

Standard Grade Biology **Biotechnology**

3. Reprogramming Microbes.

At the end of this topic you should know:

Checklist

Grade

- | | | |
|---|--------------------------|---------|
| (a) that the normal control of bacterial activity depends on its chromosomal material. | <input type="checkbox"/> | General |
| (b) and explain genetic engineering in terms of manipulation of chromosomal material. | <input type="checkbox"/> | Credit |
| (c) that pieces of chromosome can be transferred from a different organism and so allow bacteria to make new substances, and as a result may produce increased quantities of products and speed up processes. | <input type="checkbox"/> | General |
| (d) some of the advantages of genetic engineering, compared with selective breeding in producing new genotypes to create the best organism for a particular function. | <input type="checkbox"/> | Credit |
| (e) some examples of the products of genetic engineering and their applications. | <input type="checkbox"/> | General |
| (f) and explain the ever increasing need for insulin produced by biotechnology. | <input type="checkbox"/> | Credit |
| (g) that 'biological' detergents contain enzymes produced by bacteria and explain the action of 'biological ' detergents in terms of digestion by enzymes. | <input type="checkbox"/> | General |
| (h) describe the advantages of using the low temperature enzyme reactions of biological detergents. | <input type="checkbox"/> | Credit |
| (i) that an antibiotic is a chemical which prevents growth of micro-organisms, and explain why a range of antibiotics is needed in the treatment of bacterial diseases. | <input type="checkbox"/> | General |
| (j) the advantage of using immobilisation techniques. | <input type="checkbox"/> | General |
| (k) how continuous flow processing is allowed by using immobilisation and the advantages this has over batch processing. | <input type="checkbox"/> | Credit |

Homework

End of Topic Test