

NIOS lesson adaptation project

By EMBRACE Volunteers

(A community initiative of Harchan Foundation Trust)

Chapter 12

Housing

(Printable Version)

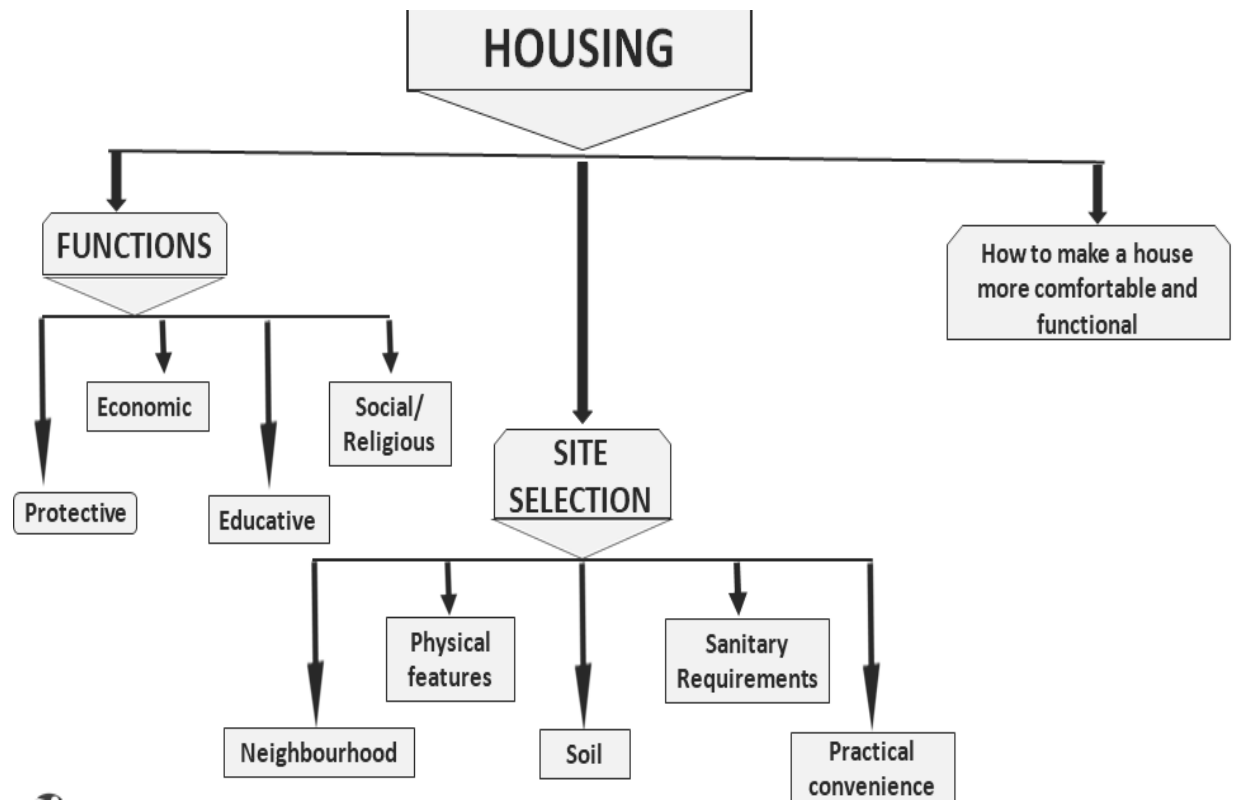
- **Simplified Lesson**
- **Previous Year Questions with Answers**
- **Terminal Questions**

This project is aimed at supporting children with different needs. Information provided is adapted to the best of knowledge by the volunteers. For complete information please refer to the NIOS resources in <https://www.nios.ac.in/online-course-material/secondary-courses.aspx>.

LESSON 12

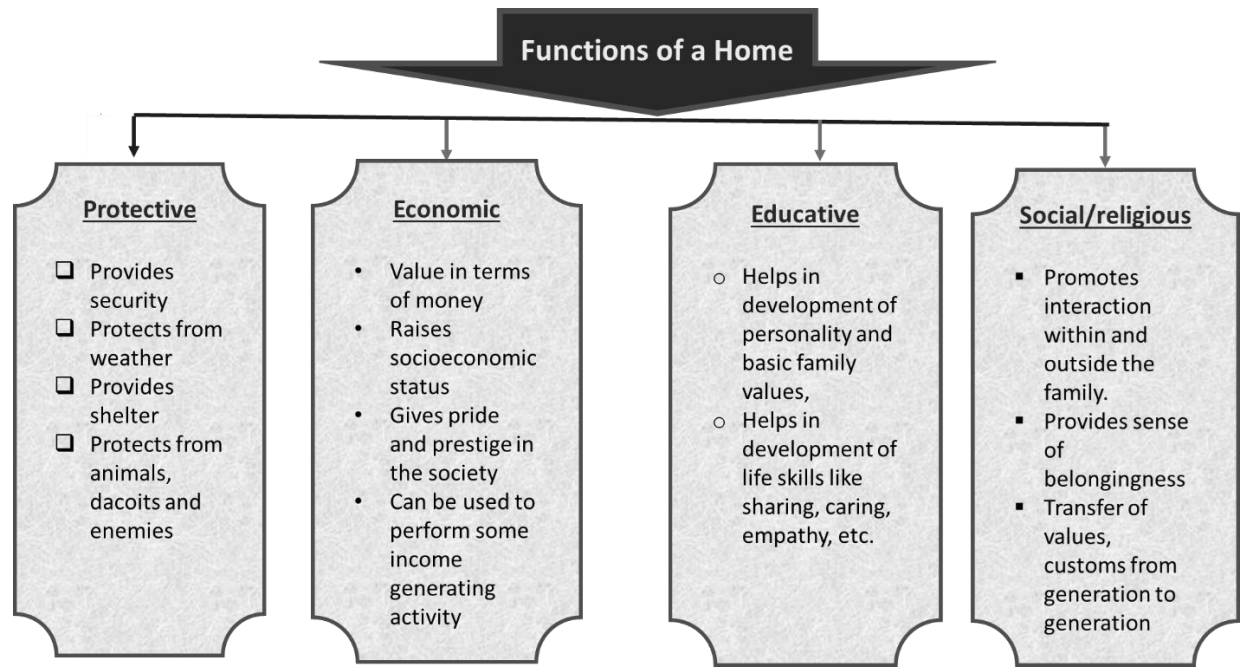
Housing

CONTENTS



IMPORTANCE OF LIVING IN A HOME

- ❖ Home provides security and belongingness.
- ❖ It provides for physical and emotional needs of all the family members.
- ❖ For children, it provides education in basic values like respect for elders, love and affection to others, health, religion, discipline and responsibility.
- ❖ It is a place for loving and celebrating together.



SITE SELECTION FOR A HOUSE

- **NEIGHBOURHOOD;**
Must be a developed area which has electricity, roads, drainage, post office, banks, schools and markets.
- **PHYSICAL FEATURES:**
Must be in an open area
not close to heavy traffic areas
avoid low lying areas
- **SOIL:**
~ For the foundation of the house to be strong, soil should be firm.
~ Loose soil, sandy and gravel type of soil are not suitable for construction.
- **SANITARY REQUIREMENTS:**
~ Vacant plot filled with garbage is not suitable for construction.
~ It should be filled with fresh and firm soil.
~ It should be elevated to the level of the road outside.
- **PRACTICAL CONVENIENCE:**
> To meet our daily needs and practical convenience likes:
Market, school, bank and hospital

Means to make a home more comfortable and functional:

- Make a list of all the activities which take place in each room
- Mark space for every activity.
- Combine activities like dining with kitchen, study with bedroom.
- Avoid over-crowding of furniture. We may use multi-purpose furniture like sofa-cum-bed, etc.

- Some pieces of furniture can be used as storage units and room dividers.
E.g., drawing room can be partitioned with shelves on either side.
- Storage can be provided in the furniture itself.
E.g., bed with boxes, tables with drawers, etc.
- The space below the staircase can be converted into a storeroom or a toilet.

DIFFERENT TYPES OF ROOMS IN A HOUSE:

LIVING ROOM:

Near the entrance of the building.

In small houses combine it with dining room.

Furniture is arranged in such a manner that people can talk to each other comfortably.

BEDROOM:

- Should offer privacy and free from noise.
- Should have an attached bathroom.
- A rectangular bedroom can accommodate other furniture and storage.

BATHROOM:

~ Floors should be non-slippery and easy to clean.

~ One wall should be exposed to outside for proper light and ventilation.

KITCHEN:

- Good drainage system.
- Sanitation wire-mesh doors.
- One wall should be exposed to outside for proper light and ventilation.
- Sufficient storage space above and below the work counter.
- Light colours on the wall.

Maintaining hygiene for healthy living:

The aspects which are important in maintaining hygiene for healthy living are:

☐ Light

Natural lighting: Receive from natural source I,e sun

Artificial lighting: Receive from artificial source I,e from tube light blubs etc

☐ Ventilation

Circulate fresh air and driving out the foul air in order to freshen up the Interiors of house.

- ✓ Windows should be kept open for circulation of free air.
- ✓ Cross ventilation is desirable for ventilation.

❑ Sanitation:

Sanitation refers to a system which includes the capture, storage , transport and disposal or reuse of human excreta and waste water.

The most important one are:

- ✓ Maintaining cleanliness.
 - Cleaning is basic to maintaining hygiene
- ✓ Removal of garbage: Segregate and dispose.
 - Dry waste : Dust by mopping, covers, papers
 - Wet waste: Kitchen waste, vegetable and fruit peels, egg shells
- ✓ Disposal of excreta

TYPES OF CLEANING:

Daily cleaning:

- Sweeping and mopping of floors;
- Dusting surfaces;
- Cleaning of rugs and carpets;
- Making beds in the morning;
- Tidying up objects in every room.

Weekly cleaning:

- Different surface areas of Bathrooms, toilets and wash basins;
- Removing cobwebs;
- Shelves of kitchens;
- Door handles and other fittings;
- Mirrors and pictures;
- Polishing of wooden surfaces and other areas.

Spring or seasonal cleaning:

- ✚ Airing mattresses, cushions, pillow, rugs and carpets in sunlight
- ✚ Washing curtains;
- ✚ Thorough cleaning of rooms after removing all furniture;
- ✚ Cleaning the store room;
- ✚ Cleaning and polishing of wooden work and getting any repairs done.

Cleaning of different surface and materials:

<u>Surfaces</u>	<u>Material required</u>
Floors	Broom ,brush, soap, detergent water, phenyl ,oil and lime
Kitchen and bathroom tiles	Soap, vinegar, mild hydrochloric acid
Plastic mugs, bucket, mug and chairs	Luke warm soap or detergent water, scrubber, vinegar, soda
Glass/ window mirrors	Moist new paper pad and vinegar
Metal tap/ brass taps	Lemon vinegar tamarind hot soapy water and salt
Wood surface	Soft cloth and vinegar

DISPOSAL OF HUMAN EXCRETA**Water closet:**

- Human excreta are removed through the water carriage system.
- It is connected to a sewer through a pipe.
- This system is the most sanitary method for removal of human excreta.

Septic tank:

- ~ These can be seen in semi-urban areas or where sewerage system has not been laid.
- ~ Household drains are connected to this.
- ~ “Sulabh Shauchalaya” toilets are based on this principle.

Advantages of septic tank:

- ❖ Hygiene.
- ❖ Low cost and easy to construct.
- ❖ Does not pollute surface or ground water.
- ❖ Free from foul smell.
- ❖ Maintenance is easy and cost low.
- ❖ Needs less water for flushing.
- ❖ Does not require cleaning of pits.
- ❖ The sludge from the pits is a good manure.
- ❖ Gases are dispersed into the soil.
- ❖ Eliminates mosquitoes, insects and fly breeding.

Soakage pit:

- These are very important for areas where there is no drainage system.

- Cheap and easy to construct.
- Pit is 2 mt deep and 1 mt wide.
- 1/3 of portion is filled with coarse stones , middle portion with small stones and upper most with sand .
- Cover it with earth and grass.
- Waste water from house is led through drainage pipe to soakage pit.
- The waste gradually percolates and soaks away into the ground from the pit

Pit latrine:

- ❖ A pit is dug which should be more than 3 metres deep to prevent flies from sitting.
- ❖ The soil should be sandy to allow the liquid portion to drain away.
- ❖ This is ideal only in case of temporary use for few days.
- ❖ There can be a concrete platform around the opening of the hole and raised foot stands.
- ❖ The opening of the hole should be covered with a lid.
- ❖ The system is not very hygiene as it pollutes the ground water.

PREVIOUS YEARS QUESTIONS

1 Mark questions:

1. Sulabh Shauchalayas are based on the principle of 1
(A) Septic tanks (B) Pit latrine
(C) Soak pit (D) Water closet Answer (A)
2. How can you make your bedroom more spacious? 1
(A) By using heavy furniture (B) Using red colour on the
(C) Mounting mirror on the (D) wall
cupboard door Keeping furniture away
from the wall Answer (C)
3. What can be made in the space below the stairs ? 1
(A) Kitchen (B) Toilet
(C) Bedroom (D) Living room Answer (B)

2 Marks Questions:

- 1. Give four reasons to justify the importance of living in a home** **2**
- 1) Home provides security and belongingness.
 - 2) It provides for physical and emotional needs of all the family members.

- 3) For children, it provides education in basic values like respect for elders, love and affection to others, health, religion, discipline and responsibility.
- 4) It is a place for loving and celebrating together.

2. How will you identify the economic functions of your home? 2

- 1) Value in terms of money.
- 2) Raises socioeconomic status.
- 3) Gives pride and prestige in the society.
- 4) It can be used to perform some income generating activity.

3. What four points would you consider while selecting a site for your house 2

- 1) The neighbourhood must be developed area which has electricity, roads, etc.,
- 2) Avoid low lying areas.
- 3) The foundation should be strong and soil should be firm.
- 4) Vacant plot filled with garbage is not suitable for construction.

3 Marks Questions:

1. Which is the most sanitary method for removal of human excreta? Give its two main features 3

Water closet is the most sanitary method for removal of human excreta, because – a) it is removed through the water carriage system, and

b) it is connected to a sewer through a pipe.

2. Which three points will you keep in mind while designing a kitchen for your new house? 3

- 1) Good drainage system;
- 2) One wall should be exposed to outside for proper light and ventilation; &
- 3) Sufficient storage space above and below the work counter.

3. List three activities each which are done daily and weekly at home 3

Daily activities:

- a) Making beds in the morning;
- b) Dusting surfaces;
- c) Sweeping and mopping of floors.

Weekly activities:

- a) Removing cobwebs;
- b) Shelves of kitchens;
- c) Different surface areas of bathrooms, toilets and wash basins.

4. Explain the main features of a pit latrine 3

A pit is dug which should be more than 3 metres deep to prevent flies from sitting.

The soil should be sandy to allow the liquid portion to drain away. This is ideal only in case of temporary use for few days.

There can be a concrete platform around the opening of the hole and raised foot stands.

The opening of the hole should be covered with a lid.

The system is not very hygiene as it pollutes the ground water.

4 Marks Questions:

1. How will you make your small house appear more comfortable and functional with adequate storage 4

- 1) Mark space for every activity.
 - 2) Combine activities like dining with kitchen, study with bedroom.
 - 3) Avoid over-crowding of furniture. We may use multi-purpose furniture like sofa-cum-bed, etc.
 - 4) Storage can be provided in the furniture itself.
- E.g., bed with boxes, tables with drawers, etc.

2. Suggest any four ways you will adopt to make a one room house appear spacious and comfortable 4

- 1) Mark space for every activity.
 - 2) Combine activities like dining with kitchen, study with bedroom.
 - 3) Avoid over-crowding of furniture. We may use multi-purpose furniture like sofa-cum-bed, etc.
 - 4) Storage can be provided in the furniture itself.
- E.g., bed with boxes, tables with drawers, etc.

3. Suggest eight ways your friend can make her small home more spacious 4

- 1) Make a list of all the activities which take place in each room.
- 2) Mark space for every activity.
- 3) Combine activities like dining with kitchen, study with bedroom.

- 4) Avoid over-crowding of furniture. We may use multi-purpose furniture like sofa-cum-bed, etc.
- 5) Make a list of all the activities which take place in each room.
- 6) Some pieces of furniture can be used as storage units and room dividers.
E.g., drawing room can be partitioned with shelves on either side.
- 7) Storage can be provided in the furniture itself.
E.g., bed with boxes, tables with drawers, etc.
- 8) The space below the staircase can be converted into a storeroom or a toilet.

4. Suggest four ways in which you will try to make your small house appear more comfortable and functional with adequate storage 4

- 1) Mark space for every activity.
- 2) Combine activities like dining with kitchen, study with bedroom.
- 3) Avoid over-crowding of furniture. We may use multi-purpose furniture like sofa-cum-bed, etc.
- 4) Storage can be provided in the furniture itself.
E.g., bed with boxes, tables with drawers, etc.

5. How will you make a small house appear more comfortable and functional with adequate storage 4

- 1) Mark space for every activity.
- 2) Combine activities like dining with kitchen, study with bedroom.
- 3) Avoid over-crowding of furniture. We may use multi-purpose furniture like sofa-cum-bed, etc.
- 4) Storage can be provided in the furniture itself.
E.g., bed with boxes, tables with drawers, etc.

TERMINAL QUESTIONS

1. State any three functions performed by your home.

- ANS:**
- 1) It protects from animals, dacoits and enemies.
 - 2) It helps in development of personality and basic family values.
 - 3) It provides sense of belongingness.

2. State any four important points to be considered while selecting a house and tell why you consider these important.

ANS:

- **Neighbourhood:** Attention must be given to the environment and the neighbourhood where the house is to be located. The house should be in

the area which is developed in all aspects. A place is called a developed area when it has electricity, roads and drainage laid out. Common facilities like post office, banks, school and markets are available nearby.

- **Physical features:** While selecting a site, choose a house in an open area. It should not be close to heavy traffic areas. These can affect health and activities due to air and noise pollution. Low lying areas should be avoided due to danger of flooding or water logging. An elevated site provides better view to the house.

- **Soil:** The foundation of the house should be strong for it to stand on. The foundation depends upon the type of soil. The soil should be firm till 2 to 5 feet below the surface for a strong foundation.

- **Sanitary requirements:** You must have seen vacant plots filled with garbage. Such a piece of land is not recommended for construction of a house. A house built on such a plot will have uneven soil level and drainage problems. The site should be filled with fresh and firm soil and elevated to the level of the road outside.

3. Name two sources of lighting in the house and state why each one is important.

ANS: Every house has two types of lighting:

i. **Natural Lighting:** The light that we receive from natural sources i.e. the sun. ii. **Artificial Lighting:** The light that we receive from artificial sources such as tube light, bulbs.

Natural light ie., Sunlight is important for all the rooms but more specially for kitchen and bathrooms where water is used frequently. If sunlight does not enter into these areas, they will remain dark and damp. It will encourage the entry of mosquitoes and cockroaches. It is not very hygienic to stay in such a house. This increases the chances of infections and fungal diseases.

We need **artificial lighting** because it is not possible to have natural light in each and every corner of the house. Moreover, in the evening, we need **artificial lighting**. When artificial light is used, we have to make sure that it is not too strong and that it falls on the work that we are doing and not on our eyes. The glare from the light falling directly on our eyes will make it difficult for us to see. Our eyes may also ache and start watering.

4. State any three advantages of ventilation.

ANS: The advantages of proper ventilation are: -

- It ensures circulation of fresh air and driving out of foul air which is essential for healthy living.
- It ensures proper air circulation in rooms by removing smoke, bad smells, moisture and fumes that offend.

- It also controls cold drafts in winter.

5. What are the effects of poor lighting on your health?

ANS:

- **Natural light ie., Sunlight** is important for all the rooms but more specially for kitchen and bathrooms where water is used frequently. If sunlight does not enter into these areas, they will remain dark and damp. It will encourage the entry of mosquitoes and cockroaches. This increases the chances of infections and fungal diseases.
- The glare from the light falling directly on your eyes will make it difficult for us to see. Our eyes may also ache and start watering. We should be careful that for studying, there should be proper lighting, otherwise, our eyes will get tired soon.

6. Which method do you suggest is ideal for the disposal of human excreta and waste water and why?

ANS: Some of the established ways of safe disposal of human excreta are: -

(i) Water closet; (ii) Septic tank; & (iii) Pit latrine.

Out of these, **water closet** system is the most sanitary method for removal of human excreta, because:

> In this system which is prevalent in large towns, a **water closet** is a sanitary installation in houses for reception of the human excreta, which is connected to a sewer through a pipe. Thus, human excreta are removed through the water carriage system, i.e., along with the household waste water, the faeces and urine are carried away by a flush of water through a system of drains and sewers.

7. Name two cleaning agents you will use to clean window glass panes?

ANS: Moist newspaper pad, vinegar and commercial glass cleaner.

8. Suggest two ways you will adopt to make a one room house appear spacious.

ANS: § Take care not to over crowd the room with too much furniture.

§ Storage can be provided in the furniture itself like bed with boxes, tables and stools with drawers etc.

9. Write any three essential planning tips for designing a good kitchen.

ANS: (i) One wall of kitchen must be on exterior side of the house for providing good light and air;

(ii) Exhaust fan must be installed to take away smoke. By all means cross ventilation has to be provided here; &

(iii) Sufficient storage space should be provided above and below the work counter to facilitate smooth functioning of the work.

10. List any four activities which are performed in a kitchen.

ANS: In Kitchen we cook, cut vegetable and fruits, eat, store provisions and groceries, cleaning.

11. Think of the situation given below and answer the questions. The festival of Diwali is approaching and your mother is not keeping well. You want to help your mother in cleaning and decorating your home for the festival. a. List the activities that need to be performed for cleaning and decorating your home. b. Sequence these activities in an order. c. Assign specific activities and tasks to different family members. What criteria will you keep in mind while doing this?

- 1) Clean the whole house, loft, cup boards, shelves - Father, brother, sister, myself
 - 2) Remove unwanted things, give away old and unused clothes and thing - Father, brother, sister, myself
 - 3) Cleaning the grills and doors, gadgets and equipment-children
 - 4) White washing the house- Father and brother
 - 5) Putting rangoli, decorating with fresh flowers, with lights and lamps-Myself
- criteria includes the heaviness of the work and the age of the family member.