



মহাশিক্ষা বিভাগ (মাম)

DEPARTMENT OF EDUCATION (S)

Government of Manipur

**CLASS-IX
HOME SCIENCE
CHAPTER-1
UNIT-III
THE HOUSE AND ITS SANITATION**

SOLUTIONS

TEXT BOOK QUESTIONS AND ANSWERS

Q1. State any three functions performed by your own home.

Ans: Functions of a home/house are as follows:-

1. **Protective-** Home protects us from outside heat and cold, rain, wind and sun etc. It also protects small children and old people who need special care.
2. **Education-** A child's basic education starts from the home which helps in the development of a child's personality.
3. **Affection-** Family members stay together with love and affection.
Extra points:-
4. **Social -** A home facilitates meeting with other people and promotes social interaction.
5. **Economic -** Home facilitates income generating activities such as stitching, embroidery, kitchen gardening, weaving etc.
6. **Status giving -** Home gives status to its inmates in the society.

Q2. Examine your home whether there is adequate ventilation. If not suggest few ways in which ventilation can be improved.

Ans- Ventilation means making arrangement for fresh air to circulate.

There are two methods of ventilation:

1. **Natural system of ventilation-** Natural system of ventilation is the movement of air into and out of the premises through windows and doors and any other opening without any mechanical aid. Adequacy of air inlets and outlets is of great importance to natural ventilation.
Chimney is an excellent and efficient outlet. Windows place opposite each other serve both as inlets and outlets.



2. Artificial/ Mechanical system of ventilation- It is the method of ventilation in which mechanical devices are used either to force the fresh air into the room or to extract the foul air from the room or a combination of both. There are three methods of artificial ventilation:

- a) **Vacuum system:** The air is drawn out by mechanical means like exhaust fan.
- b) **Plenum of propulsion system:** The fresh air is force into the spaces to be ventilated from a chamber (plenum chamber) at a pressure slightly higher than atmospheric pressure, so as to expel foul air. Air conditioner is an example. The disadvantage is that sometimes fresh air is drawn out.
- c) **The balance system:** the combination of vacuum system and propulsion is known as balance system. It is use for ventilating big houses and halls.

Advantages of artificial ventilation system:

- i) The air can be purified, warmed or cooled as desire.
- ii) It is a quick method.

The disadvantage is that it is rather expensive to install.

Q3. What will be the effect of poor lighting on your health?

Ans- Though eyes have marvellous power of adaptation to changes, it is over strained when severe contrast in brightness or sudden changes in the intensity of light occur. It is essential for the light to focus on the area of work and not directly or indirectly in the worker's eye. Poor lighting can be physically and psychologically harmful.

Common health affects associate with poor lighting includes:

- ✚ Headache and eye strain.
- ✚ Neck, back and shoulder strain. (When straining to see because of poor lighting).
- ✚ Depression (in case of insufficient of proper lighting).

Q4. Tick the most appropriate answer

- I. In case of pit latrine, the pit should be
 - a) More than three metres deep,
 - b) Less than three metres deep.
 - c) Exactly three metres deep.
 - d) None of the above.

Ans: (c) exactly three metres deep.



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Q5. Match the items in column A with the set of column B.

A

(i) Natural light

(ii) Artificial light

B

(i) Bulbs and Tubes

(ii) Sunlight

Ans:

A

B

(i) Natural light

(ii) Sunlight

(ii) Artificial light

(i) Bulbs and Tubes.

EXTRA QUESTIONS & ANSWERS

OBJECTIVE TYPE QUESTIONS

Q1. The place where all the family members stay together is called

- a) House b) Flat c) Bungalow d) Home

Ans. (d) Home.

Q2. For healthy living we need

- a) Proper outlet b) Fresh air c) Window d) Ventilator

Ans. (b) Fresh air.

Q3. Outlets are usually provided near the

- a) Chimney b) Door c) Ceiling d) Window.

Ans. (c) Ceiling.

Q4. is an excellent and efficient outlet.

- a) Exhaust fan b) Ceiling fan c) Ventilator d) Chimney.

Ans. (d) Chimney.



Q5. A sanitary installation for reception of human excreta is known as.....

- a) Pit latrine b) Water closet c) Bore hole latrine d) Sulabh Shauchalaya

Ans: (b) Water closet.

Q6. Home facilitates.....generating activity.

- a) time b) energy c) income d) cloth

Ans: (c) Income.

Q7. Sulabh Shauchalaya is developed by.....

- a) Dr. Rajendra Prasad b) Dr. Bindeshwar Pathak c) Dr. Abdul Kalam d) Shree Narendra Modi

Ans: (b) Dr. Bindeshwar Pathak.

Q8. To prevent breeding of mosquito there should be no.....water in the surrounding.

- a) Toilet b) rain c) drain d) stagnant

Ans: (d) Stagnant.

Q9.placed opposite each other serve both as outlet and inlet.

- a) Door b) window c) fan d) ventilator

Ans: (b) Window.

ANSWER THE FOLLOWING QUESTIONS

Q1. Differentiate between house and home.

Ans: Basically, house is the physical space provided by a hut, kutcha, semi-pucca and pucca building.

A house becomes a home when family members start living with love and affection.



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Q2. Name the different types of latrine.

OR

Name the different ways of safe disposal of human excreta.

Ans: a) Water closet b) Pit latrine c) Borehole latrine d) Sulabh Shauchalaya.

Q3. State the advantages of artificial system of ventilation.

Ans: (a) The air can be purified, warmed and cooled as desired.

(b) It is a quick method.

Q4. Which method of artificial ventilation uses both vacuum and propulsion system?

Ans: The balanced system.

Q5. Which room in the house need sunlight most?

Ans: Kitchen and bathroom.

Q6. Name the latrine which has two pits.

Ans: Sulabh Shanchalaya.

Q7. What is Ventilation?

Ans: Ventilation is a process by which the products of respiration and combustion are removed from an enclosed space, i.e. a room by supply of fresh air.

Q8. State one natural and one artificial systems of ventilations.

Ans: One natural system of ventilation is-

Wind- It is a powerful ventilating agent. It forces itself into the room through open doors, windows, holes and openings as a result of the movement of natural air.

One artificial system of ventilation is-

Vacuum system- Mechanical means such as exhaust fans are used for extracting the foul air out of the room.

Q9. Define sanitation.

Ans: Sanitation refers to public health conditions related to clean drinking water adequate treatment and disposal of human excreta and sewage.



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Q10. Differentiate between pit and borehole latrine.

Ans: **Pit latrine:** Three metres deep hole to receive human excreta. Soil should be sandy to drain away the liquid portion; the openings of the hole should be covered with lid to prevent flies attracting to its smell.

Borehole latrine: It resembles pit latrine. It is inexpensive and requires very little space. The diameter of the hole is about half a metre and depth being six to seven metres. The hole is covered with a concrete slab and squatting plate is fitted.

Q11. What are the ill-effects of bad ventilation?

Ans: Headache, sickness, faintness and vomiting are often caused by foul air in rooms, public halls, schools, theatres and overcrowded places and badly ventilated buildings. People living in ill-ventilated houses suffer from cold, cough, influenza, pneumonia, tuberculosis, skin trouble and eye trouble, indigestion, sleeplessness, debility and anaemia. These in turn affect mind concentration and long working hours.

Q12. Cite the healthy sanitary practices which should be observed at home and public places.

Ans: Healthy sanitation practices to be observed are-

- (a) Cleanliness of the surrounding area.
- (b) Not throwing out the garbage indiscriminately here and there.
- (c) Preventing water from collecting and stagnating at one place so as to prevent breeding of mosquitoes.
- (d) Not spitting on the roads and in public places.
- (e) Covering nose and throat when sneezing and coughing.
- (f) Not giving the sick person's clothes to the dhobi, it should be disinfected first at home.
- (g) Washing fruits and vegetables before eating. They should be washed with potassium permanganate solution during an epidemic.
- (h) Not using public towels found in restaurants and public places.



Q13. Mention the advantages of Sulabh Shauchalayas ?

Ans:- The advantages of Sulabh Shauchalayas are as follows:-

- i) They are low cost latrines and are easy to construct with locally available materials.
- ii) They are very hygienic.
- iii) They are free from foul smells.
- iv) The sludge from the pits can be used as good manures.
- v) Vent pipes are not needed as gases are dispersed into the soil.

Q14. How is the household garbage to be managed?

Ans:- Garbage from the house, dust collected after sweeping, waste materials like vegetable peelings etc. should be kept in a covered dustbin to prevent scattering around and causing diseases. The dustbin should be emptied everyday and should be disposed off in the garbage bin regularly. It helps in maintaining a neat and clean environment and also in maintaining good health and habits.

Q15. List some of the healthy and sanitation practices which all individuals should observe at home and public places.

Ans:- Some of the healthy and sanitation practices to be observed by individuals at home and public places are as follows:-

- i) Every individual are expected not to throw garbage indiscriminately here and there in order to keep the surrounding area clean.
- ii) Collection and stagnation of water at a place should be stopped to prevent breeding of mosquitoes
- iii) They should cover their nose and mouth while sneezing and coughing.
- iv) They should not spit on the road and in public places.
- v) They are to disinfect the patient's clothes and wash at home.
- vi) They should wash fruits and vegetables before eating.
- vii) They should not eat anything from hawkers who sell foods which are exposed to flies.

Q16. Draw the neat diagrams of the following:

1. Vacuum system (Holding force of a suction cup)
2. Exhaust fan
3. Dustbin with a lid



Ans: 1.

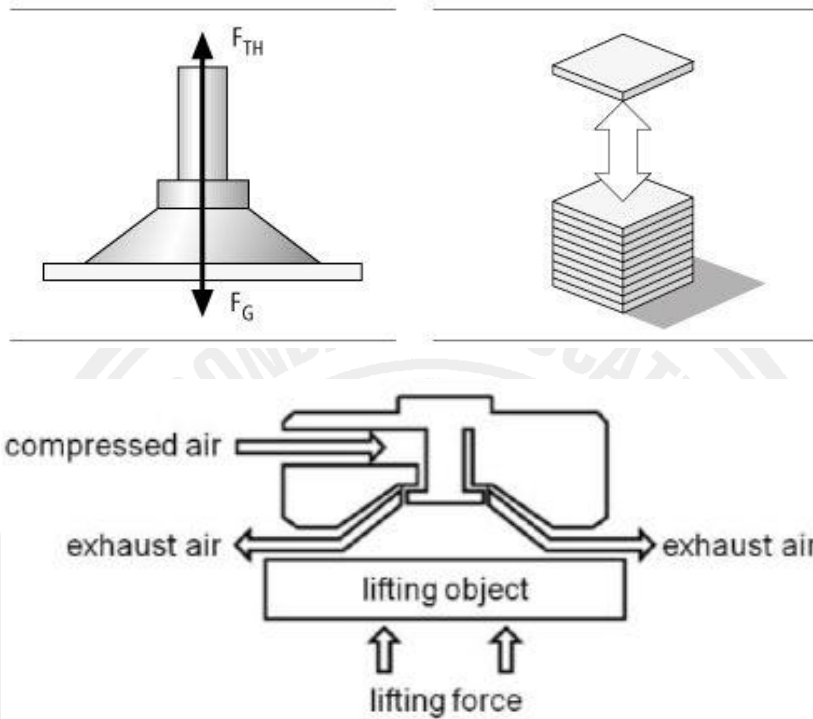


Fig. Holding force of a suction cup

Ans: 2

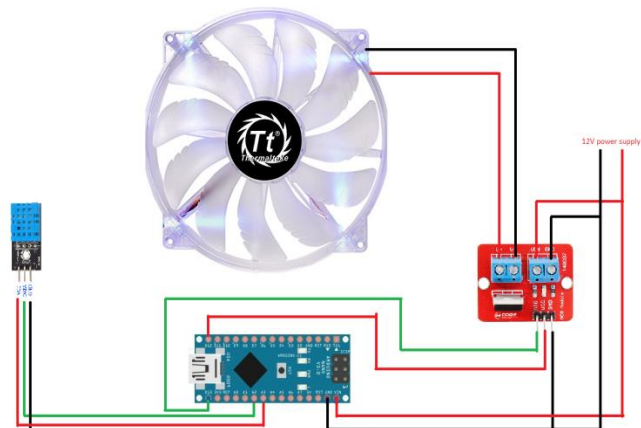


Fig. Exhaust Fans



Ans: 3



Fig. Dustbins with lids
