathers, Pleats, or Elastic. (Any two - 2 mks)
- (c) **Qualities:** Even width, correctly neatened, flat and smooth, strong/durable. (Any three - 3 mks)
- (d) **Parts:** Tension disc, take-up lever, spool pin, bobbin case. (4 mks)
- (e) **Importance:** Helps in buying the right quality, getting value for money, understanding rights (e.g., returns), and reading labels for care instructions. (3 mks)