

Part 1: Theory

Instruction: Answer question 1 and any other 2 questions.

Time Allowed: 1 Hour 30 mins

1. (a) State the factors that necessitate the modification of native antibiotics

(b) List the different classes of antibiotics

(c) Describe the industrial production of ampicillin from penicillin

2. Trace the pathway of glycerol production by yeast fermentation

3. Explain an enzymic process by which fermentable sugars can be derived from corn

starch

4. Describe a process by which lager beer can be produced from a named local material

