

THIRUVANANTHAPURAM EDUCATIONAL DISTRICT

BWS11 X

STANDARD X BIOLOGY(Answer Key)

1.

Disease	Affected part of the body	Symptoms	Mode of transmission
Ringworm	Skin	Round red blisters on the skin	Through contact
Athlete's foot	On the sole of the foot and between the toes	Reddish scaly rashes that cause itching	Pathogen enter through the toes when they come in contact with contaminated water and soil

2. i.A.Plasmodium

B.Female anopheles mosquito

C.Humans

D.Filarial worms

E.Culux mosquito

ii. High fever with shivering and profuse sweating are the major symptoms of malaria.

The worms stay in the lymph ducts and obstruct the flow of lymph by blocking the ducts.This causes swelling in the lymph ducts.

3. i.Sickle cell anaemia

The defects in genes cause deformities in the sequencing of amino acids which are the building blocks of haemoglobin. As a result of this, the structure of haemoglobin changes and this in turn decreases its oxygen carrying capacity.

ii. The oxygen carrying capacity of red blood cells decreases. The sickle shaped RBCs get collected in the blood vessels and block the flow of blood in them.

4 i. AIDS, others are spread by mosquitos

ii .It is necessary to avoid situations that lead to the multiplication of mosquitos in this area. Polluted surroundings promote the multiplication of pathogens.

5.i.Blood clots with the help of some proteins in blood plasma.The defects in the genes responsible for the clotting of blood leads to the uncontrolled flow of blood even through small wounds.

ii. Genetic diseases are caused by defects in the genes that control the cellular activities.

iii.A complete cure is not possible at present.In the case of haemophilic patients, temporary relief is brought in by identifying and injecting the deficient protein.