



**NEERAJ®**

# HOME SCIENCE

**N-216**

**Chapter wise Reference Book  
Including MCQ's  
& Many Solved Sample Papers**

*Based on*

**N.I.O.S. Class – X**  
National Institute of Open Schooling

*By : Taruna Jain*



**NEERAJ  
PUBLICATIONS**

*(Publishers of Educational Books)*

---

Mob.: 8510009872, 8510009878 E-mail: [info@neerajbooks.com](mailto:info@neerajbooks.com)

Website: [www.neerajbooks.com](http://www.neerajbooks.com)

---

**MRP ₹ 320/-**

# CONTENTS

# HOME SCIENCE

*Based on:* **NATIONAL INSTITUTE OF OPEN SCHOOLING – X**

<i>S.No.</i>	<i>Chapters</i>	<i>Page</i>
	Solved Sample Paper - 1 .....	1-7
	Solved Sample Paper - 2 .....	1-6
	Solved Sample Paper - 3 .....	1-8
	Solved Sample Paper - 4 .....	1-7
	Solved Sample Paper - 5 .....	1-6

## MODULE-1

## HOME SCIENCE IN DAILY LIFE

1. What is Home Science?.....	1
2. Food and its Nutrients .....	9
3. Food Groups .....	18
4. Method of Cooking Food .....	24
5. Preservation of Food .....	33
6. Environment.....	40
7. Health .....	47
8. Communicable and Life Style Diseases .....	55
9. Care and Maintenance of Fabrics.....	60

<i>S.No.</i>	<i>Chapter</i>	<i>Page</i>
10.	Fibre to Fabric .....	68
11.	Fabric Finishes .....	74
<b>MODULE-2</b>		<b>MY FAMILY AND I</b>
12.	Housing .....	81
13.	Safety in the Home .....	89
14.	Introduction to Resources .....	98
15.	Management of the Time and Energy .....	104
16.	Managing Family Income .....	112
17.	Life Begins .....	119
19.	Concept of Development .....	127
19.	My Family and I .....	135
20.	Adolescence: Charms and Challenges .....	143
21.	Ethics in Daily Life .....	153
22.	Consumer Beware! Beware! .....	159
		■ ■

**Sample Preview  
of the  
Solved  
Sample Question  
Papers**

*Published by:*



**NEERAJ  
PUBLICATIONS**

[www.neerajbooks.com](http://www.neerajbooks.com)

# Solved Sample Paper - 1

Based on NIOS (National Institute of Open Schooling)

## Home Science - X

N-216

Time : 2½ Hours

Maximum Marks : 85

**Note :** (i) This question paper consists of 47 questions in all. (ii) All questions are compulsory. (iii) Marks are given against each question. (iv) Section A consists of: (a) Q. No. 1 to 19 – Multiple Choice type Questions (MCQs) carrying 1 mark each. Select and write the most appropriate option out of the four options given in each of these questions. An internal choice has been provided in some of these questions. You have to attempt only *one* of the given choices in such questions. (b) Q. No. 20 to 31 – Objective type questions of 2 marks each. Attempt these questions as per the instructions given for each of the questions. (v) Section B consists of: (a) Q. No. 32 to 41 – Very Short questions carrying 2 marks each to be answered in the range of 30 to 50 words. (b) Q. No. 42 to 45 – Short Answer type questions carrying 3 marks each to be answered in the range of 50 to 80 words. (c) Q. No. 46 and 47 – Long Answer type questions carrying 5 marks each to be answered in the range of 80 to 120 words.

### SECTION-A

**Q. 1. To maintain relationships, one should never speak:**

- (a) To each other      (b) Ill of other  
(c) The truth          (d) Cheerfully

**Ans.** (b) Ill of other.

**Q. 2. The doctor diagnosed that the patient was suffering from pertussis on the basis of these two symptoms:**

- (i) Cough with whoop like sound  
(ii) Rapid pulse  
(iii) Inflammation of mucus membrane  
(iv) Chest pain

**Choose the best option:**

- (a) (i) and (iv)      (b) (ii) and (iii)  
(c) (iii) and (iv)      (d) (i) and (iii)

**Ans.** (d) (i) and (iii).

**Q. 3. Your friends are making posters to make people aware of air pollution in their neighbourhood. Choose the most suitable slogan given below for this purpose:**

- (a) Stop leakage in taps  
(b) Play radio on low volume  
(c) Dispose garbage safely  
(d) Keep vehicle pollution free

**Ans.** (d) Keep vehicle pollution free.

**Q. 4. Lifestyle diseases cannot be prevented by one of the following:**

- (a) Drinking plenty of water  
(b) Eating seasonal fruits and vegetables  
(c) Meditation and Yoga  
(d) Eating foods made with refined flour

**Ans.** (d) Eating foods made with refined flour.

**Q. 5. Hall mark is not given to this jewellery:**

- (a) Silver              (b) Gold  
(c) Platinum          (d) Brass

**Ans.** (d) Brass.

**Or**

**Which standard mark will you check while buying wheat flour?**

- (a) ISI MARK          (b) AGMARK  
(c) HALL MARK      (d) ECO MARK

**Ans.** (b) AGMARK.

**Q. 6. To provide light in kitchen, one should paint the following colour on the walls:**

- (a) Light green      (b) Maroon  
(c) Navy blue        (d) Bright purple

**Ans.** (a) Light green.

**Q. 7. Which method is used for cooking fruits at low temperature with less water?**

- (a) Boiling            (b) Stewing  
(c) Baking            (d) Pressure cooking

**Ans.** (b) Stewing.

**Or**

**In which method food is cooked under pressure, above 100°C, in a special utensil?**

- (a) Roasting          (b) Pressure cooking  
(c) Baking            (d) Solar cooking

**Ans.** (b) Pressure cooking.

**Q. 8. Stiff neck and difficulty in swallowing may be symptoms of which disease?**

- (a) Typhoid            (b) Tetanus  
(c) Hepatitis          (d) Tuberculosis

**Ans.** (b) Tetanus.

**Q. 9. Which one of the following statement is incorrect?**

# Solved Sample Paper - 2

Based on NIOS (National Institute of Open Schooling)

## Home Science - X

N-216

Time : 2½ Hours

Maximum Marks : 85

**Note :** (i) This question paper consists of 47 questions in all. (ii) All questions are compulsory. (iii) Marks are given against each question. (iv) Section A consists of: (a) Q. No. 1 to 19 – Multiple Choice type Questions (MCQs) carrying 1 mark each. Select and write the most appropriate option out of the four options given in each of these questions. An internal choice has been provided in some of these questions. You have to attempt only *one* of the given choices in such questions. (b) Q. No. 20 to 31 – Objective type questions of 2 marks each. Attempt these questions as per the instructions given for each of the questions. (v) Section B consists of: (a) Q. No. 32 to 41 – Very Short questions carrying 2 marks each to be answered in the range of 30 to 50 words. (b) Q. No. 42 to 45 – Short Answer type questions carrying 3 marks each to be answered in the range of 50 to 80 words. (c) Q. No. 46 and 47 – Long Answer type questions carrying 5 marks each to be answered in the range of 80 to 120 words.

### SECTION-A

**Q. 1. Tick mark (✓) the most appropriate answer:**

(a) Soakage pits provide a hygienic method for the disposal of \_\_\_\_\_.

- (a) Garbage (b) Waste water  
(c) Human excreta (d) All of these

**Ans. (b) Waste water.**

**Q. 2. Method of Removing Lipstick stain.**

- (a) Use of salt water  
(b) Soak in ammonia  
(c) Sponge with methylated spirit  
(d) Wash with hot water and soap

**Ans. (c) Sponge with methylated spirit.**

**Q. 3. Which of the following is a fine motor skill?**

- (a) Writing with pencil  
(b) Jumping rope  
(c) Walking independently  
(d) Catching ball

**Ans. (a) Writing with pencil.**

**Q. 4. Body ache with alternative chills and perspiration could be symptoms of which disease?**

- (a) Typhoid (b) Malaria  
(c) Tetanus (d) Tuberculosis

**Ans. (b) Malaria.**

**Q. 5. What is the average weight gain during pregnancy ?**

- (a) 10 kg (b) 12 kg  
(c) 18 kg (d) 20 kg

**Ans. (b) 12 kg.**

OR

**What is a baby referred to inside a mother's womb ?**

- (a) Zygote (b) Ovum  
(c) Foetus (d) Sperm

**Ans. (c) Foetus.**

**Q. 6. Which fibre smells like burning paper when burnt ?**

- (a) Rayon (b) Polyester  
(c) Silk (d) Nylon

**Ans. (a) Rayon.**

**Q. 7. You should buy deep orange and red coloured fruits as they are rich in this vitamin :**

- (a) Vitamin D (b) Vitamin C  
(c) Vitamin B (d) Vitamin A

**Ans. (d) Vitamin A.**

OR

**Curd is a very good source of :**

- (a) Iron (b) Calcium  
(c) Carbohydrates (d) Iodine

**Ans. (b) Calcium.**

**Q. 8. Which of the following is an example of non-biodegradable product?**

- (a) Tin (b) Wool  
(c) Cotton (d) Flower petals

**Ans. (a) Tin.**

**Q. 9. Which of the following is not a specialization area in Home Science?**

- (a) Food Science (b) Garment Designing  
(c) Nursing (d) Interior Decoration

**Ans. (c) Nursing.**

**Q. 10. Which nutrient provides maximum kilocalories?**

- (a) Carbohydrates (b) Protein  
(c) Fats (d) Vitamins

**Ans. (c) Fats.**

# Sample Preview of The Chapter

*Published by:*



**NEERAJ  
PUBLICATIONS**

[www.neerajbooks.com](http://www.neerajbooks.com)

# HOME SCIENCE

Based on: NATIONAL INSTITUTE OF OPEN SCHOOLING - X

MODULE-1

HOME SCIENCE IN DAILY LIFE

1

## WHAT IS HOME SCIENCE ?

### SUMMARY

Home Science, or the science of a home, includes all the things that concern the person, home, family members and resources. It is the education for “better living” and the core of this education is the family ecosystem. It also deals with reciprocal relations between the family and its natural and man made environments. It aims at getting maximum satisfaction for the person and their family members through the efficient and scientific use of your resources. It gives the person all the knowledge of the scientific procedures involved in making a home beautiful.

The development of Home Science education reflects social pressures that are evident around the turn of the century. It is a need-based, professionally oriented education to assist family and community towards improved living. In the context of growing pressures in the work environment and external world, the family assumes a significant role in shaping the citizens of tomorrow. The family is the main factor which protects the individuals from all external forces and provides the right type of atmosphere for children to grow into strong and independent personalities.

The discipline of home science covers the following areas:

1. Human Development and Family Studies
2. Extension and Communication Management

3. Foods and Nutrition

4. Resource Management and Consumer Sciences

5. Apparel and Textiles

Home Science is both an art and science that deals with various aspects of house keeping. It is not just restricted to food or nutrition, but also covers hygiene, economics, child development, sociology, family relations, community living, clothing, textiles, dietetics and house keeping. A person opting for a career in this field needs to have a logical mind along with realistic approach and a balanced attitude.

There are five major components of home science which are as follows:

- Food and Nutrition
- Resource Management
- Fabric and Apparel Science
- Human Development
- Communication and Extension

The Home Science graduates have many different job opportunities. They can be placed in hotels, textile business, resorts, etc. A few career profiles for these candidates are sales jobs, production jobs, research jobs, service jobs, technical jobs, teaching jobs, etc. They have various specializations like textiles, cooking, promotion of food products, fashion designing, research scientists, manufacturing industries, house keeping, etc. These



2 / NEERAJ : HOME SCIENCE ( N.I.O.S – X )

graduates can also pursue some short term courses like Diploma in Nutrition, Diploma in Home Science, Certificate Course in Food Science and Dietetics, etc. There are many higher study options for B.Sc Home Science candidates. They are PhD in Home Science, PG Diploma in Home Science, M.Sc in Home Science, etc.

**INTEXT QUESTIONS 1.1**

**Q. 1. Select the correct alternative from those given below.**

(i) Home Science means \_\_\_\_\_.

- (a) learning to build interpersonal communication
- (b) the art of managing your resources
- (c) developing a skill to start an enterprise
- (d) all of the above

Ans. (d) all of the above.

(ii) Which of the following is not a specialization area in Home Science?

- (a) Food Science
- (b) Garment Designing
- (c) Nursing
- (d) Interior Decoration

Ans. (c) Nursing.

**Q. 2. List any four ways by which Home Science can help you.**

Ans. 1. Home Science is helpful in resources efficiency as it gives maximum satisfaction for us and our family members through the efficient and scientific use of our resources.

2. Home Science help in making the things beautiful around us as we learn how to manage the things around us in well mannered form.

Ans.

Science Specialization	Employment Opportunity
(i) Food and Nutrition-Catering	Training of service staff or staff in canteen or restaurant
(ii) Resource management and Designing	Interior decoration and furniture designer-staff in retail outlets and staff in a production house
(iii) Clothing and Textiles at a boutique	Dress/Textile designing-staff at textile designing unit or
(iv) Human Development of children	Social Welfare-Day-care or school after care for young
(v) Communication and Extension	Researcher-As an organization communication consultant

3. Home Science helps us to lead a happy and healthy life.

4. Home Science help us in providing various successful career opportunities.

**INTEXT QUESTIONS 1.2**

**Q. 1. Give any four examples of home-based self-employment opportunities in the area of Home Science.**

Ans. Following are some of the examples of home based self-employment opportunities in the area of home science:

**1. Catering**–This includes food services from home.

**2. Interior decoration and furniture designer**–This includes conducting hobby classes or courses from home.

**3. Dress or textile designing**–This includes home based services or conducting hobby classes from home.

**4. Teaching**–This includes conducting tuitions at home or short term courses in the areas of Home Science courses.

**Q. 2. List any one wage-employment opportunity in the five specialization areas of Home Science.**

Specialization	Employment Opportunity
(i) Food and Nutrition	
(ii) Resource management and Designing	
(iii) Clothing and Textiles	
(iv) Human Development	
(v) Communication and Extension	

**Q. 3. Classify the following either as wage-employment (WE) or as self-employment (SE). Tick mark the option you choose.**

- (i) Pre-school teacher
- (ii) Owner of a home accessories showroom
- (iii) Production unit staff
- (iv) Consultancy service provider
- (v) Research Assistants
- (vi) Conducting hobby classes
- (vii) Owner of a boutique
- (viii) Guest House manager
- (ix) School teacher
- (x) Development Consultant

**Ans.**

- (i) Pre-school teacher (WE)
- (ii) Owner of a home accessories showroom (SE)
- (iii) Production unit staff (WE)
- (iv) Consultancy service provider (SE)
- (v) Research Assistants (WE)
- (vi) Conducting hobby classes (SE)
- (vii) Owner of a boutique (SE)
- (viii) Guest House manager (WE)
- (ix) School teacher (WE)
- (x) Development Consultant (SE)

**ACTIVITY 1.1**

State the art and science in following activities you perform at home. The first two have been done for you:

Activity	Art	Science
to have a bath	feel fresh and clean	<ul style="list-style-type: none"> <li>• dirt and germs are removed from your body</li> <li>• pores on skin get open</li> <li>• select right food</li> <li>• use of correct method of cooking to preserve nutrients</li> <li>• enhance nutritive value of food.</li> </ul>
prepare breakfast	serve attractively	
wash clothes		
clean the house		
make grocery purchases		
use household appliances		
caring for children		

**Ans.**

Activity	Art	Science
to have a bath	feel fresh and clean	<ul style="list-style-type: none"> <li>• dirt and germs are removed from your body</li> <li>• pores on skin get open</li> <li>• select right food</li> <li>• use of correct method of cooking to preserve nutrients</li> <li>• enhance nutritive value of food.</li> </ul>
prepare breakfast	serve attractively	
wash clothes	washed in organized way	
		<ul style="list-style-type: none"> <li>• separate the clothes according to their type</li> <li>• use the right method and detergent</li> <li>• retain the originality i.e., texture, colour, softness of the clothes</li> </ul>

4 / NEERAJ : HOME SCIENCE ( N.I.O.S – X )

clean the house	should look attractive	<ul style="list-style-type: none"> <li>• should be dirt and germ free disinfectant is used to keep flies and mosquitoes away</li> <li>• should be fresh, economical should fulfil the needs of family members</li> <li>• saves time</li> <li>• saves energy</li> <li>• optimum utilization</li> <li>• make them responsible and caring grown ups understand their rights and duties learn hygiene and discipline in life</li> </ul>
make grocery purchases	do it effectively	
use household appliances	do it efficiently	
caring for children	doing in right manner	

**ACTIVITY 1.2**

Do you agree with the following statements? Give reasons for your opinion?

Situations	Agree/ Disagree	Reasons
Only a mother can look after a sick child	Disagree	Anyone with a caring attitude can look after a sick child. Gender does not play any role. Male doctors take equally good care of patients as female doctors do.
Purchasing of electronic appliances items should be preferably done by men		
Washing, ironing, folding and keeping away the weekly laundry is best handled by women		
Money is best managed by men		

Ans.

Situations	Agree/ Disagree	Reasons
Only a mother can look after a sick child	Disagree	Anyone with a caring attitude can look after a sick child. Gender does not play any role. Male doctors take equally good care of patients as female doctors do.
Purchasing of electronic appliances items should be preferably done by men	Disagree	Women at home makes use of household appliances more than men so they need to understand its usage and the product they want in order to meet their requirements
Washing, ironing, folding and keeping away the weekly laundry is best handled by Women	Disagree	Anyone who is taking care of the household activities can do the job