

5.6 HOME SCIENCE (441)

5.6.1 Home Science Paper 1 (441/1)



MANYAM FRANCHISE
Discover! Learn! Apply

SECTION A

1. Functions of vitamin A in the body:
 - regulates growth especially that of children
 - maintains healthy skin
 - protects the body from infections
 - necessary for good vision.
 - prevents night blindness
 - promotes healthy mucus membrane

any 2 x 1 = 2 marks

2. Symptoms of Goitre:
 - irritability
 - tiredness/fatigue
 - weight loss/wasted
 - change of eating habits.
 - swelling of the neck/thyroid gland
 - hoarse voice
 - difficult in swallowing

2 x 1 = 2 marks

3. Precautions to take when handling calabashes:
 - avoid banging or hitting with heavy objects
 - do not expose to naked flame
 - always store in a cool, dry place.
 - avoid scrubbing the inside
 - avoid soaking/steeping

any 2 x 1 = 2 marks

4. Reasons for using dried fruits in cake making:
To;
 - enrich
 - preserve
 - add flavour
 - improve texture
 - improve appearance

2 x 1 = 2 marks

5. Difference between shallow and deep fat frying
 - shallow frying is cooking food in a small amount of hot fat while
 - Deep fat frying is cooking food by complete immersion in hot fat/oil.

Well differentiated = 2 marks

6. Methods of removing dust from surface in a home:
 - sweeping
 - dusting

- brushing
- suction
- dispersal

2 x 1 = 2 marks

7. Advantages in using loose covers in the home.

They:

- ease maintenance of the article
- enhance beauty/decoration
- protect the article.

any 2 x 1 = 2 marks

8. Ways of disposing refuse economically:

- using as animal feed
- converting to manure
- recycling.

any 2 x 1 = 2 marks

9. Definition of Good Grooming

- taking care of oneself so that one looks neat, clean and generally attractive in appearance.

well defined - 1 mark

10. Ways in which medicine can be abused:

- taking someone else's medicine in belief that your illnesses are similar
- taking medicine without a doctors prescription
- using medicine for reasons other than treatment.
- using expired or poorly stored medicine
- not completing the recommended dose

any 2 x 1 = 2 marks

11. Benefits of manipulative play. It:

- enables children to exercise their limbs/their muscles/strength
- enables children to enjoy play
- teaches size, colours, volume and shapes
- improves co-ordination.

any 2 x 1 = 2 marks

12. Problems that may occur on the feet as a result of wearing tight fitting shoes include:

- corns
- blisters
- in grown toe nails
- bent toes/incorrectly arranged toes
- bunions
- poor blood circulation

any 2 x 1 = 2 marks

13. Difference between goods and services

- Goods are tangible items such as food, tools and clothes which can be bought or sold while
- services are work rendered at a fee such as cleaning, medical, catering and teaching.

Well differentiated = 2 marks

14. Vegetable stains commonly occurring in homes, are:
- banana sap
 - grass stain
 - fruit juice stain.
 - coffee
 - tea
- any 2 x ½ = 1 mark
15. Reasons for starching articles.
To:
- restore body and feel of the article
 - improve appearance
 - give article glossy surface (crease resistant)
 - make them dirt resistant
 - making them crease resistant
- any 2 x 1 = 2 marks
16. Precautions to take when laundering viscose rayon:
- do not rub or twist
 - dry under the shade/away from sunlight
 - dry evenly
 - use a warm iron
 - iron when damp.
 - use kneading and squeezing method
- any 2 x 1 = 2 marks
17. Examples of inconspicuous seams are:
- plain
 - French seam.
 - Open seam
- 2 x 1 = 2 marks
18. Functions of openings on a garment.
They:
- allow putting on and taking off the garment
 - decorate the garment
 - introduce a style feature.
- any 2 x 1 = 2 marks
19. Advantages of using tacking stitches. They:
- give direction/guidance for permanent stitching
 - hold two or more pieces of fabric in place before permanent stitching
 - allow for fitting and adjusting a garment before permanent stitching.
- any 2 x 1 = 2 marks
20. Difference between trimmings and trimming in clothing construction.
- Trimmings are sewing notions used for decorating garments such as laces and bias binding while
 - Trimming is the action of cutting off excessive fabric on seams or edges of fabric.

Award 2 marks for correct differentiation.

21. Completing the table on classification of fibres

Fibre	Class
Viscose rayon	Regenerated fibres (½ mark)
Elastofiber	Synthetic (½ mark)
Polyester	Synthetic (½ mark)
Asbestos	Mineral (½ mark)

4 x ½ mark = 2 marks

SECTION B (20 marks)

22. (a) The procedure to make muddy contaminated water safe for drinking:
- leave the water to stand (½) for sometime (½) for mud to settle at the bottom of the container and then decant (1)
 - filter (½) using a filter paper/home filter/clean cloth (½)
 - boil (1) the water. Put the boiled water in a clean (½) container
 - cover (½) with clean (½) lid/cover (½)

Total marks = 6 marks

- (b) The procedure of thorough cleaning plastic chairs:
- Collect equipment and materials (½)
 - dust the chairs with a dry cloth (½) remove mud with a blunt stick or wet cloth (½)
 - clean with warm soapy water (½) using a soft cloth/sisal fibres/sponge (½) from top to bottom/underneath/back (½)
 - rinse (½) using warm (½) water
 - final (½) rinse with cold (½) water
 - remove excessive water (½) using a clean cloth/turn/tilt chair upside down so that water can drain off (½)
 - buff with a clean (½) dry (½) non fluffy (½) cloth
 - clean equipment, dry and store (½)

Maximum marks = 8 marks

- (c) The procedure to follow when laundering a coloured cotton handkerchief:
- wash (½) in warm soapy (½) water using friction method (½)
 - rinse (½) in clean warm water (½)
 - finally rinse in cold (½) water, add vinegar (½)
 - dry in the shade (½)
 - iron while slightly damp (½) using a hot iron (½) Air (½) and fold appropriately (½)

maximum marks = 6 marks

SECTION C

23. (a) Rules to observe when making short crust pastry:
- all ingredients must be weighed accurately to come up with a quality product
 - the mixture should be aerated as much as possible to allow proper raising of the product
 - pastry should be kept as cool as possible to avoid the fat melting
 - the pastry should be handled as little as possible to avoid hardening the product

- the pastry should be rolled on a light floured surface to avoid sticking
- pastry should be rolled with light to and fro movement to avoid extracting the trapped air
- the pastry should be baked in a fairly hot oven so that the water is quickly turned to steam to puff up the pastry
- all measured liquids should be added at once to give an even texture.

any 4 x 2 = 8 marks

(b) Hygiene practices to observe during food storage:

- storage equipment such as refrigerators, kitchen stores, must be kept clean at all times to avoid attracting pests and micro-organisms
- the principle of first in, first out should be practiced when storing foods to prevent food spoilage
- containers used to hold cooked food should be free from cracks and chips to avoid harbouring micro-organisms
- dry foods should be stored in well ventilated storage places which are free from pests to avoid spoilage.
- Food should be covered or wrapped during storage to avoid contamination

any 3 x 2 = 6 marks

(c) Points to take into account when buying baking tins to ensure they are of good quality:

- buy reliable and tested products as these are more likely to be of reasonable standards and good value for money
- insist on a warranty as this is a good indicator of the quality of the item
- buy from reliable and established dealers as they are dependable
- buy renowned brands as they are a symbol of quality.
- buy rust-free tins to avoid poisoning, discolouration or altering the taste of food
- buy one that is smoothly finished to avoid injuries and ease of cleaning

any 3 x 2 = 6 marks

24. (a) Steps followed in making pin tucks:

- mark the position of the tucks
- fold the fabric appropriately/on straight grain on the RS
- hold the tucks with temporary stitches close to the fold
- stitch close to the fold
- work as above, until all tucks are made
- remove the temporary stitches and press.

correct sequence 6 x 1 = 6 marks

(b) Qualities of a well-made in-seam pocket. the:

- pocket is inconspicuous on the RS for neat appearance
- pocket should lie flat to avoid bulkiness
- pocket should face the RS of the garment for ease of use
- pocket is reinforced at the mouth to avoid tearing
- grain of the pocket and that of the garment should be matching to give good drape
- pocket mouth should be large enough for the hand of the wearer to enter with ease
- pocket bag should be deep enough to prevent items placed inside from dropping out.

any 4 x 2 = 8 marks

- (c) Procedure of laundering a polyester pair of trousers:
- wash in warm detergent water by kneading and squeezing
 - rinse thoroughly in warm water
 - give a final rinse in cold water
 - use fabric conditioner
 - drip dry in the shade
 - press with a warm iron
 - air dry completely
 - store appropriately.

correct sequence 6 x 1 = 6 marks

25. (a) Procedure in daily cleaning of baby's bedroom:
- strip the bed, air the beddings and wash bedsheets and pillow cases
 - collect the equipment and materials required for cleaning
 - make the bed
 - dust all the surfaces and ornaments
 - sweep/mop the floor
 - tidy, arrange the room and clean the equipment used, dry and store.

correct sequence 6 x 1 = 6 marks

- (b) Methods of lighting
- (i) Study Room:

Direct

- the light source is of the correct intensity as it avoids glare which may strain the eyes
- the light is distributed downwards hence does not cast shadow.

- (ii) Living room:

Decorative

- the light enhances beauty of interesting art objects/pictures, designs
- create/reflects different moods in the home

Semi-direct

- light is distributed evenly in all directions
- less intense, therefore suitable for general activities
- intensity of light can be controlled such as by use of adjustable pendent (which can be lowered or raised).

identification 1 x 2 = 2 marks

reason 2 x 2 = 4 marks

Total = 6 marks

- (c) Practices necessary for maintaining healthy teeth:
- visit the dentist for dental check up to ensure any problem is taken care of promptly
 - discourage the use of sharp objects to remove food from in-between the teeth to avoid damaging the gums
 - brush the teeth regularly - preferably at night before going to bed and in the morning to avoid build up of plaque
 - eat a balanced diet with plenty of calcium and phosphorous to promote growth of well formed strong teeth
 - avoid eating sweet things after cleaning teeth and especially before going to bed to prevent decay/weakening of the teeth
 - eat hard foods occasionally to exercise your jaws and to strengthen your teeth.
 - floss the teeth regularly to keep away food particles.

any 4 x 2 = 8 marks

	ACTIVITY	Score	Maximum score
1.	PRESENTATION		
(a)	Work well pressed (1) and folded ($\frac{1}{2}$)	$1\frac{1}{2}$	$6\frac{1}{2}$
(b)	Label ($\frac{1}{2}$) firmly stitched (1) without concealing details ($\frac{1}{2}$) and on a single fabric ($\frac{1}{2}$)	$2\frac{1}{2}$	
(c)	Pins/needles ($\frac{1}{2}$) and unnecessary tacking threads ($\frac{1}{2}$) and loose threads ($\frac{1}{2}$) removed	$1\frac{1}{2}$	
(d)	Made up for the LEFT side	1	
2.	CUTTING OUT		
(a)	All eight pieces ($\frac{1}{2} \times 8$) cut out	4	15
(b)	Smooth cutting of the C.F of bodice (1) and cut on straight grain to within 3 mm (1)	2	
(c)	Smooth cutting of the C.B of bodice (1) and cut on straight grain to within 3 mm (1)	2	
(d)	Smooth cutting of C.F of skirt	1	
(e)	Smooth cutting of C.B of skirt	1	
(f)	Smooth cutting of the dress lower edge front (1) and back(1)	2	
(g)	Smooth cutting of the sleeve edge	1	
(h)	Crossway strip cut on true bias	1	
(i)	Dress skirt cut on true bias front ($\frac{1}{2}$) and back ($\frac{1}{2}$)	1	
3.	DART		
(a)	Straight stitchery (1) of dart and tapering to nothing ($\frac{1}{2}$)	$1\frac{1}{2}$	6
(b)	Stitchery fastened at the point	$\frac{1}{2}$	
(c)	Correct length of the dart 7.5 cm to within 2 mm (7.3 cm - 7.7 cm)	1	
(d)	Correct width of dart 1.5 cm to within 2 mm (1.3 cm - 1.7 cm)	1	
(e)	Pressed towards C.B	1	
(f)	Flatness of dart on W.S ($\frac{1}{2}$) and R.S ($\frac{1}{2}$)	1	
4.	SHOULDER SEAM - DOUBLE STITCHED (If not double stitched award zero (0))		
(a)	First row of stitchery made with straight stitches	1	8
(b)	Raw edges well tucked under	1	
(c)	Second line of stitchery made with straight stitches	1	
(d)	Evenness of seam (1) and correct size 0.6 cm to within 2 mm (1) (0.4 cm - 0.8 cm)	2	
(e)	Flatness of seam on R.S (1) and on W. S (1)	2	
(f)	Fell facing back of dress	1	

		Score	Maximum score
5.	SIDE SEAMS - OPEN SEAM (if not open seam award zero(0))		
	BODICE		
	(a) Joined with straight stitchery	1	
	(b) Raw edges well neatened (1 x 2)	2	
	(c) Evenness of seam allowance	1	
	(d) Correct size of seam allowance 1cm to within 2 mm (0.8 - 1.2cm)	1	
	(e) Seam pressed open and flat at the arm hole (1) and waist (1)	2	
	SKIRT		
	(a) Joined with straight stitchery	1	13
	(b) Raw edges well neatened (1x2)	2	
	(c) Evenness of seam allowance	1	
	(d) Correct size of seam allowance (1 cm to within 2 mm (0.8 - 1.2 cm)	1	
	(e) Seam pressed open and flat at the waist	1	
6.	WAIST SEAM - PLAIN SEAM		
	(a) Joined with straight stitchery	2	
	(b) Seam evenly trimmed (1) and correct size (1) 1 cm to within 2 mm (0,8-1.2 cm)	2	
	(c) Loop stitches (1) made on half back (1)	2	
	(d) Quality of loop stitches i.e. evenly distributed (½) correct tension (½) even length (½) and worked using single thread (½)	2	10
	(e) Side seams meeting to within 2 mm	1	
	(f) C.B of bodice and C.B of skirt flash (½) C.F of bodice and C.F of skirt flash (½)	1	
7.	COLLAR		
	(a) Smooth stitchery of outer edge of collar (mark by impression)	1	
	(b) Collar seam trimmed (1) and snipped (1)	2	
	(c) Well knife-edged collar	1	
	(d) Collar attached by sandwiching in the dress and crossway strip	1	
	(e) Quality of attaching stitchery (mark by impression on R.S)	1	
	(f) Attaching seam trimmed (1) and snipped (1)	2	
	(g) Crossway strip held down with straight stitchery (1) and well tucked under (1)	2	17
	(h) Evenness of the crossway strip	1	
	(i) Correct positioning of collar i.e. C.F of collar flash with C.F of bodice (1) and C. B of collar 1.5 cm from cutting edge (1)	2	
	(j) Correct size (1) to within 5mm and correct shape (1) (superimpose pattern)	2	

		Score	Maximum score
(k)	Collar lying flat on dress front (½) and dress back (½)	1	
(l)	C.F of crossway strip and C.F of bodice flash (½) and C. B of crossway strip and C.B of bodice flash (½)	1	
8.	UNDERARM SEAM - OPEN SEAM		
(a)	Joined with straight stitchery	1	6
(b)	Raw edges well neatened (1 x 2)	2	
(c)	Evenness of seam allowance	1	
(d)	Correct size of seam allowance 1cm to within 2 mm (0.8 cm - 1.2 cm)	1	
(e)	Seam pressed open and flat at the armhole	1	
9.	SLEEVE		
(a)	Good hang	1	8½
(b)	Gathers (1) evenly distributed (1) at the crown (½)	2½	
(c)	Armhole made with straight stitchery	2	
(d)	Armhole seam neither trimmed (½) nor neatened (½)	1	
(e)	Correct position i.e front notches (½) and back notches (½) matching	1	
(f)	Underarm seam and side seam matching to within 2mm	1	
	TOTAL	90 ÷ 2	45

5.6.3 Home Science Paper 3 (441/3)

	AREAS OF ASSESSMENT	MAXIMUM SCORE	ACTUAL SCORE	REMARKS
1.	PLAN Recipes - Availability - Correct quantities - Appropriate choice Order of work - Availability - Proper sequencing List of foodstuffs and equipment - Availability - Adequacy - Appropriateness	 $1\frac{1}{2}$ 3 $1\frac{1}{2}$ 1 2 2 3 2		
		16		
2.	PREPARATION AND COOKING Correct procedure - Item 1 (main dish) - Item 2 (vegetable) - Drink Methods of cooking (at least two) - Quality of results - Item 1 (main dish) - Item 2 (vegetable) - Drink	 4 2 2 2 2 1 1		
		14		
3.	PRESENTATION Utensils - Appropriate - Clean - Table lay out Centre piece - General impression - Hygiene - Food(1) Kitchen(1) Personal (1)	 2 2 2 2 1 3		
		12		
4.	ECONOMY OF RESOURCES - Water - Food - Fuel - Materials Clearing up - During work - After work	 1 1 1 1 2 2		
		8		
		50 ÷ 2		