Parasites

Question Paper

Level	O Level
Subject	Biology
Exam Board	Cambridge International Examinations
Topic	Relationships of organisms with one another and the environment
Sub Topic	Parasites
Booklet	Question Paper

Time Allowed: **28 minutes**

Score: **/23**

Percentage: **/100**

1 How is malaria usually transmitted from human to human?

A by a bacterium

B by a mosquito

C by a pathogen

D by contaminated water

2 How is malaria normally transmitted from person to person?

A airborne droplets

B contaminated needles

C infected mosquitoes

D sexual intercourse

3 The malarial parasite can be transferred from mosquitoes to humans when

A humans swim in lakes containing mosquito larvae.

B female adult mosquitoes feed.

C mosquito larvae contaminate drinking water.

D mosquitoes lay eggs near places where humans live.

4 Which method of malarial control is effective against both adult and larval forms of the mosquito?

A covering standing water

B draining swamps

C spraying insecticides

D spraying oil on standing water

5 Why is the organism that causes malaria called both a parasite and a pathogen?

	called a parasite because	called a pathogen because
A	it feeds on its host	it causes disease
B	it feeds on its host	it lives inside another organism
C	it is carried by a vector	it causes disease
D	it is carried by a vector	it lives inside another organism

6 Which words can all be applied to the organism that causes malaria?

A microscopic, parasite, sexually transmitted

B microscopic, parasite, pathogen

C mosquito, pathogen, vector

D parasite, sexually transmitted, vector

7 Which factor does **not** help to make the mosquito an effective vector of malaria?

A Mosquitoes are attracted to warmth and carbon dioxide.

B Mosquitoes lay their eggs in water.

C Mosquito saliva stops blood from clotting.

D The malaria pathogens live in mosquito salivary glands.

8 One method of preventing malaria is to reduce the number of vectors.

Which control method will achieve this?

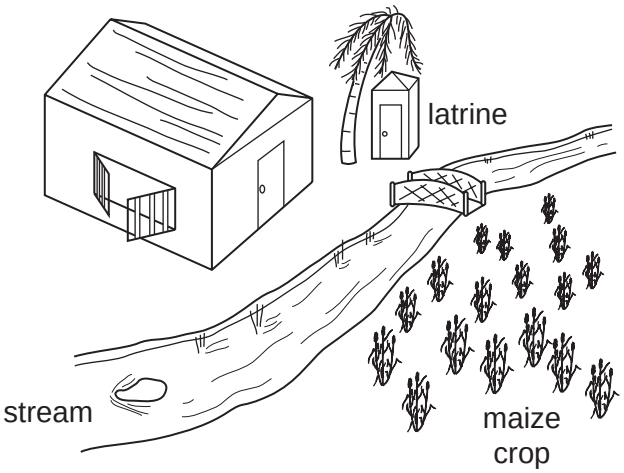
A Cover areas of standing water to prevent mosquitoes from laying eggs.

B Use an anti-malarial drug that kills the malarial pathogen in the human body.

C Use an anti-malarial drug that inhibits the reproduction of the malarial pathogen.

D Use mosquito nets that prevent mosquitoes from sucking blood.

9 The diagram shows a building in a tropical country.



What would be the most effective way of preventing a person who sleeps in the building from catching malaria?

A Divert the stream away from the house since mosquitoes breed in water.

B Move the latrines further away from the building since sewage attracts mosquitoes.

C Put netting over the door and window to prevent the entry of mosquitoes.

D Spray insecticide on the maize crop to kill mosquitoes.

10 Which method of control would **not** be effective against the spread of the malarial parasite?

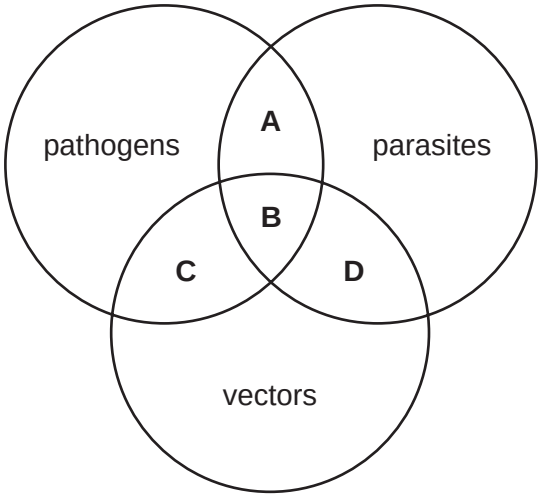
A drainage of swamps and marshes

B safe disposal of sewage solids

C sleeping under a mosquito net

D spraying walls of houses with insecticide

11 Which area of the diagram best describes mosquitoes?



12 To transmit malaria in the human population, how many times **must** a mosquito feed on human blood?

A only once

B twice

C three times

D more than three times

13 Three statements about malarial parasites are listed.

1 Insecticides are used to kill the vectors.

2 Netting is used to keep the vectors away from people.

3 People take drugs that stop the malarial pathogen developing.

Which of these methods can be used to control malaria?

A 1 only

B 1 and 2 only

C 2 and 3 only

D 1, 2 and 3

14 Which control measure would **not** help to prevent the spread of malaria?

A boiling drinking water

B covering windows with netting

C draining swamps

D spraying insecticides onto stagnant water

15 What makes the female mosquito an effective vector for malaria?

A It has wings.

B It lays many eggs.

C It makes a noticeable noise.

D It mates several times.

16 What are the roles of the mosquito and the malarial parasite in the spread of malaria?

	mosquito	malarial parasite
A	host	vector
B	pathogen	host
C	pathogen	vector
D	vector	pathogen

17 A farmer sprays some fields with nitrogen fertilizers. Soon afterwards, the fertilizer is washed off by heavy rain into a nearby lake. Then, a few weeks later, most of the organisms in the water die.

The list includes the main stages of this process.

P Light is blocked from deeper water plants.

Q Plants cannot photosynthesise and die.

R Algae multiply rapidly on the lake surface.

S Oxygen levels fall and aerobic organisms die.

T Aerobic bacteria feed on dead plants.

In what order do these stages occur?

A P → R → T → Q → S

B Q → S → P → R → T

C R → P → Q → T → S

D S → T → P → Q → R

18 Which term describes the role of the mosquito in the transmission of malaria?

A parasite

B pathogen

C pest

D vector

19 Which stages of the life cycle of the malarial vector live in water?

	larva	pupa	adult
A	✓	✓	✓
B	✓	✓	✗
C	✓	✗	✗
D	✗	✗	✗

20 Why is it important to control the amount of nitrate fertiliser used on farm land?

A Nitrate causes acid rain which kills trees and fish.

B Nitrate decreases the fertility of the soil.

C Nitrate may lead to excessive growth of water plants.

D Nitrate poisons many kinds of crop plants.

21 Some samples are taken from a human patient.

Which sample could be examined to find out whether the patient is infected with the malarial parasite?

A red blood cells

B saliva

C urine

D white blood cells

22 A mosquito transmits malaria and is therefore described as a

A parasite.

B pathogen.

C vector.

D virus.

23 Which feature of the life history of a female mosquito makes it an effective vector of malaria?

A It has three pairs of legs.

B It has wings.

C It lays eggs in water.

D It mates frequently.