

## **Environmental Studies**

### **(Chapter – 8) (A Treat for Mosquitoes)** (Class – 5)

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#### **Find Out:**

##### **Question 1:**

Do you know anyone who has had malaria?

##### **Answer 1:**

Yes, Once one of my friends suffered from malaria.

##### **Question 2:**

How did they find out that they had malaria?

##### **Answer 2:**

It was found out by examining his blood.

##### **Question 3:**

What problems did they have on having malaria?

##### **Answer 3:**

At times he used to suffer from with chills and rigors. He also becomes weak.

##### **Question 4:**

What other diseases can be caused by mosquito bites?

##### **Answer 4:**

Diseases like dengue, chickengunia, filaria etc. are caused by mosquito bite.

##### **Question 5:**

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

##### **Answer 5:**

Malaria is more common during the rainy season. This is because water logged and damp places provide suitable breeding environment for the mosquitoes.



### Question 6:


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

### Answer 6:

In my house as well as my friend's house mosquitoes repellent devices and mosquito nets are used to protect ourselves from mosquitoes. Besides, we remain vigil that there should not be any water logging in our surroundings. We also keep our coolers, pots etc. clean.

### Question 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?

<b>क्लीनिकल विकृति रिपोर्ट</b> <b>CLINICAL PATHOLOGY REPORT</b> <b>केंद्रीय सरकार स्वास्थ्य योजना</b> <b>Central Govt. Health Scheme</b>	
18/08/2007	
नाम/Name..... <b>Rajat</b>	आयु/Age..... <b>11</b> स्त्री या पुरुष/Sex..... <b>Male</b>
रोग की पहचान/Diagnosis..... <b>Fever with Chills and Rigors</b> ( ठंड लगकर कंपकपी के साथ बुखार )	
<b>Malarial Parasite Found in Blood Sample</b> ( खून में मलेरिया के जीवाणु पाए गए )	
 Pathologist	


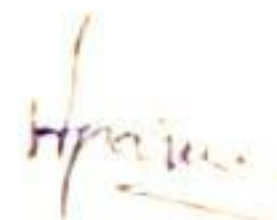
### Answer 7:

It is clearly mentioned in the report that malarial parasite has been found in blood sample of the patient.



**Tell:**

**Question 8:**

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

- (i) Look at Aarti's blood report and find out the minimum required haemoglobin?
- (ii) How much did Aarti's haemoglobin go up and how long did it take for that?
- (iii) What does the newspaper report say about the problems caused by anaemia?
- (iv) Have you or anyone in your family ever needed to get a blood test? When and why?
- (v) What was found out by the blood test?
- (vi) Have you had a health check up in your school? What did the doctor tell you?



**Answer 8:**

- (i) Minimum haemoglobin requirement is 12 gm/sl.
- (ii) Aarti's haemoglobin increased by 2.5 gm/dl i.e. around 30% in about three months.
- (iii) Newspaper report tells that anaemia is affecting both physical as well as mental health of the children suffering from it. Due to anaemia, children do not grow well, and their energy levels are low. This also affects their ability to study properly.
- (iv) Yes, Last year I had got a blood test done. It was because doctors feared that I might be suffering from anaemia.
- (v) It was found out that I was suffering from anaemia.
- (vi) Yes, last month we have had a health check up in our school. The doctor told me that I am healthy.

**Find Out:****Question 9:**

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

**Answer 9:**

Green leafy vegetables, apple, jaggery, liver, nuts, pulses etc. contain ample amount of iron.

**Find out and tell:****Question 10:**

Have you seen any poster like this put up anywhere?

**Answer 10:**

Yes. Such posters are put up near my school.



**Question 11:**

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

**Answer 11:**

The government would have been putting up such posters and giving information in the newspaper.

**Question 12:**

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

**Answer 12:**

In the poster it has been warned to remain alert about the mosquitoes because they can spread malaria, dengue and chickengunia. Some precautionary measures are also advised to keep off mosquitoes.

**Question 13:**

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

**Answer 13:**

Because these are the stuff where breeding of mosquitoes can takes place if there are water logged or are not cleaned up regularly.

**Think:****Question 14:**

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

Fishes eat up mosquito larvae that have been developing in the water.

**Answer 14:****Question 15:**

What will happen when oil is spread on the water?



### Answer 15:

When oil is spread on water, the eggs and larvae of mosquitoes growing there will be killed.

### Find out:

### Question 16:

Which diseases are spread by flies and how?

### Answer 16:

Flies spread dysentery, cholera, typhoid, antrax etc. Flies are easily attracted by filth. They used to sit on dirty and filthy matters. Again when these sit upon the food microbes are mixed into the food. From there these can enter human body.

### Mosquito check:

### Question 17:

Divide your class into two or three groups. Each group will go around to check one area in school or around it. It must carefully note if water has collected anywhere, and mark (✓) where it finds stagnant water.

Pot ☐ Cooler ☐ Tank ☐ Any open space in the school ground ☐ Gutter ☐ Any other place \_\_\_\_\_

### Answer 17:

Pot ☐ Cooler ☐ Tank ☒ Any open space in the school ground ☒ Gutter ☒ Any other place On the nearby roads



**Question 18:**

Since how many days has water collected there?

**Answer 18:**

For almost 8-10 days water has been collected there .

**Question 19:**

Who is responsible for keeping these places clean?

**Answer 19:**

Within the school premises, it is the responsibility of school authority while outside the school, the local municipality is responsible for the same.

**Question 20:**

Who is supposed to get the gutters and drains repaired?

**Answer 20:**

The local municipality is responsible to get the gutters and drains repaired.

**Question 21:**

Can any larvae be seen in the collected water?

**Answer 21:**

Yes, the larvae of mosquitoes can easily be seen in the collected water.

**Question 22:**

Has it caused any problem in the area? Write.

**Answer 22:**

Yes, it is causing many problems, The entire area is turned into a mess and breeding place of mosquitoes and germs.



## **Make a poster:**

### **Question 23:**

In your group, make a poster with a message to keep the cooler, tank, drains and the area clean (wherever water collects). Put up your poster in and around your school.

### **Answer 23:**

This is a drawing project. students are advised to draw the poster as directed.

### **Question 24:**

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 24:**

The local municipality is responsible for keeping the area around our school clean. So, the letter should be addressed to the Mayor and be sent to the local municipal corporation office.

#### **Letter to the Mention Municipality**

To,  
The Mayor,  
Municipal Corporation of Delhi,  
New Delhi

**Subject :** Request for better cleanliness around Sarvodaya Vidyalaya, Laxmi Nagar.

Respected Sir,

Through this letter, we, the student of Sarvodaya Vidyalaya, Laxmi Nagar want to bring into your notice about the Filth and garbage collected around our school. The lots of dogs are gathered around it. Last week heavy rains have only aggravated the situation. The drains and pits are water logged and became the breeding ground of mosquitoes and germs.



So we request you to clean the area as soon as possible before it affects the health of people.

Yours Sincerely

Student of Class V  
Sarvodaya Vidyalaya  
Laxmi Nagar  
Delhi.

**Tell:**

**Question 25:**

Is there a pond or river around your house or school? Go and look around and observe these things: Can you see algae in or around the water?

**Answer 25:**

Yes, I can see algae in or around the water.

**Question 26:**

Where else have you seen algae?

**Answer 26:**

We saw it near drain, handpump, on damp walls etc.

**Question 27:**

Are there plants growing on the side or in water? Find out their names. Draw some of these in your note book.

**Answer 27:**

Yes, there are some small plants growing around the side or in the water bodies. These are liver worts, mosses etc.



**Question 28:**

Do you think these were planted by someone or did they grow on their own?

**Answer 28:**

These grew on their own.

**Question 29:**

What else can you see in water? Make a list.

**Answer 29:**

Besides algae, small fishes, frogs, larvae, floating insects and mosquito are also being spotted.

**What we have learnt:****Question 30:**

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

**Answer 30:**

This can be done by:

- (I) Not allowing the area around us to get water logged.
- (ii) Regularly cleaning the coolers and water tanks.
- (iii) Spraying DDT and oil in drains, pits etc.
- (iv) Cultivating fishes in nearby ditches, pits, ponds etc

**Question 31:**

How can you find out if someone has malaria?

**Answer 31:**

If malarial parasites are found in blood sample of that person, it means he or she has malaria, otherwise not.