

Question Paper Solution

2023

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Marking Scheme
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Secondary School Examination, 2023
SUBJECT NAME -HOME SCIENCE (SUBJECT CODE -064) (PAPER CODE-37)

General Instructions: -

1	You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully.
2	**"Evaluation policy is a confidential policy as it is related to the confidentiality of the examinations conducted, evaluation done and several other aspects. Its' leakage to public in any manner could lead to derailment of the examination system and affect the life and future of millions of candidates. Sharing this policy/document to anyone, publishing in any magazine and printing in News Paper/Website, etc. may invite action under various rules of the Board and IPC."**
3	Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. **However, while evaluating, answers which are based on latest information or knowledge and/or are innovative, they may be assessedfor their correctness otherwise and due marks be awarded to them. In class-X, while evaluating two competency-based questions, please try to understand given answer and even if reply is not from marking scheme but correct competency is enumerated by the candidate, due marks should be awarded.**
4	The Marking scheme carries only suggested value points for the answers These are in the nature of Guidelines only and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the due marks should be awarded accordingly.
5	The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. If there is any variation, the same should be zero after deliberation and discussion. The remaining answer books meant for evaluation shall be given only after ensuring that thereis no significant variation in the marking of individual evaluators.
6	Evaluators will mark (√) wherever answer is correct. For wrong answer CROSS 'X" be marked. Evaluators will not put right (✓) while evaluating which gives an impression that answer is correct and no marks are awarded. **This is most common mistake which evaluators are committing.**
7	If a question has parts, please award marks on the right-hand side for each part. Marks awarded for different parts of the question should then be totaled up and written in the left-hand margin and encircled. This may be followed strictly.
8	If a question does not have any parts, marks must be awarded in the left-hand margin and encircled. This may also be followed strictly.
9	If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out with a note **"Extra Question"**.
10	No marks to be deducted for the cumulative effect of an error. It should be penalized only once.

11	A full scale of marks **70**(example 0 to 80/70/60/50/40/30 marks as given in Question Paper) has to be used. Please do not hesitate to award full marks if the answer deserves it.
12	Every examiner has to necessarily do evaluation work for full working hours i.e., 8 hours every day and evaluate 20 answer books per day in main subjects and 25 answer books per day in other subjects (Details are given in Spot Guidelines). This is in view of the reduced syllabus and number of questions in question paper.
13	Ensure that you do not make the following common types of errors committed by the Examiner in the past: - ● Leaving answer or part there of unassessed in an answer book. ● Giving more marks for an answer than assigned to it. ● Wrong totaling of marks awarded on an answer. ● Wrong transfer of marks from the inside pages of the answer book to the title page. ● Wrong question wise totaling on the title page. ● Wrong totaling of marks of the two columns on the title page. ● Wrong grand total. ● Marks in words and figures not tallying/not same. ● Wrong transfer of marks from the answer book to online award list. ● Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line.Same is with the X for incorrect answer.) ● Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
14	While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as cross (X) and awarded zero (0) Marks.
15	Any un assessed portion, non-carrying over of marks to the title page, or totaling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in orderto uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
16	The Examiners should acquaint themselves with the guidelines given in the "**Guidelines for spot Evaluation**" before starting the actual evaluation.
17	Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totaled and written in figures and words.
18	The candidates are entitled to obtain photocopy of the Answer Book on requeston payment of the prescribed processing fee. All Examiners/Additional Head Examiners/Head Examiners are once again reminded that they must ensure that evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.

CLASS X HOME SCIENCE (2022-2023)

MARKING SCHEME

Q. No.	EXPECTED ANSWER/VALUE POINTS	Marks
	SECTION A	
1.	(a) Sexual maturity	**1**
2.	(d) Rust	**1**
3.	(b) 20	**1**
4.	(d) Not establishing balance	**1**
5.	(a) FSSAI	**1**
6.	(b) Putting cockroach trap on drains	**1**
7.	(a) Light	**1**
8.	(c) Before throwing garbage	**1**
9.	(b) A-i, B-iv, C-ii, D-iii	**1**
10.	(c) A-iii, B-iv, C-ii, D-i	**1**
11.	(b) ii and iv	**1**
12.	(d) i and iii	**1**
13.	(a) Buy sealed packet/bottle	**1**
14.	(c) Carbohydrates	**1**
15.	**Note- Deficiency diseases is not in syllabus. One mark should be awarded for attempting the question.**	**1**
16.	(b) i and iv	**1**
17.	(d) ii and v	**1**
18.	**Note- Types of milk is not in syllabus. One mark should be awarded for attempting the question.**	**1**
	SECTION B	
19.(a)	Mention four advantages of making a time plan. **Four advantages of making a time plan-** 1. Saves time 2. Conserves/saves energy 3. Better management of resources 4. Time for recreation/ other activities /hobbies 5. Avoids last minute stress/ anxiety/ tension 6. Helps in advance planning /Can plan ahead 7. Can think of various solutions/options to the problems/situation 8. Handle emergency situations 9. Increases productivity 10. Enhances efficiency 11. Timely achievement of goals 12. Timely completion of tasks **Any other, Any four**	**½X4=2**
	OR	**OR**
(b)	To save energy, activities should be performed in a proper order. Explain giving one example. **An example to save energy, activities should be performed in a proper order –** **Example 1** While cleaning the table after meals- Collect all the plates of the same size → Put smaller plates on top of the bigger ones → Keep them on a tray → Put all spoons on sides of plates → Take them to kitchen → Now wipe the table This will save energy as it reduces the number of trips/ movement to the kitchen.	**1+1=2** **1 mark for example** **1 mark for explanation**

	Example 2 While washing the clothes- Sorting ⟹ Soaking ⟹ Washing This will save energy as it reduces the time and effort to wash clothes. **Any other suitable example, Any one**	
20.(a)	Inform your family about the four ways of suitable cleanliness of the kitchen dustbin. **Four ways of suitable cleanliness of the kitchen dustbin-** Dustbin should be- 1. lined with newspaper/disposable bag and fitted. 2. cleaned regularly. 3. kept dry. 4. covered. 5. emptied daily. 6. not overflowing. **Any other, Any four**	**½X4=2**
	OR	**OR**
(b)	'Proper storage of food helps to prevent contamination.' Suggest to your younger sister, four hygienic practices to be followed during storage of food in the refrigerator at home. **Four hygienic practices to be followed during storage of food in the refrigerator at home-** 1. Refrigerators should be set at the right temperature (1°C to 4°C). 2. Non-vegetarian foods should be wrapped separately in small ready to use packets. 3. Perishable foods should be refrigerated within 2 hours of purchase. 4. All foods should be covered. 5. Raw and cooked food should be stored separately. 6. Foods which absorb flavours/smells should be stored away from those that give strong flavours/smells. 7. Rule of First In First Out (FIFO) must be followed. 8. Regular inspection and cleaning of refrigerator should be followed. 9. Any spills and food deposits in refrigerator should be cleaned immediately. **Any other, Any four**	**½X4=2**
21.(a)	What is the full form of FSSAI? Write names of any two food products on which this mark is given. **Full form of FSSAI-** Food Safety and Standards Authority of India **Two food products on which this marks is given-** 1. Tinned/Canned/Frozen food items 2. Pickles 3. Jams/Jellies/Marmalades 4. Sauces 5. Vinegar 6. Packaged milk 7. Bread 8. Tea/Coffee 9. Packed Spices/Cereals/Pulses	**1+1=2** **1** **½X2=1**

	10. Biscuits/Chips **Any other, Any two food items**	
	OR	**OR**
(b)	List any four problems faced by consumers in our country while purchasing food items. **Four problems faced by consumers in our country while purchasing food items-** 1. Price variation in goods/commodities 2. Price variation in services 3. Substandard products 4. Imitation/Duplication/Fake copy 5. Adulteration 6. Faulty/Defective weights and measures 7. Non-availability/Hoarding of products 8. Black-marketing 9. Incomplete information on labels/pamphlets/leaflets 10. Misleading/False advertisements 11. Incomplete information by shopkeepers/salespersons **Any other, Any four**	**½X4=2**
22.	There are tea, curry, milk and ink stains on a bedsheet. Identify the category of each stain. **Category of following stains-** 1.Tea- Vegetable 2. Curry-Vegetable/Grease 3. Milk-Animal 4. Ink-Mineral/Miscellaneous	**½X4=2**
23.	Why should Suresh purchase products having standardized marks? Write any two reasons. **Two reasons for purchasing products with standardized marks-** Products are- 1. free from contamination/adulteration. 2. pure/of good quality. 3. safe to use/not hazardous. 4. not harmful for the environment. 5. not fake/duplicate/replica of original. 6. manufactured in accordance with the norms laid down by the standardizing agency. 7. worth their price. **Any other, Any two**	**1x2=2**
24.	Explain the difference between Peak load period and Leisure period. Give one example of each. **Any other difference with any one example**	**½X4=2**

Peak Load Period	**Leisure Period**
Certain times of the day when a number of activities have to be performed within a fixed time period.	Rest period, time when one is not working or occupied. It includes rest and recreation.
Example- Morning hours when family members leave for work, school etc.	**Example**- Listening to music, Gardening, Watching T.V, Exercise, Sleeping etc.

25.	Every time the season changes, some clothes are stored. Which four points should be kept in mind while storing clothes? **Four points to be kept in mind while storing clothes-** 1. Clothes should be sorted and stored according to the nature of fibres. 2. Clothes should be aired/sun dried and brushed. 3. All holes, tears, broken fasteners etc. should be mended. 4. Pins, buckles etc. should be removed. 5. Stains should be removed immediately. 6. Dirty clothes should be washed thoroughly, dried and ironed properly. 7. Buttons and zips should be closed. 8. Airtight boxes/bags/cupboards should be used for storing. 9. Pockets should be inverted and emptied. 10. Cupboards and boxes should be sprayed with insect repellent before storing clothes. 11. Insect repellent like naphthalene balls/flakes, camphor, neem leaves etc. should be used. 12. Fumigation can also be done. 13. Clothes may be wrapped in newspaper/brown paper/muslin cloth. **Any other, Any four**	**½X4=2**
26.	One-year-old Mridul opens or breaks each of his toys and keeps on examining them. Identify which type of play this is. Also state the names of four other types of play. **Type of play-** Exploratory/Curious play **Names of four other types of play-** 1. Active 2. Passive 3. Natural 4. Serious/Make-believe/Role play 5. Solitary 6. Cooperative/Group 7. Parallel **Any other, Any four**	**1+2=3** **1** **½X4=2**
27.	'Adolescence is a period of stress and storm'. Justify this statement by giving three points. **Three points-** 1. Negative peer pressure 2. Disagreement/ arguments with parents, siblings, friends, teachers etc. 3. Identity crisis 4. Rapid physical and sexual changes 5. Academic pressure 6. Career related issues 7. Body image issues 8. Mood swings 9. Feeling intense emotions 10. Rebellious attitude 11. Casual attitude **Any other, Any three points related to development**	**1X3=3**

28.(a)	Which six points should the mother of a school-going ten-year-old Ragini keep in mind while planning a tiffin for her? **Six points the mother of a school-going ten-year-old Ragini should keep in mind while planning a tiffin for her-** 1. Nutritious/include maximum food groups/should be balanced 2. Provides satiety/fullness 3. Attractive and colorful 4. Easy to prepare 5. Easy to eat/carry/not messy 6. Provides variety 7. According to likes and dislikes of the child 8. Freshly prepared 9. Include seasonal and locally available foods 10. Avoid strongly flavoured/spicy/fried foods/junk food **Any other, Any six**	**½X6=3**
	OR	**OR**
(b)	Describe any three ways to Sakshi to get nutritive food by spending less money. **Three ways to get nutritive food by spending less money-** 1. Prefer using seasonal foods 2. Substitute expensive foods with low-cost nutritious foods 3. Select locally available foods 4. Use parboiled /fermented/germinated/combination of foods 5. Utilize left-over food 6. Advance planning of menu 7. Buy ingredients from wholesale market 8. Preserve seasonal food items for future use 9. Prefer freshly prepared home cooked food 10. Use vegetables/fruits from kitchen garden 11. Appropriate cooking method which saves nutrients and fuel **Any other, Any three**	**1X3=3**
29.	Suchita wants to starch her cotton saree. (i) Inform her about two materials which can be used to prepare starch. **Materials used to prepare starch-** 1. Arrowroot 2. Rice 3. Maida/Refined flour 4. Tapioca 5. Readymade starch powder/solution 6. Water obtained after boiling any starchy food items like pasta, noodles, macroni, rice etc. **Any other, Any two**	**1+2=3** **½X2=1**
	(ii) Explain to her the suitable method of applying starch on clothes. **Application of starch-** 1. Dissolve any starch material into required quantity of water. 2. Dip the saree in plain water and squeeze it properly. 3. Spread/open the saree and dip in starch solution. 4. Squeeze gently and spread in the sun. **Any other method**	**2**

	OR Rashmi wants to wash her white cotton dupatta at home. (i) Name two reagents essential for washing clothes. **Two reagents** 1. Soap 2. Detergent **Any other, Any two** (ii) Also give one characteristic of each reagent. **One characteristic of each reagent-** **Soap** 1. Cheap/ Inexpensive 2. Biodegradable/Environment and skin friendly 3. Made up of natural oils/fats and waxes 4. Effective only in soft water **Detergent** 1. Effective in hard water also 2. Dissolve in both cold and hot water 3. Less water is required for rinsing 4. Lowers the surface tension of water **Any other, Any one characteristic of each**	**OR** **1+2=3** **½X2=1** **1+1=2**
30.	While riding a tricycle, four-year-old Tanya is curious to know when her newborn brother will learn to ride a cycle like her. Explain to her, the gross motor development from birth to three years of age. **Note- Gross motor development from birth to three years of age is not in syllabus. Four marks should be awarded for attempting the question.**	**4**
31.	Many people fell ill after eating besan barfi from a sweet seller shop. (i) Which two adulterants may be present in this barfi? **Two adulterants present in barfi-** 1. Metanil yellow 2. Kesari Dal **Any other, Any two** (ii) State four ill-effects of these on health. **ill -effects of these adulterants on health-** 1. Cancer 2. Anemia 3. Mental retardation 4. Degeneration of reproductive organs 5. Paralysis/Lathyrism 6. Pain in lower limbs 7. Pain in joints 8. Gastro intestinal disorder/Food poisoning **Any other, Any four**	**2+2=4** **1+1=2** **½X4=2**

32. Make a checklist of eight precautions to maintain food hygiene in a kitchen for a person who is cooking and serving food.

½X8=4

Eight precautions to be maintained for food hygiene in a kitchen for a person who is cooking and serving food-

1. Use clean water to wash and cook food.
2. Use separate chopping boards, knives, equipments etc. for vegetarian and non-vegetarian foods.
3. Food should be kept in clean and covered containers.
4. Food handler should wear clean clothes, apron and disposable gloves.
5. Ladles/tongs to be used while cooking and serving food.
6. Food handler should not dip their fingers in glasses.
7. Hold the utensils from the base and avoid touching the food.
8. Food handler should have clean and trimmed nails.
9. Food handler should wash hands with soap and water before cooking and serving the food.
10. Hair of the food handler should be neatly tied.
11. Food handler should not cough/sneeze on food.
12. Food handler should be free from any skin infections, wounds, cuts etc.
13. Food handler should not lick food with their fingers while tasting and serving the food.
14. Kitchen should be free from household pests.
15. Kitchen slabs/surfaces should be kept clean.
16. Kitchen slabs/surfaces should be free from grooves, crevices or corners.
17. Food handler should not enter the kitchen with dirty footwear.
18. Food handler should not wear rings and jewellery items to avoid food lodging.

Any other, Any eight

33. Kavita is a pregnant lady. **1+3=4**

(i) Which two points should she keep in mind while planning meals for herself?

½X2=1

Two points should be kept in mind while planning meals for pregnant lady-

1. Nutrition dense meals should be planned / Increased amount of protein, carbohydrates, fats, calcium, iron and other vitamins and minerals
2. Increased fluid intake
3. Increased fibrous and laxative foods
4. Avoid too much salt/spices/strongly flavoured foods
5. Restrict the consumption of fried foods
6. Lesser intake of spices
7. Avoid alcohol /tobacco
8. Small frequent meals should be given
9. Prefer seasonal and locally available foods

Any other, Any two

(ii) Plan a nutritious morning breakfast for her and also mention any three nutrients provided by it. **1½+1½= 3**

Examples of Breakfast-

Menu for the breakfast	**Nutrients**
Mix Vegetable Poha (with peanuts), Seasonal Fruit, Milk	Carbohydrates, Calcium, Protein, Iron, Vitamin A, Vitamin C, Fats
Banana milk shake, Vegetable Dalia with moong dal / Vegetable omelette/Boiled Eggs	Carbohydrates, Calcium, Protein, Iron, Vitamin A, Vitamin C,Fats
Methi Parantha, Vegetable Raita/Curd, Fresh Fruit Juice	Carbohydrates, Calcium, Protein, Iron, Vitamin A, Vitamin C, Fats

1½ for Menu for breakfast

1½ for Three nutrients

	Any other example of breakfast along with any three nutrients provided **OR** Ravi is working in a city, away from his family and prepares his own food. (i) Inform him of any four food groups. **Food Groups** 1. Cereals, grains and products 2. Pulses and Legumes 3. Milk, meat and their products 4. Fruits and Vegetables 5. Fats and sugars **Any four** (ii) Name any one food included in each food group. **One food included in each group** **Any other, Any one**	**OR** **2+2=4** **½X4=2** **½X4=2**
34.	(i)What is Fatigue? Which two types can it be classified into? Give one example of each. **Fatigue** When the body gets into a state where it cannot function efficiently. or The feeling of tiredness causing desire to stop working. **Any other suitable definition** **Two types of fatigue** 1. Physiological/Physical 2. Psychological/Mental **Any two** **One example of each-** Physiological/Physical fatigue 1. Strenuous exercise 2. Lifting heavy articles 3. Wrong posture 4. Long period of physical work	**3+2=5** **1** **½X2=1** **½X2=1**

Food Groups	**Examples**
Cereals, grains and products	Wheat, Jowar, Potato etc.
Pulses and Legumes	Kidney Beans, Horsegram, Soyabean etc.
Milk, meat and their products	Egg, Fish, Chicken, Curd, Cottage cheese etc.
Fruits and Vegetables	Apple, Banana, Pumpkin, Cabbage etc.
Fats and sugars	Ghee, Sunflower oil, Refined sugar, Cream, Butter, Jaggery etc.

Psychological/Mental fatigue

1. Repetitive/Monotonous work
2. Disinterest/Personal dislike in any task
3. Unsatisfactory/Undesired results
4. Not getting incentive/appreciation/motivation
5. Lack of skills in particular area

Any other, Any one example for each

(ii) Write any four ways to reduce fatigue.

Four ways to reduce fatigue- **½X4=2**

1. Rest/Relax/Recreational activities
2. Divide work in smaller units
3. Alternate between heavy and light activities
4. Use of labour-saving devices
5. Set small targets/goals
6. Change routine
7. Incentives/Motivation/Appreciation
8. Develop skills at work
9. Conducive work environment
10. Delegate work/share responsibilities/ask for help
11. Positive mindset

Any other, Any four

OR **OR**

1+4=5

(i)What do you understand by work simplification?

Work Simplification **1**

A method of doing a job in simplest, easiest and quickest way possible.

or

A method of saving time and energy by using a simple procedure and/or a labour saving device to complete a task.

Any other suitable definition

(ii) Elaborate any four ways of work simplification with suitable examples.

Four ways of work simplification with suitable examples **1X4=4**

Ways of work simplification	**Examples**
1.Dovetailing	Washing clothes while baking
2.Labour saving devices	Vacuum cleaner, Washing machine, Micro wave etc.
3.Using readymade items	Frozen vegetables, Ready to eat food items, Tomato puree, Ginger garlic paste etc.
4.Perform activities in a better order/sequence	Soaking clothes before washing them
5.Improve posture	Using long handled mop
6.Conducive work area/place	Proper lighting and Ventilation

Any four ways with suitable examples

35.	Name the two techniques to remove stains from clothes. Describe each technique in detail. **Two techniques to remove stains from clothes-** 1. Scraping 2. Dipping 3. Sponging 4. Drop method **Description of each technique-** 1. Scraping It is used to lift off excess staining material and to loosen caked on stains. This can be done using a blunt knife. 2. Dipping The stained area is dipped into the reagent and gently scrubbed. It is suitable for a fabric with many stains or one large stain. 3. Sponging The stained area is placed on a flat surface. Reagent is applied with a sponge on the stained area and absorbed by the blotting paper laid underneath. The reagent should be worked in a circular movement starting from the outer edge of the stain to the centre. 4. Drop method The stained cloth is stretched over a bowl. The reagent is put on wrong(reverse) side of the fabric gradually with a help of dropper, followed by other steps of laundry. **Any other, Description of any two**	**2+3=5** **1X2=2** **1½+1½=3**