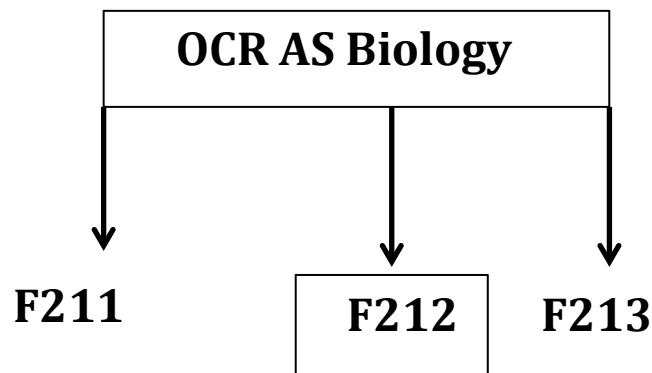


## OCR AS GCE Biology A (H021)

**F212:  
Molecules,  
Biodiversity,  
Food and  
Health**

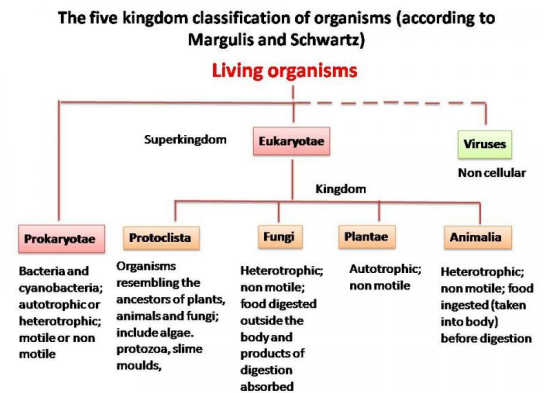
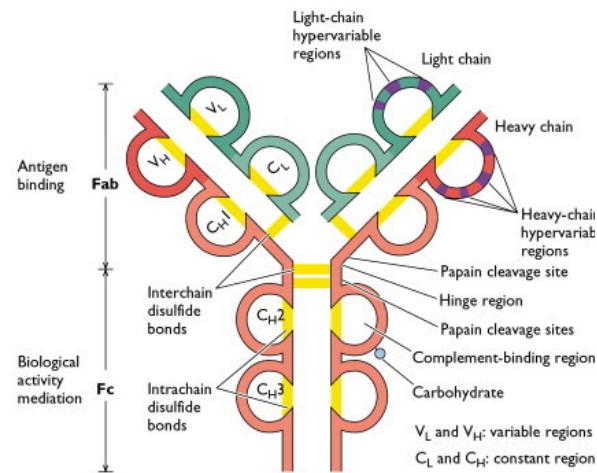
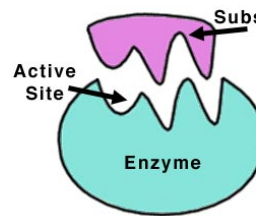
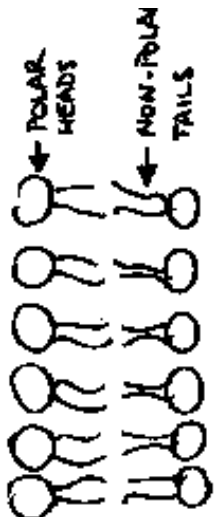
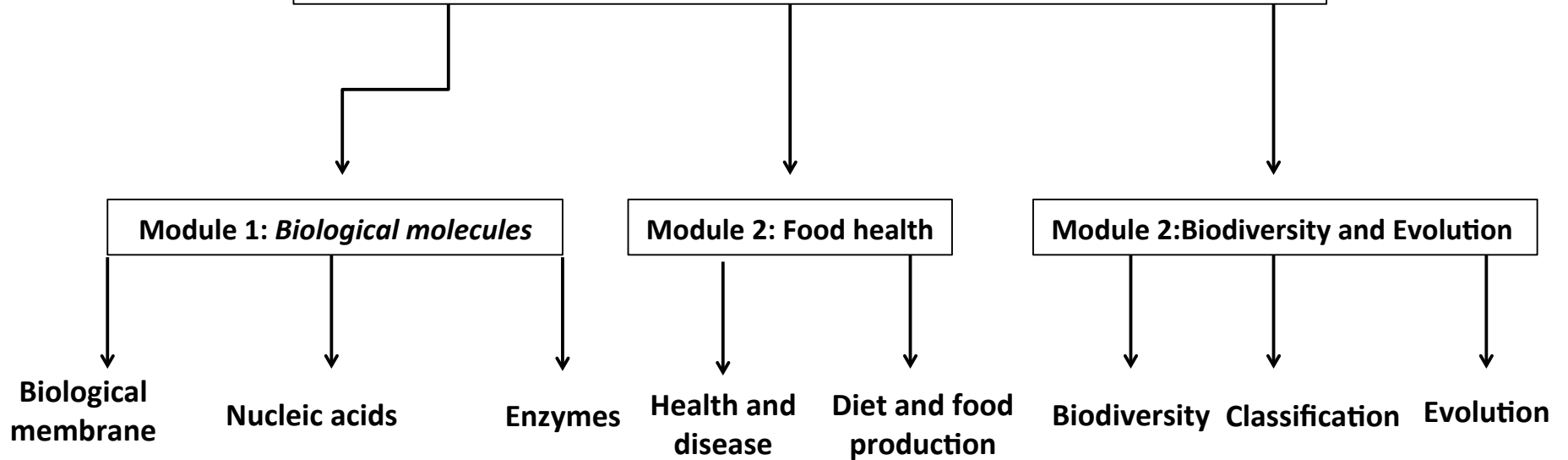


**Dr. Faisal Rana**  
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Unit F212: Molecules, Biodiversity, Food and Health Paper code: F212 QP																																		
1. Exam paper- Unit F212: Molecules, Biodiversity, Food/Health 1 <sup>st</sup> June 2015 – 1 hour and 45 min	25 % of Advanced GCE Biology																																	
<b>Overview of content</b>																																		
<ol style="list-style-type: none"> <li>Module 1: Biological Molecules</li> <li>Module 2: Food and Health</li> <li>Module 3: Biodiversity and Evolution</li> </ol>																																		
<b>Overview of assessment</b>																																		
<ol style="list-style-type: none"> <li>The unit is assessed through a 1-hour examination paper set and marked by OCR.</li> <li>The total number of marks is 100.</li> <li>Grades A–E are available.</li> <li>Grades assessment by year:</li> </ol>																																		
<table border="1"> <thead> <tr> <th>Year</th> <th>Raw Marks to 90 % UMS - A*</th> <th>Raw Marks to 80 % UMS grade 'A'</th> </tr> </thead> <tbody> <tr> <td>Jan 2010</td> <td>-</td> <td>69</td> </tr> <tr> <td>Jun 2010</td> <td>-</td> <td>77</td> </tr> <tr> <td>Jan 2011</td> <td>-</td> <td>64</td> </tr> <tr> <td>Jun 2011</td> <td>-</td> <td>73</td> </tr> <tr> <td>Jan 2012</td> <td>-</td> <td>66</td> </tr> <tr> <td>Jun 2012</td> <td>-</td> <td>67</td> </tr> <tr> <td>Jan 2013</td> <td>-</td> <td>71</td> </tr> <tr> <td>Jun 2013</td> <td>-</td> <td>69</td> </tr> <tr> <td>Jun 2014</td> <td>-</td> <td>68</td> </tr> <tr> <td>Jun 2015</td> <td>?</td> <td>?</td> </tr> </tbody> </table>		Year	Raw Marks to 90 % UMS - A*	Raw Marks to 80 % UMS grade 'A'	Jan 2010	-	69	Jun 2010	-	77	Jan 2011	-	64	Jun 2011	-	73	Jan 2012	-	66	Jun 2012	-	67	Jan 2013	-	71	Jun 2013	-	69	Jun 2014	-	68	Jun 2015	?	?
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# OCR AS GCE Biology A

## AS unit F212: *Molecules, Biodiversity, Food and health*



## How BioChem Tuition prepares their students for F212: *Molecules, Biodiversity, Food and Health?*

BioChem Tuition has a three-pronged strategy to attack F212 that helps students achieve grade A or A\*.

1. **Detailed F212 knowledge:** The students will study the specification of OCR F212 alongside extensive practice of examination style questions to help them retain the content of the specification. The students will receive detailed F212 notes prepared by BioChem Tuition. This is supplemented by examination style questions to gauge the student's level of understanding of the topic.

### Key features

- ✓ F212 specification notes.
  - ✓ F212 examination style past examination questions.
  - ✓ 1-2-1 help in understanding the key examiner points.
  - ✓ Revision notes and charts to aid revision.
2. **Practice OCR past examination papers (2001-2014):** All students will complete at least 14 years of OCR past exam papers. BioChem Tuition will provide all the past papers in printed form to the students. Candidates are required to complete past papers, which are checked and marked in light of the official examiner report and mark scheme in the presence of the student. Any mistakes will be followed up to ensure the mistakes are not repeated. The students will be shown how to maximise their marks by following our exam technique and also methods to improve comprehension for scientific questions.

### Key features

- ✓ 14 years of past examination papers practice.
  - ✓ 1-2-1 help in understanding the exam technique.
  - ✓ Revisit the mistakes and practice relevant questions to ensure the mistakes are not repeated.
  - ✓ Past paper practice can be extended by solving F212 style questions from AQA, CIE and Edexcel exam boards.
3. **Mock examination practice:** Mock F212 examination practice to give student feedback on the likely grade achievable in the exams.

### Key features

- ✓ Mock examination practice to simulate exam experience, which will be marked, graded and feedback on mistakes provided.

**How To Achieve Grade 'A' or 'A\*'**  
***F212: Molecules, Biodiversity, Food and Health***

<b>Intensive tutoring</b>	<b>Past papers practice (2001-2014)</b>	<b>Mock examination practice</b>
<b>1. Cover F212 Specification</b> <b>2. Practice examination style questions</b>	<b>1. Solve F212 past papers.</b> <b>2. Revisit the mistakes/revise topics</b>	<b>1. Solve mock examination papers to prepare for the exam</b>

## F212 Tuition Plan

<b>Tuition Plan for F212: Molecules, Biodiversity, Food and Health</b>	
<b>Stage 1: Specification Topics</b>	<b>Tuition time</b>
<b>Module 1: <i>Biological molecules</i></b>	<b>12 hours</b>
<b>1.1 Biological Molecules</b> <ul style="list-style-type: none"> <li>• Carbohydrates – structure &amp; function</li> <li>• Amino acids &amp; proteins.</li> <li>• Fats, lipids and cholesterol</li> <li>• Water –</li> <li>• Tests for reducing and non-reducing sugars</li> <li>• Tests for starch and fats</li> <li>• Enzymes – effect of temperature, pH &amp; inhibitors</li> </ul>	<b>6 hour</b>
<ul style="list-style-type: none"> <li>• Practice of past examination style questions on <b>Biological Molecules.</b></li> </ul>	<b>6 hour</b>
<b>Module 2: <i>Food and Health</i></b>	<b>12 hours</b>
<b>2.1 Food and Health</b> <ul style="list-style-type: none"> <li>• Nutrition and balanced diet</li> <li>• Pathogens and detailed immune system</li> <li>• Innate and adaptive immune system</li> <li>• The effects of smoking and cardiovascular diseases</li> </ul>	<b>6 hours</b>

Practice of past examination style questions on <b>Food and Health</b>	<b>6 hours</b>
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<b>Module 3: Biodiversity and Evolution</b>	<b>8 hours</b>
<b>3.1 Biodiversity and evolution</b> <ul style="list-style-type: none"> <li>• Biodiversity and sampling</li> <li>• Classification systems</li> <li>• Taxonomy</li> <li>• Darwin's theory and natural selection</li> <li>• Conservation <i>in situ and ex situ</i></li> </ul>	<b>6 hours</b>
<ul style="list-style-type: none"> <li>• Practice of past examination style questions on <b>Biodiversity and Evolution.</b></li> </ul>	<b>6 hours</b>
<b>Stage 2: Past paper practice</b>	<b>10 hours</b>
<ul style="list-style-type: none"> <li>• Practice of past examination papers from 2001 to 2014 relevant to <b>F212: Molecules, biodiversity, food and health.</b> <ul style="list-style-type: none"> <li>✓ 14 years of past examination papers practice.</li> <li>✓ 1-2-1 help in understanding the exam technique.</li> <li>✓ Revisit the mistakes and practice relevant questions to ensure the mistakes are not repeated.</li> <li>✓ Past paper practice can be extended by solving F212 style questions from other exam boards such as AQA, CIE and Edexcel.</li> </ul> </li> </ul>	<b>10 hours</b>

<b>Stage 3: <i>Mock examination practice</i></b>	<b>4 hours</b>
<ul style="list-style-type: none"><li>• Mock examination practice to simulate exam experience, which will be marked, graded and feedback on mistakes provided by BioChem Tutors.</li></ul>	4 hours