

**30.12 HOME SCIENCE (441)**

**30.12.1 Home Science Paper 1 (441/1)**

1.

- Vital for every body cells/maintains turgidity of body cells.
- Provides minerals, for example:- zinc, copper, etc.
- Transportation of nutrients.
- Eliminates waste.
- Digestion.
- Controlling body temperature.
- Regulating fluidity of body fluids.
- Lubricating parts of the body.
- Dissolves foods.
- Prevents dehydration.
- Acts as a medium of body metabolism.
- Controls body pH.
- Acts as a solvent for various substances in the body.

*(Any 3x1=3 marks)*

2.

- Making salads.
- Making appetizer.
- Used as accompaniment.
- Making stock/soup.
- Making juice.
- Making stew.
- Used as a vegetable dish.
- Used as a snack.
- Used as a base when roasting.
- Used in braising.
- Used as a garnish.
- Adds colour.
- Adds flavour.
- Adds nutrients.

*(Any 6x½ =3 marks)*

3.

- Sudden contraction/warping/distorted shape.
- Shortened life span/develop hot spots/burns food/develops holes.

*(2 x 1 = 2 marks)*

4.

- Heating to kill micro organisms.
- Removing air to prevent development of bacteria.

*(2 x 1 = 2 marks)*

5.

- **AIDS**:- Acquired Immune Deficiency Syndrome.
- **TBA**:- Traditional Birth Attendant.

*(2 x 1 = 2 marks)*

6.

- Hypertension/heart disease/heart attack.
- Stretch marks.
- Diabetes.
- Cellulites.
- Kidney disease.
- Tiredness and shortness of breath.

*(Any 2 x1 = 2 marks)*

- 7.
- Meeting nutritional needs of the mother.
  - Social preparation of the expectant mother.
  - Psychological preparation of the expectant mother.
  - Voluntary counselling and testing of H.I.V. of the parents.
  - Correct age of the parent.
- (Any 3x1 = 3 marks)*
- 8.
- Near good road network for ease of communication.
  - Near a health facility.
  - Near a shopping centre.
  - Well drained.
  - Near a clean water supply.
  - Safe neighbourhood.
  - Validity of ownership/legally acquired.
  - Should be within family's financial means/cost.
- (Any 3x1 = 3 marks)*
- 9.
- Clean all beddings.
  - Observe strict hygiene/observe cleanliness of the room.
  - Air beddings regularly.
  - Ventilate rooms.
  - If furniture is infested spray with insecticide/pesticide.
  - Pour boiling/hot water.
  - House should be well lit.
- (Any 3x1 = 3 marks)*
- 10.
- In case of emergency a consumer can access goods and services.
  - Can be used at any time of the day or night.
  - Some credit cards give cash credit.
  - It is relatively safer to carry than carrying cash money.
  - Not bulky.
  - Save time and energy.
  - Convenient in use.
- (Any 3x1 = 3 marks)*
- 11.
- Acrylic.
  - Wool.
  - Silk.
  - Polyester.
- (4 x ½ = 2 marks)*
- 12.
- Damping articles.
  - Protecting articles from scotching/burning/getting damaged.
  - Preventing sheen on articles.
  - Protect articles from direct heat of the iron.
  - Improve/enhance appearance of articles.
- (Any 3x1 = 3 marks)*
- 13.
- Remove unwanted stitches.
  - Cutting through buttonholes.
- (2 x 1 = 2 marks)*
- 14.
- Lacing.
  - Using a bias binding.
  - Using ric rac.
  - Shell edging.

- Hemming/machine/edge-stitching.
- Using zig zag stitches/loop stitches/satin/overlock/buttonhole stitches.
- Crocheting.
- Scalloping.
- False hem.
- Facing/ribbon/crossway strip.

(Any 6x½=3 marks)

15.

- To give body.
- To strengthen.
- To add firmness/to stiffen/crisp.
- To give shape.
- To prevent stretching.

(Any 2x1= 2 marks)

16. *Natural fibres* are obtained from natural products (plants, animals, minerals) while *man-made fibres* are manufactured from synthetics and regenerated. (2 marks)

17.

(a)

- Dust the surface with a soft cloth/duster.
- Wring out the soft cloth in warm soapy water/warm water with vinegar added to it and wipe the surface carefully.
- Rinse using soft cloth wrung in warm water.
- Dry thoroughly with a dry soft cloth.
- Rub with a little furniture cream polish/linseed oil/cold black tea.
- Buff to shine.

(6 x 1 = 6 marks)

(b)

- Identify type of fabric before choosing stain removal agent.
- If alkaline stain based, use acidic and vice versa.
- Remove stains from the outside to the inside.
- Remove stains when they are fresh.
- Use specific stain removal agents for stains that are clearly identified.
- If the nature of the stain is not known, try the least harmful method first.
- Use correct procedure when removing stains.
- When treating stains, try several weak applications of the stain removal agent rather than one strong one.
- Stain removal agents must be used in the recommended form.
- When fabric is immersed in solution, it should not be allowed to stay longer than necessary.
- Once the stain is removed, the articles should be washed immediately to remove traces of the agent.
- Work on the stain before washing.
- Identify the type of stain first.

(Any 6x1=6 marks)

(c)

- Flush the toilet/pour water.
- Sprinkle some toilet cleaner /detergent and leave for some time.
- Clean with a toilet brush/broom.
- Flush the toilet again/pour water/rinse.
- Clean the floor with a mop and disinfectant.
- Ensure fresh air/leave window and door ajar for a while/use air freshner.
- Sprinkle water/disinfectant.
- Pour ash on the floor.
- Levelise ash/sweep with broom.
- Ensure enough toilet paper/leaves/enough water.
- Ensure fresh air.
- Clean outside the toilet.
- Pour water.
- Detergent.

- Scrub.
  - Brush/broom.
  - Rinse.
  - Disinfect.
  - Toilet paper.
  - Air.
- (8 marks)**

18. (a)
- Food items served alongside others although they may not form part of the main menu. **(1 mark)**
  - Foods that have a salty taste/not sweet/sour. **(1 mark)**
  - Substances which when added to foods enhance taste. **(1 mark)**

- (b)
- Type of diners, for example:- age, status.
  - Number of courses to be served.
  - Provide adequate spacing on the table.
  - Type of food service to be used.
  - Table linen should be clean.
  - Table linen should be well starched.
  - Table mats should be heat resistant.
  - Cutlery should be clean.
  - Cutlery should be well polished.
  - Crockery should be adequate.
  - Cruets and water jugs should be filled and placed within reach.
  - Flower arrangement should be low/centre piece should be present.
  - Cover items should be appropriately placed.
  - Table linen should be well pressed.
  - Number of people eating the meal. **(8 marks)**

- (c) (i) It is a guide/plan for spending the available income of a family or an individual on food. **(2 marks)**

- (ii)
- It enables an individual or family to plan for food requirements within their income.
  - It helps in setting of food priorities.
  - It enables one to plan for future meals.
  - It helps in controlling and limiting food expenses/minimizes impulse buying.
  - It is an organized method for accumulating savings for future use.
  - It helps in meeting the set goals or obligations for a family/individual.
  - The family/individual gets some satisfaction.
  - It guides a family/individual on expenditure on food.
  - Ensures that the family/individual vary their meals. **(Any 7x1=7 marks)**

19. (a)
- Prevent accidents.
  - Free the house from dampness.
  - Keep off bad odours/smells.
  - Destroy breeding places for pests.
  - Keep the surroundings neat.
  - Keep the surroundings free from pools of stagnant water. **(Any 4x1=4 marks)**

- (b)
- They pose danger to people/domestic animals in that they can fall into them and get hurt or drown.
  - They cause soil erosion because the edges of uncemented ones continue to wear out.
  - They can be unsightly due to accumulation of rubbish. Smelly due to the accumulation of waste water not cleared constantly.
  - Pests can breed in them and this can become a health hazard.
  - May encourage dampness thus posing a danger to health.

- Can cause stagnant water/floods which can cause accidents. *(Any 4x2=8 marks)*

(c)

- Proper disposal of faeces and urine.
- Treating/boiling water for use in the house.
- Washing hands before handling food and after visiting the toilet/pit latrine.
- Thoroughly washing food preparation and service utensils before use.
- Thoroughly cleaning food preparation areas.
- Thoroughly washing fruits and vegetables before service.
- Ensuring food handlers are clean.
- Ensuring food handlers under go regular medical check-up.
- Ensuring food handlers are free from typhoid.
- Encouraging vaccination against typhoid/encouraging immunisation
- Thoroughly cook food. *(Any 8x1=8 marks)*

20.

(a)

- Raglan.
- Puff-sleeve.
- Bishop sleeve.
- Bell.
- Magyar/short kimono.
- Leg of mutton.
- Kimono/long kimono.
- Dolman. *(Any 6x½=3 marks)*

(b)

- Hem opening.
- Bound opening.
- Faced-slit opening.
- Continuous wrap opening.
- Piped opening.
- Zipped opening. *(Any 3x1= 3 marks)*

(c)

- Its head has a slight rather shallow curve at the back.
- It is well rounded.
- It has a hollow curve at the front area. *(3 x 1 = 3 marks)*

(d)

- Place the sleeve in the armholes R.S. facing.
- Match and pin the fitting lines, notches/balance marks and under arm seams.
- Working from the W.S. of the bodice, pin the rest of the sleeve to the armhole.
- Ease in/distribute the fullness across the crown of the sleeve and pin.
- Check the sleeve/test for good hang.
- Tack along the stitching line.
- Remove pins.
- Machine along the fitting line.
- Remove tackings.
- Trim the armhole seam allowance to 6 mm to 1 cm.
- Neaten the seam.
- Press. *(11 marks)*

### 30.12.2 Home Science Paper 2 (441/2)

#### 1. Presentation

- (a) Work well pressed and folded. *(1½ marks)*
- (b) Label firmly fixed without concealing details on a single fabric. *(2½ marks)*
- (c) Pins/needles, unnecessary tacking threads and loose threads removed. *(1½ marks)*
- (d) Made up for the left side. *(1 mark)*

#### 2. Cutting Out

- (a) All five pieces cut out. *(2½ marks)*
- (b) Smooth cutting of the blouse C.B. and cut on straight grain to within 2 mm. *(3 marks)*
- (c) Smooth cutting of collar C.B. and cut on straight grain. *(3 marks)*
- (d) Smooth cutting of the armhole. *(4 marks)*

#### 3. Shoulder Seam (Open Seam)

- (a) Seam joined with straight stitchery. *(1 mark)*
- (b) Well neatened raw edges. *(2 marks)*
- (c) Evenness of seam allowance. *(1 mark)*
- (d) Correct size of seam allowance (0.8 cm – 1.2 cm). *(1 mark)*
- (e) Seam pressed open and flat at the neckline. *(1 mark)*

#### 4. Side Seam (French Seam)

- (a) Seam well trimmed that is, no threads on the R.S. *(1 mark)*
- (b) Straight stitchery. *(2 marks)*
- (c) Seam well knifed edged. *(1 mark)*
- (d) Evenness of seam. *(2 marks)*
- (e) Correct size (6mm) to within 2mm (4-8mm). *(2 marks)*
- (f) Seam pressed towards the back at the hem. *(1 mark)*
- (g) Flatness of seam at hem on R.S. and on W.S. *(1 mark)*

#### 5. Collar

- (a) Smooth outer edge of collar. *(2 marks)*
- (b) Collar seam trimmed and snapped. *(2 marks)*
- (c) Collar well knife edged with a sharp point. *(2 marks)*
- (d) Correct shape and size (superimpose the collar pattern) to within 5mm. *(2 marks)*
- (e) Flatness of attached collar R.S. and W.S. *(2 marks)*
- (f) Collar attached by sandwiching it between blouse front and facing. *(1 mark)*
- (g) Attaching seam made with straight stitchery. *(1 mark)*
- (h) Seam trimmed and snapped. *(2 marks)*
- (i) Positioning of collar C.F. of blouse flash with C.F. of collar and C.B. of blouse flash with C.B. of collar to within 3mm. *(2 marks)*

- (j) Quality of hemming stitches. *(2 marks)*
- (k) Quality of neatening the free edge of facing. *(2 marks)*
- (l) Quality of diagonal stitches. *(2 marks)*
- (m) Facing firmly held at the shoulder seam. *(2 marks)*

**6. Patch Pocket**

- (a) Hem correctly finished, that is, raw edges well tucked under. *(1 mark)*
- (b) Straight stitchery of pocket hem. *(1 mark)*
- (c) Attached with straight stitchery and close to the edge. *(3 marks)*
- (d) Raw edges of seam well tucked under. *(1½ marks)*
- (e) Seam pivoted at the corners. *(1 mark)*
- (f) Pocket mouth appropriately reinforced. *(2 marks)*
- (g) Seam allowance evenly trimmed and snipped at the corners. *(4 marks)*
- (h) Flatness of attached pocket on the R.S. and W.S. *(2 marks)*
- (i) Correct shape and size of attached pocket (superimpose pattern piece to within 5mm). *(2 marks)*

**7. Blouse Hem (Machine Stitched)**

- (a) Straight machine stitchery. *(2 marks)*
- (b) Even tacks appropriately made:- *(3 marks)*
  - Close to fold.
  - Straight.
  - Raw edges well tucked under.
- (c) Evenness of hem. *(2 marks)*
- (d) Size of hem, 1cm to within 2cm. *(2 marks)*
- (e) Flatness of hem. *(2 marks)*
- (f) Hem appropriately finished at the C.F. with a pointed corner trimmed. *(2½ marks)*