

CHAPTER – 8

A TREAT FOR MOSQUITOES

2 MARK QUESTIONS

1. Do you know anyone who has had malaria?

ANSWER:

Yes, malaria had once attacked my friend.

2. How did they find out that they had malaria?

ANSWER:

By undergoing blood tests, they got to know it was malaria.

3. What problems did they have with malaria?

ANSWER:

My friend, when she was suffering from malaria, got a high fever and became too weak.

4. What other diseases can be caused by mosquito bites?

ANSWER:

Through mosquito bites, we may get other diseases like chikungunya, yellow fever, dengue, etc.

5. In which season is malaria more common? Why do you think this happens?

ANSWER:

Malaria is seen more commonly during the rainy season because that is the breeding time for mosquitoes.

6. What do you do in your house to protect yourself from mosquitoes? Also, find out from your friends about what they do.

ANSWER:

- The best thing to protect ourselves from mosquitoes is to use mosquito repellent.
- My friends use mosquito nets, mosquito repellent cream, and also mosquito repellent coils.

7. Look at the report of the blood test given here. Which words in the report help us to know that the person has malaria?

क्लीनिकल विवृति रिपोर्ट
CLINICAL PATHOLOGY REPORT
केंद्रीय सरकार स्वास्थ्य योजना
Central Govt. Health Scheme

18/08/2007

नाम/Name..... **Rajat** आयु/Age..... **11** स्त्री या पुरुष/Sex..... **Male**

रोग की पहचान/Diagnosis..... **Fever with Chills and Rigors**
(उड़ लगाकर कंपकंपी के साथ बुखार)

Malarial Parasite Found in Blood Sample
(खून में मलेरिया के जीवाणु पाए गए)

[Signature]
Pathologist

ANSWER:

In the report, it is indicated that the malaria parasite found in the blood sample shows that the person is suffering from malaria.

8. Ask a doctor or elders about the food items that contain iron.

ANSWER:

When I asked the doctor about the food items that contain iron, the doctor suggested that green leafy vegetables like spinach, cabbage, etc., contain iron.

9. Why do you think it talks about putting fish in the tank? What do you think the fish eats?

ANSWER:

By putting the fish in the tank, it eats up the larvae of mosquitoes so that there won't be any breeding.

10. What will happen when oil is spread on the water?

ANSWER:

When oil is poured into the water, it stops the oxygen supply to the mosquito's larva from growing and kills them.

11. What can you do so that mosquitoes do not breed in your house, school and neighborhood?

ANSWER:

We have to avoid water logging, keep the surroundings clean, spray chemicals to prevent mosquitoes from breeding, use fish in water so that it prevents mosquito larvae from growing further, etc.



12. How can you find out if someone has malaria?

ANSWER:

We can check if someone is having malaria if the blood reports show positive results of malaria.

5 MARK QUESTIONS

1. Tell

क्लीनिकल विकृति रिपोर्ट CLINICAL PATHOLOGY REPORT केंद्रीय सरकार स्वास्थ्य योजना Central Govt. Health Scheme	
20/06/2007	15/09/2007
नाम/Name..... Aarti आयु/Age..... 12 स्त्री या पुरुष/Sex..... Female	नाम/Name..... Aarti आयु/Age..... 12 स्त्री या पुरुष/Sex..... Female
रोग की पहचान/Diagnosis..... Anaemia (अनीमिया)	रोग की पहचान/Diagnosis..... Anaemia (अनीमिया)
Normal Range (नॉर्मल रेंज)	Normal Range (नॉर्मल रेंज)
Haemoglobin 8 gm/dl 12 to 16gm/dl (हीमोग्लोबिन)	Haemoglobin 10.5 gm/dl 12 to 16gm/dl (हीमोग्लोबिन)
 Pathologist	 Pathologist

Q1. Look at Aarti's blood report and find out the minimum required hemoglobin.

Answer: By seeing Aarti's blood report, the minimum required hemoglobin is 12 gm/dl.

Q2. How much did Aarti's hemoglobin go up, and how long did it take for that?

Answer: By seeing Aarti's blood report, hemoglobin increased by 2.5 gm/dl, which took almost 3 months to increase.

Q3. What does the newspaper report say about the problems caused by anemia?

Answer: The newspaper report states that anemia affects both the mental and physical health of a child. It causes problems in children's growth, reducing their energy levels which in turn affects their education.

Q4. Have you or anyone in your family ever needed to get a blood test? When and why?

Answer: Yes, last month, when I was down with a fever, I got a blood test done. It resulted in malaria.

Q5. What was found out by the blood test?

Answer: By doing the blood test, we got to know that I was suffering from malaria.

Q6. Have you had a health checkup at your school? What did the doctor tell you?

Answer: Yes, we had a health check-up two months back at our school. The doctor told me that I was fit and fine.

2. Find out and tell



Q1. Have you seen any poster like this put up anywhere?

Answer: Yes, these posters are usually put on school notice boards.

Q2. Who do you think puts up such posters or gives ads in the newspapers?

Answer: Government authorities may put up such posters or give ads in the newspapers; by doing so, they are providing information to the public.

Q3. What are some of the important points given in the poster?

Answer: The important points given in the poster are:

- Warning alerts regarding the diseases caused by mosquito bites.
- Fill up the pits, and don't let water stagnate around your home.
- Every corner should be kept clean, and no moisture should be there so that mosquitoes don't get to breed.
- Protect yourself from mosquitoes by using mosquito nets.
- Spray kerosene on the stagnant water and thereby reduce the further growth of mosquitoes.

Q4. Why do you think pictures of a tank, cooler and pits are shown in the poster?

Answer: In these areas, it is easy for mosquitoes to breed since water is stagnant at such places.

3. Which diseases are spread by flies and how?

Answer:

Flies transmit pathogens via touch or from bodily fluids, including their saliva, feces, vomit, and urine. They can transmit parasites or bacteria that cause various infections. The most common are amoebic dysentery, typhoid fever, cholera, Trachoma, tapeworm, roundworm, leprosy, and mycoses.

4. Find out who is responsible for keeping the area around your school clean. Write a letter from your class, reporting your findings and suggestions. Find out to whom the letter should be written and to which office it should be sent.

Answer:

The local municipality is responsible for keeping the area around the school clean. So let us write the letter addressing the mayor and send the letter to the local Municipal Corporation Office.

To,
The Mayor
Municipal Corporation of Bangalore
Karnataka

Subject: Requesting for better cleanliness around the Vidyaniketan School premises.

Respected Sir/Madam,

We, the students of Vidyaniketan School, Bangalore, would like to bring to your notice the dirt and garbage collected surrounding the school premises. The whole area is facing a mess from the mosquitoes breeding and diseases caused by them. Due to heavy rains, the water has been logged and caused this issue.

So, we request you to kindly look into the matter and resolve the problem at the earliest.

Thanking you,

Yours sincerely,
Student of Class V
Vidyaniketan School
Bangalore

5. Is there a pond or river around your house or school? Go and look around and observe these things:

Q1. Can you see algae in or around the water?

Answer: Yes, we can see algae formed in or around the water.

Q2. Where else have you seen algae?

Answer: We can see algae on damp walls, damp floors etc.

Q3. Are there plants growing on the side or in water? Find out their names.

Answer: Yes, there are plants that grow on the side or in the water, like mosses, liverworts, etc.

6. Discuss the experiments conducted with water, including the objects used, observations made, and the scientific concepts involved. How did Ayesha and her friends explore buoyancy and density?

ANSWER:

Ayesha experimented with different objects in water, observing their behavior. The group activities included testing objects like steel plates, spoons, and plastic bottle caps. They explored buoyancy and density without using technical terms, fostering curiosity about floating and sinking.

7. Explore the significance of Ronald Ross's discovery regarding malaria transmission. How did he conduct experiments, and what were the implications of his findings?

ANSWER:

Ronald Ross's discovery, for which he received the Nobel Prize, proved that mosquitoes transmit malaria. He conducted experiments by studying mosquitoes and patients, ultimately identifying the parasites in a mosquito's stomach. This breakthrough advanced our understanding of malaria transmission.

FILL IN THE BLANKS

1. Aarti had a blood test that revealed she had _____ with low hemoglobin levels. (**anemia**)

2. In the blood test, Aarti's doctor recommended a diet rich in iron, including jaggery, amla, and green _____. (**leafy vegetables**)

3. Ronald Ross received the Nobel Prize for his discovery that _____ transmits malaria. (**mosquitoes**)

4. The preventive measures mentioned in the poster include filling up pits, keeping water pots and coolers _____, and using mosquito _____. (**clean, nets**)

MULTIPLE CHOICE QUESTIONS

1. Aarti was diagnosed with:

- a) Diabetes
- b) Anaemia
- c) Hypertension
- d) Arthritis

Answer: b) Anaemia

2. What did Aarti's doctor recommend to improve her hemoglobin levels?

- a) Eating more chocolates
- b) Taking iron-rich foods
- c) Avoiding vegetables
- d) Drinking more soda

Answer: b) Taking iron-rich foods

3. What did Ronald Ross receive the Nobel Prize for?

- a) Physics
- b) Literature
- c) Medicine
- d) Chemistry

Answer: c) Medicine

4. According to the poster, what is one preventive measure against mosquitoes?

- a) Using more pesticides
- b) Keeping water pots and coolers dirty
- c) Spraying kerosene in water-collecting areas
- d) Ignoring stagnant water

Answer: c) Spraying kerosene in water-collecting areas

SUMMARY

In the story "A Treat for Mosquitoes," Rajat shares his experience of being diagnosed with malaria after a blood test. He explains that despite the pain being similar to an ant bite, the test helped identify the presence of malaria parasites in his blood. Nancy clarifies that not all mosquito bites cause malaria; it is spread only by disease-carrying mosquitoes. Aarti also recounts her blood test, revealing that she had anaemia, a condition with low hemoglobin. The group discusses the importance of iron-rich foods to address anaemia.

The narrative emphasizes the significance of blood tests in diagnosing diseases like malaria and anaemia. The discussion extends to preventive measures, such as keeping surroundings clean to avoid mosquito breeding. The children inspect stagnant water areas in their school and create a poster to raise awareness about maintaining hygiene. The story highlights the role of mosquitoes in spreading diseases, leading to a historical account of Ronald Ross's discovery that mosquitoes transmit malaria.

In conclusion, the story educates readers about diseases, blood tests, and preventive measures, blending personal experiences with scientific insights. It promotes hygiene practices and empowers children to take proactive steps in their communities.