Edexcel International GCSE Biology 4BI1 Learning Plan

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| **Unit: 6. Microorganisms and Genetic Modification** | | **Chapter: 21. Using Microorganisms** | | **Hours: 3** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 5: Use of biological resources**  **a)** Food production | **5.5** understand the role of yeast in the production of food including bread  **5.6** *practical: investigate the role of anaerobic respiration by yeast in different conditions*  **5.7** understand the role of bacteria (*Lactobacillus*) in the production of yoghurt  **5.8** understand the use of an industrial fermenter and explain the need to provide suitable conditions in the fermenter, including aseptic precautions, nutrients, optimum temperature and pH, oxygenation and agitation, for the growth of microorganisms. | Video: Biology Section 5 – Lesson 1 – Population Growth and Food Production – 12.25 to 18.38  Powerpoint: Biology Section 5 – Lesson 1 – Slides 43 to 77  Textbook pages:  281 – What are microorganisms?  282 – Fermentation and biotechnology  282 – Traditional biotechnology – making food and drinks | Page 287 – 288 Qs. 1 to 7  Textbook Answers (PDF)  Chapter 21 - exam question - pdf  Chapter 21 - exam question mark scheme – pdf  Chapter 21 - Talking paper video | |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Biology Student Book - Pearson (Bradfield and Potter)