

2002 HIGHER SCHOOL CERTIFICATE EXAMINATION

Biology

Section I (continued)

Part B – 60 marks

Attempt Questions 16–27

Allow about 1 hour and 45 minutes for this part

Answer the questions in the spaces provided.

**Question 16** (4 marks) **Marks**

‘Modern methods of disease control place more emphasis on prevention than on treatment.’ **4**

Discuss this statement using at least ONE example in your answer.

*Genetic engineering  
- prevents Bt cotton trash  
GE resistance*

*in part, antibiotics, insecticides*

*in the past, treatment was emphasised in disease control.  
For example, the Boll Worm Disease in cotton was treated  
by spraying the plant with insecticide. Modern methods  
of disease control place emphasise on prevention. The same  
cotton plants have been genetically engineered to contain  
the Bt gene, which provides the plant with resistance to  
the Boll Worm disease. This method is an example of  
prevention as a modern method of disease control.*