

**MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI**

1	Name of Syllabus	<b>CERTIFICATE COURSE IN HOME SCIENCE (401204)</b>																																																													
2	Max.Nos of Student	25 Students																																																													
3	Duration	1 year																																																													
4	Type	Part Time																																																													
5	Nos Of Days / Week	6 Days																																																													
6	Nos Of Hours /Days	4 hrs.																																																													
7	Space Required	Practical Lab = 200 sqfeet <u>Class Room = 200 sqfeet</u> TOTAL = 400 sqfeet																																																													
8	Entry Qualification	S. S. C. Appeared																																																													
9	Objective Of Syllabus/ introduction	To acquire employable skill																																																													
10	Employment Opportunity	Can get employment in related establishment.																																																													
11	Teacher’s Qualification	Diploma or H.S.C. (Vocational) in related field.																																																													
12	Training System	<b>Training System Per Week</b> <table><tr><td>Theory</td><td>Practical</td><td>Total</td></tr><tr><td>6hrs</td><td>18hrs</td><td>24hrs</td></tr></table>						Theory	Practical	Total	6hrs	18hrs	24hrs																																																		
Theory	Practical	Total																																																													
6hrs	18hrs	24hrs																																																													
13	Exam. System	<table><tr><td>Sr. No.</td><td>Paper Code</td><td>Name of Subject</td><td>TH/PR</td><td>Hours</td><td>Max. Marks</td><td>Mini. Marks</td></tr><tr><td>1</td><td>40120411</td><td>Home Science</td><td>TH-I</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>2</td><td>40120412</td><td>Clothing &amp; Textile</td><td>TH-II</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>3</td><td>40120413</td><td>Food &amp; Nutrition</td><td>TH-III</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>4</td><td>40120421</td><td>Home Science</td><td>PR-I</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td>5</td><td>40120422</td><td>Clothing Textile</td><td>PR-II</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td>6</td><td>40120423</td><td>Food &amp; Nutrition</td><td>PR-III</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td></td><td></td><td>TOTAL</td><td></td><td></td><td>600</td><td>255</td></tr></table>						Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Mini. Marks	1	40120411	Home Science	TH-I	3 hrs.	100	35	2	40120412	Clothing & Textile	TH-II	3 hrs.	100	35	3	40120413	Food & Nutrition	TH-III	3 hrs.	100	35	4	40120421	Home Science	PR-I	3 hrs.	100	50	5	40120422	Clothing Textile	PR-II	3 hrs.	100	50	6	40120423	Food & Nutrition	PR-III	3 hrs.	100	50			TOTAL			600	255
Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Mini. Marks																																																									
1	40120411	Home Science	TH-I	3 hrs.	100	35																																																									
2	40120412	Clothing & Textile	TH-II	3 hrs.	100	35																																																									
3	40120413	Food & Nutrition	TH-III	3 hrs.	100	35																																																									
4	40120421	Home Science	PR-I	3 hrs.	100	50																																																									
5	40120422	Clothing Textile	PR-II	3 hrs.	100	50																																																									
6	40120423	Food & Nutrition	PR-III	3 hrs.	100	50																																																									
		TOTAL			600	255																																																									

## **THEORY - I - HOME SCIENCE**

- 1) Home maker – her duties and responsibilities – Division of work among family member.
- 2) Care of home – daily, weekly and seasonal cleaning – watching of floors dusting sweeping care of books
- 3) Cleaning agents – methods of cleaning different materials – brass silver, glass, mirror, tiles wood, polishing leather porcelain, sinks etc. Different types of brooms brushes and dusters.

Labour Saving Devices.

- 1) Household Pots – Insecticides and disinfectants – rat poison fly killers etc.
- 2) Family Income – Household budget, saving methods and benefit opening and maintenance banking account.
- 1) Selection of the House – Site locality – facilities for transport, nearness to shopping centers, schools, etc. Ventilation drainage, lighting, water supply, sanitation clearance of refuse etc.
- 2) Home furnishing – Essential furniture, built in furniture, furniture arrangement, colour combination, picture and flower arrangements.

## **HEALTH SCIENCE**

- 1) First – Aid
- 2) Home Nursing
- 3) Hygiene

### **1) FIRST AID :-B**

General knowledge of first aid, bandages and slings, treatment of broken bones, dislocation, sprains.

Outline of first-aid structure and functions of the body, dressing and badges, wounds and hemorrhages, hemorrhages from special regions, shocks, injuries to bones and joints and first-aid to be rendered, burns and scalds, poisons insensibility.

Test book :- First-Aid of the injured by St. John's Ambulance Association.

### **2) HOME NURSING :-**

Importance and necessity of Home Nursing choice and preparation of sick room, bed and bed making for a patient, changing of bed sheets when patient can be turned and when a patient cannot be turned to his side, beds for special cases, observation of the sick.

Different disinfectants i.e. sunlight, fire, boiling, white washing, fumigating, sulphur dioxide. Carbolic acid, Carbolic soap, Phenyls, Lysol. D.D.T. Kerosene oil, lime, perchloride of mercury, cresol potassium permanganate etc.

Antiseptic and their uses – iodine, detol, Iystrine.

Infections diseases – measles, chicken pox, diphtheria, whooping, cough, small pox, scabies, influenza, plague, cholera, diphtheria, dysentery, leprosy, trachoma – their incubation period, signs and symptoms of invasion, their isolation or quarantine period.

Sponging the patient in bed, keeping records.

Invalid food, liquid, semi-liquid soft diet and full diet.

Text book – Home Nursing in India by St. John's Ambulance Association.

### **3) HYGIENE :-**

Definition of hygiene, personal hygiene – care of hands and nails care of mouth and teeth, care of bowels, care of hair, habits of cleanliness.

Food hygiene Introduction of the problems of food poisoning and spoilage and how to avoid these.

Exercise, importance of exercise, different types of exercise according to age and occupation.

Rest and sleep – Importance and necessity of regular rest, sleep and relaxation, difference in hours of sleep for different occupations and ages.

Temperatures – Effects of various climates – wind, humidity and rainfall – on health adjustment in heat and temperature by natural and mechanical ways.

## **CHILD DEVELOPMENT & FAMILY RELATIONS**

### **CHILD DEVELOPMENT :-**

- 1) Personal Development

Signs of Pregnancy.

Principles of Development.

Care of the expectant mother medical care, diet-exercise, rest, clothing etc.

Preparation for child birth.

- 2) Birth to 15 months :

Post natal care

Daily schedule – feeding, bathing, sleep, play health routine, weaning etc. Importance of gradual weaning, supplementary, diet and gradual toilet training, Immersion, physical and motor development, emotional and social development. Basic needs of the child.

3) Toddler hood :-

Characteristics.

Slow rate of growth feeding problems, negativism and development of sense of autonomy, intellectual development social development – language, play, suitable toys, importance of Nurses school, sex education.

## **MARRIAGE & FAMILY RELATIONS :**

1) Engagement :

- a. Arranged marriages vs. Love marriages.
- b. Difference between infatuation and love.
- c. Need for developing ways suited to the interests of young people and parents.
- d. Purpose of engagement, duration. How to utilize the engagement period of mutual advantage,

2) Wedding :-

Importance of wedding ceremony, Good and harmful customs like dowry etc. prevalent in today society. Need for change.

3) Adjustment in Marriages :

Effects of movies and fiction. Need for education for marriages and family life. Main areas of conflict – In – laws, sex, money, work etc. and marriage. Problems of working wives and mothers.

## **PRACTICAL - I Home Science.**

- 1) Filmstrips to study water supply, drainage, sanitation, fire brigade etc.
- 2) Equipment for household cleaning daily cleaning, weekly cleaning, annual cleaning.
- 3) Study of different cleanings agents, preparation of household polishers, cleaning of floors, ceiling, wall surface, wood, marble, metal etc.
- 4) Arrangements of rooms colour schemes and furnishing.
- 5) Flower arrangement, accessories, etc.
- 6) Planning budget at different income levels marketing.
- 7) Service-gas, water electricity mending of fuses, replacing of washers etc.
- 8) Hobbies supplementing family income – To be taught as extra curricular activities.
- 9) The candidates should submit hobby article prepared during the course of year at the time of practical examination.
- 10) Flower arrangements hand sketches and pictures
- 11) Five colour scheme for various rooms in the houses.
- 12) Samples of furnishing fabrics.
- 13) Planning budget for income between Rs.200 to Rs.500 for a family unit of five.
- 14) List by trade names cleaning material for household care and their specific functions of utility value as tested out in the class.

## **THEORY :- II CLOTHING & TEXTILES**

Different fibers, their characteristic and their manufacture into cloth – Vegetable fibers: cotton, linen, jute, rayon, coconut – animal fibers : hair, wool, silk-synthetic or chemical fibers e.g. terylone, nylon, Dacron.

Preparation of fiber for spinning – general idea of spinning, weaving – metal fibers, gold, silver, gold, silver, copper.

Cloth finishing processes – mercerizing, bleaching, dyeing, sizing, printing, stenciling – dyeing and resting of cloth of different common fibers for strength, durability shrinkage, fastness of colour.

Test of pure mixed materials by household tests.

Choice of clothing – use – warmth properties cost, errors of clothing, dangers from faulty or unsuitable clothing, children's clothes for the household, buying for the household. Care of clothes.

Test specimen of different fabrics for porosity, rapid absorption of moisture, capacity of absorption and evaporation.

**NEEDLE WORK :-** Equipment – types of needles and thread – suitability for particular materials – Scissors at least three types – thimble sewing machine – tailor’s square- tracing wheel – embroidery ring – embroidery frames. Knowledge of different seams and their uses – fastenings and opening, hooks, eyes, buttons, button hole- bias binding, collars cuffs.

**EMBROIDERY STITCHES :-** Lazy Daisy, button hole, chain stitch, stem stitch, long and short, French knots, herringbone, blanket, cross satin stitch.

**TO PREPARE ANY TWO :-** Tray cloth, batwa, tea cosy, headed net covers for tumblers, pillow case.

**TAILORING, CUTTING AND SEWING :-** Drafting and cutting of jangia napkins (Babies), jhablas, baby’s frock, baba suits (any three garments for children) and either a choli or a blouses.

Darning, mending and renovation, knitting baby’s set.

**LAUNDRY :-** Importance of laundry.

Different processes – sorting – mending – sleeping – soaking – rubbing – kneading and pressing – squeezing – rising – starching – blueing – drying – ironing – folding.

**KNOWLEDGE AND CARE OF EQUIPMENT :-** Washing Machine sinks, washing board, pans basins, wooden lades, glass rods, brushes,

Water hard and soft method of softening hard water. Knowledge of washing and cleaning agents : Soap, soap-nuts, soap flakes, liquid soap, commercial detergents, local substitute where used, washing soda, borax, ammonia bleaching powder, bran.

**STARCHES :-** Use – preparation, cold water starch, ready-made starches, starches available in the market starch substitute.

**BLUEING / IRONING :-** Ironing equipment – table board, sleeve board.

Types of iron – Coal, electric, steam iron –care of iron – methods of ironing different garments according to materials.

**STAIN REMOVAL :-** Grease, blood, condiment, ink, mud, tea coffee, paint.

## **PRACTICAL - II CLOTHING & TEXTILES**

Laundering of – Plain cotton garments, printed cotton garments, plain art silk garments, plain silk garments, printed silk garments, knitted woolen garments, stocking, household linen, garments with jari in it, stain removal. Needle work, Embroidery Stitches Tailoring & cutting

## **THEORY :- III FOODS & NUTRITION**

Aims and objects of cooking food.

Classification of raw materials.

Principles of food storage according to type of commodity ventilation and refrigeration

Preparation of ingredients

Texture

Methods of cooking food.

Terms used in cooking food.

The cleanliness of the kitchen, server dining room and stores including furniture and fittings such as sinks, shelves and cupboards.

The choice, use, care and maintenance of all fixed and movable equipment.

Routine use : care and maintenance of all fixed and movable equipment. Including refrigerators, various types of ovens, boilers and mixers.

The uses and relative advantages and disadvantages of coal, coke, gas, electricity steam and oil, Necessary safety precautions.

### **NUTRITION**

Definition and history of nutrition.

Measurement :- Calories, definition of calories, daily requirement factors that affect the daily requirement.

Carbohydrates :- Composition, Classification, sources with special reference to importance of animal sources daily requirements, excess and deficiency.

Fats :- Classification according to sources. Difference between animal fat and vegetable fat, functions, daily requirements, excess and deficiency.

Mineral Salts :- Water, Calcium, phosphorous, Iron, Iodine, (sources, functions, deficiency, and daily requirements)

Direct linking of nutrition with every day cooking by calculating food value of dishes prepared.

### **PRACTICAL :- III FOODS & NUTRITION**

Practical work shall contain recipes with cost per portion. Calories, Protein, Fat, Carbohydrates, cooking time, preparation time, nutritive value etc. of any one or two dishes (as specified below) from each of the following items of Indian and Western dishes.

#### **INDIAN :-**

- a) Boiled rice, lime rice, Tahari, vegetable pilau, kitched – Any two.
- b) Chappaties, Parathas, Poories, Missle rotti, Bhaturas – Any two.
- c) Dal masur, dry dal, sambar, sprouted moong, aulchole – Any two.
- d) Fish – fish molloo, Goan fish curry or Fish patiya, Hyderabad fish curry, prawn curry, fried dish (2 types) – Any two.
- e) Meat – Hydrabadi kheema, kofta, Khorma, vindaloo, shami kababs – Any two.
- f) Vegetable – vegetable curry, stuffed vegetables (tomato mahashe or stuffed brinjal) bhujjias (Potato & Brinjal) raitas cucumbers – Any tow.
- g) Snacks – potato wada, or potato bonda, samosas, dalwada, pakoras, potato tikki, khaman dhokala, iddli, dosa, upma – Any two.
- h) Sweet Puranpoli, Karanjia, Jallebis, gaujas – Any two.

#### **WESTERN :**

- a) Basic stock, simple soups and thickened and cream soups (vegetable soup, Minestrone, Scotch broth, cream of vegetable, cream of tomato, cream of spinach)
- b) Simple sauces and gravies made on correct principles (white sauce and variations) brown sauce, tomato sauce, Barbecue sauce, brown gravy – Any two.
- c) Breakfast dished preparation of grapefruit, cereals, porridges, eggs – (boiled, scrambled, omlette, fried poached.), grilled or fried tomatoes – Any two.
- d) Fish – fish fried (slice and fillets dipped in egg and bread crumbs), fish only, fish Portuguese, fish Florentine – Any two).
- e) Meat – slews (3 types), goulash casserole, hot pot, cutlets & chops hamburgers – Any two.
- f) Vegetables – French beans (buttered), boiled cauliflower. Boiled cabbage, macedoine, salads-tossed, coleslaw, cucumber potatoes – boiled, parsley, cream, roast, fried, macaire, straw – Any two.
- g) Vegetable dishes – Vegetable cutlets, vegetable stew, vegetable hot pot, vegetable hamburgers, vegetable pies – Any two.
- h) Puddings – caramel custard, bread pudding, canary pudding, marshmallow, honeycomb mould – Any two.
- i) Confectionery – Lemon curd tarts, Swiss tarts, sponge cake, bread rolls – Any two.
- j) Beverage – Tea, coffee, coca – All.
- k) Sandwiches – 4 types – Any one.

## LIST OF TOOLS & EQUIPMENT

S.N	Name Of the item	Qty.
1	Working tables (Stainless Steel)	05 Nos
2	Chopping Boards (Wooden/Plastic)	10 Nos
3	L.P.Gas Cooking Range (+Oven & Griller)	02 Nos
4	Cooking Range (High)	01 No
5	Dry Store Shelf	04 Nos
6	Refrigerator-365 Ltr. And' 65 Ltr.	2 One each size
7	Mixer	01 No
8	Weighing Machine	01 No
9	Frying Pan-Non-Stick/Medium/Small/Large	8-3/2/1/2
10	Kadai-Large/Small	5-2 /3
11	Heavy Bottom Pan Small/Big	5-3 and 2
12	Aluminum Degchi-15Ltr./12 Ltr.	2 One each size
13	Tawa- General/Large	3-2 and 1
14	Wok (Chinese Kadai)	02 Nos
15	Roiling Pin and Rolling Base	02 Nos
16	Cooker-1 Ltr/2 Ltr.,	2-One each size
17	Mandolin Grater	01 No
18	Wooden Spatula	10 Nos
19	Strainers-(Conical/Strainers)	7-3 and 4
20	Perforated Spoon	5 Nos
21	Steel Bowls-Small/Medium/Big	16each size
22	Steel Slicer	16 Nos
23	Steel Basin	05 Nos
24	Collander	05 Nos
25	Baking Try	05 Nos
26	Holder(Togs/bowl)	05 Nos
27	Saucepan	05 Nos
28	Plastic Trays-Big/Small	6-3 each size
29	Pie Dish	6 Nos

30	Steel & Plastic Mugs	3 Each
31	Steel Plates	16 Nos
32	Steel Spoons	16 Nos
33	Baloon Whisk	05 Nos
34	Measuring Jars	03 Nos
35	Containers (For keeping dry items)	32 Nos
36	Grinding Stone	02 Nos
37	Bread Moulds	05 Nos
38	Coconut Grater	02 Nos
39	Dustbins	05 Nos

xxxxxxxxxxxxxxxxxxxx