

Biotechnology and genetic modification – 2021 O Level 5090**1. Nov/2021/Paper_11/No.40**

What is an advantage of genetic engineering?

- A genes spreading to nearby organisms
- B reduced use of insecticides
- C reduction in biodiversity
- D unexpected side effects in organisms

2. Jun/2021/Paper_11/No.27

Bacteria are involved in the manufacture of which product?

- A alcohol
- B bread
- C yoghurt
- D penicillin

3. Jun/2021/Paper_12/No.40

Some stages in the production of human insulin are listed.

- 1 Genetically modified *E. coli* bacteria are grown in large fermenters.
- 2 The gene for human insulin is inserted into the DNA of a bacterium called *E. coli*.
- 3 The gene for human insulin is obtained from human pancreas cells.
- 4 Human insulin is extracted and purified.

What is the correct sequence of these stages?

- A 3 → 1 → 2 → 4
- B 4 → 3 → 2 → 1
- C 3 → 2 → 4 → 1
- D 3 → 2 → 1 → 4