

6. (a) (i) State what is meant by EACH of the following terms:
- Biodegradable
 - Landfill
 - Sewage
 - Pollutant
- (ii) Identify TWO ways of decreasing the volume of solid waste, **other than** by reducing the production of such waste. (6 marks)
- (b) Explain how the proper construction and location of pit latrines contribute to improved health in communities without pipe-borne water supplies. (4 marks)
- (c) Persons in a remote community have heard about an outbreak of cholera and they need information. Write the information that should be put in a brochure to advise this community about
- how the disease is caused
 - signs and symptoms of the disease
 - ways to avoid contracting the disease.
- (5 marks)

Total 15 marks

Write your answer to Question 6 here.

- a.i. Biodegradable - There are waste that can be broken down by a bacteria or fungi.
- Landfill - This is a place where solid waste are sorted, crushed and compacted.
- Sewage - A form of waste mainly composed of feces and urine.
- Pollutant - There are harmful substances that bring about an undesirable change in the environment.
- a.ii. 1. Reuse - To use again and again.
2. Recycle - Solid waste used to make other products.

Write your answer to Question 6 here.

- b.v. A proper construction and location of pit latrines contribute to good health. The factors that contribute to a good health are the location of the pit latrine, having a cover, a mesh, concrete lining, and a concrete base

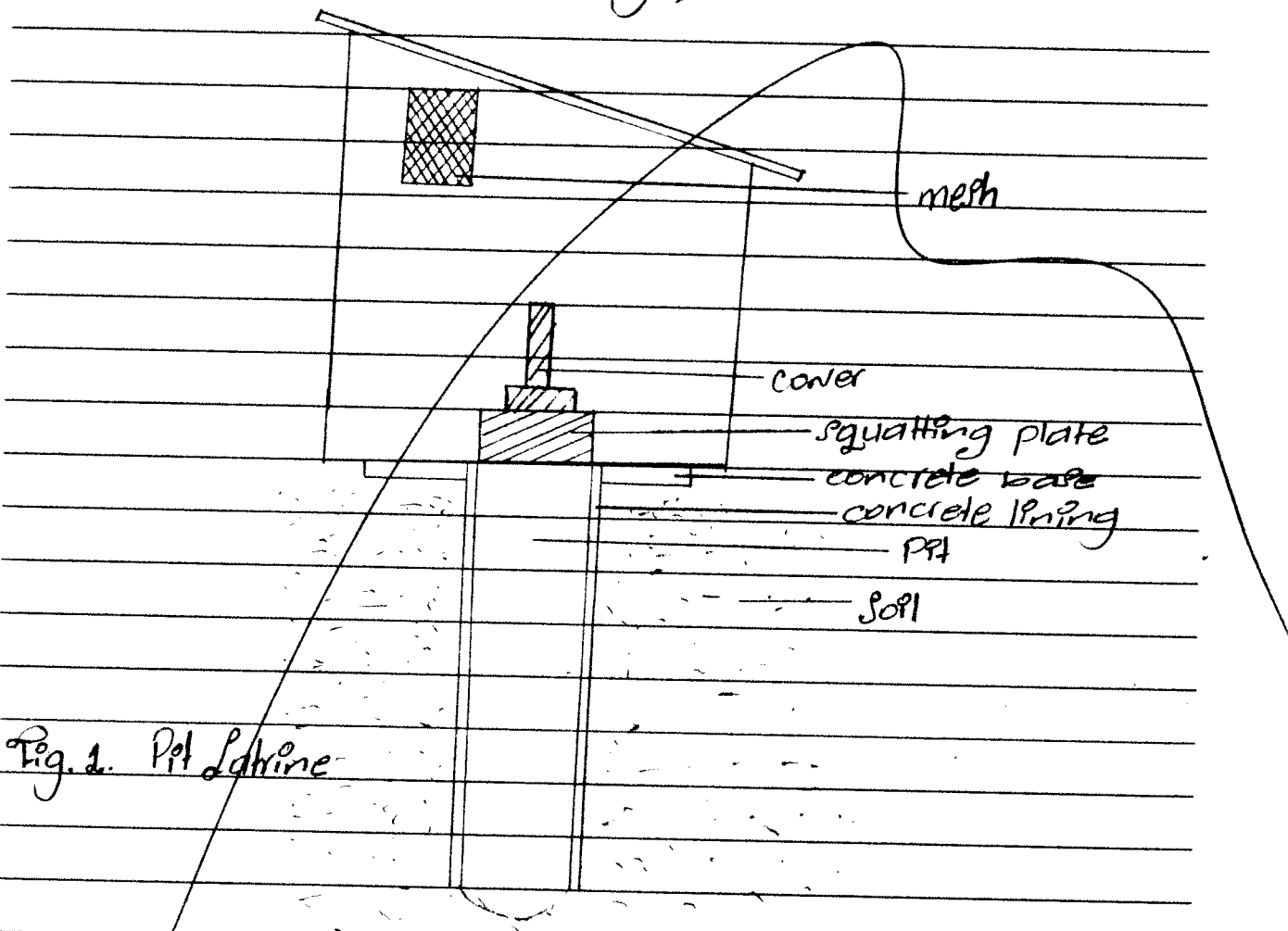


Fig. 1. Pit Latrine

As shown by the diagram above, Fig. 1 Pit Latrine, consists of many different sections. First, there is a cover to prevent ~~to pre~~ the release of small organisms to the environment and also to keep in the undesirable smell of the sewage. There is a squatting plate for organisms ~~to pass~~ ~~to~~ to sit while passing feces and urine. There is a concrete base ~~for~~ to prevent the small

Write your answer to Question 6 here.

organisms such as rat from burrowing into the pit. ^{Mesh to keep out flies and other insects}
The concrete lining prevents the sewage from draining into the surrounding soil. As for location, pit latrine should not be located near ground water because it can easily drain away into the water way and contaminate it. Contamination of water can lead to diseases such as typhoid and cholera. Hence with a proper construct and correct location these diseases can be avoided.

b.c. The disease cholera is caused by the drinking of contaminated water with the presence of the bacteria *Vibrio cholerae*. The symptoms of this disease are headache, ~~sweating~~ and high ~~body~~ temperature. The signs are vomiting and sweating. In order to avoid this disease, water should be purified. Small-scale methods of purification are boiling, filtering and adding chlorine to water while the large-scale methods are screening, sedimentation, filtration and chlorination. If the disease is already been caught then antibiotics can be taken as a treatment.

END OF TEST

Human and Social Biology

Paper 02

Question 6

This response was quite good. The candidate's expression and the use of language produced unambiguous definitions and explanations.

The response was clearly organised in terms of content. The candidate introduced Section B, then followed this with a neatly drawn, labelled diagram of the pit latrine. Expository discussion on the importance of proper construction and location of a pit followed to complete the response.

In Section C, greater attention should have been paid to identifying signs and symptoms of cholera infection. Additionally, preventative measures were too limited, focusing solely on water purification methods.