

# **Student's Favourite Academy**

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# Selina ICSE Solutions for Class 9 Biology Chapter 15 Hygiene – A Key To Healthy Life

#### Exercise 1

## Solution A.

- 1. (d) cholera
- 2. (d) Sharing towels with others
- 3. (d) Plasmodium
- 4. (c) Fluorides
- 5. (b) Bacteria

#### Solution B.1.

Column I	Column II (Answers)
(a) Mosquito	(iv) Malaria
(b) Plasmodium	(iii) Vector
(c) Entamoeba histolytica	(v) Dysentery
(d) Aedes mosquito	(ii) Dengue
(e) Insecticide	(i) DDT

## Solution B.2.

- (a) Vectors (disease carriers)
- (b) Pathogens
- (c) Hygiene

#### Solution B.3.

The different ways by which the housefly contaminates our food:

- 1. **Hairy body and legs:** Hairy or spiny body and legs easily pick up dirt containing germs from unhygienic places such as rotten materials, infected wound or faecal matter. When these flies sit on our food, they rub their legs continuously dropping the particles of dirt onto the food, thereby contaminating it.
- 2. **Pouring out saliva:** When the housefly pours its saliva or regurgitates on food, foodstuffs get moistened and pathogens get deposited on them. This results in their contamination.



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- Excreta: While feeding on food items, houseflies may deposit their excreta on food, contaminating it.
- 4. **Direct transmission of germs:** In some cases, houseflies directly transmit the pathogens. In case of eye disease trachoma, pathogens are transferred from an infected person to a healthy person, when a fly settled on an infected eye of a person sits on the eyes of a healthy person.

## Solution B.4.

Two methods of controlling flies:

- 1. Spraying of insecticides
- 2. Elimination of breeding grounds

#### Solution B.5.

Effective methods for controlling mosquitoes:

- 1. Spraying insecticides
- 2. Food should be protected by covering it
- 3. Eliminating breeding places of mosquitoes

## Solution B.6.

Kind of mosquito	Disease caused by it
Anopheles	Malaria
Culex	Filariasis

#### Solution B.7.

# Contamination of potable water can occur due to

- Improper disposal of sewage
- Defecation and urination near lakes, rivers or ponds
- Drainage of animal wastes and washings from dairies and poultries into water bodies

### Solution C.1.

- (i) One should breathe by nose and never by mouth because nose contains hair and mucous to trap dust and micro-organisms, so that the inhaled air becomes pure and the respiratory passage is free of dust and micro-organisms.
- (ii) We handle a variety of things like books, coins, furniture, tools and machinery in workshops, seats and supporting rods in buses and even pets and other domestic animals in our day-to-day life. Many of



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these objects carry germs. These germs can be picked up by us, when we touch these objects and get transferred to other parts of our body or into our mouth, when we eat our food. Therefore, it is necessary to wash our hands before eating food to avoid the spread of diseases caused due to these germs.

(iii) Flies are carriers of many disease-causing germs and bacteria. Therefore, eating places must be kept free of flies to avoid possible contamination of food.

## Solution C.2.

Cockroaches and rats are common household pests.

- 1. Cockroaches are involved in spoiling food, paper and cloth. They may act as carriers of viruses, especially those which cause cancer.
- 2. Rats eat grains and other foods. They also act as carriers of certain pathogens. A parasite named rat-fleas lives on rat's skin. It possibly carries the germs of plague.