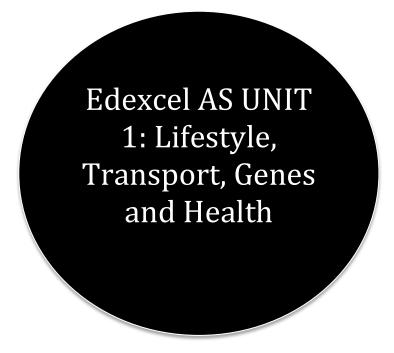
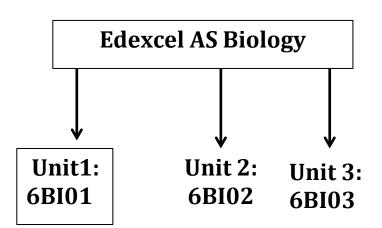
# **Edexcel AS GCE Biology (8BI01)**







Dr. Faisal Rana Landline: 02076031928 Mobile: 07783919244 www.biochemtuition.com faisal.rana@me.com Unit 6BI01: Lifestyle, Transport, Genes and Health Paper code: 6BI01 QP

1. Exam paper- Unit 1: The Core Principles of Chemistry Thursday 21st May 2015 (afternoon)

20 % of Advanced GCE Biology

### **Overview of content**

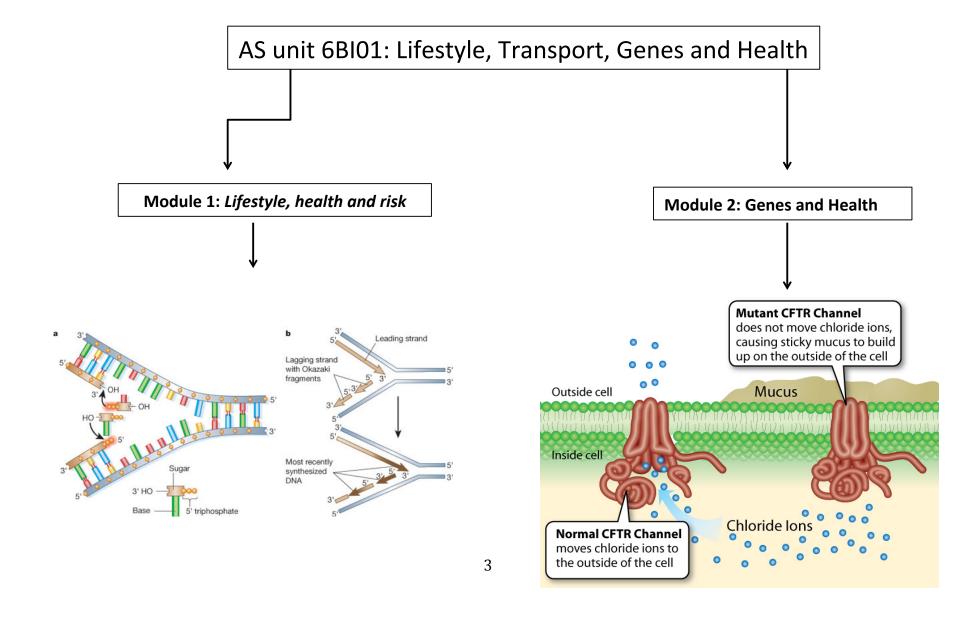
- 1. Module 1: Lifestyle, health and risk.
- 2. Module 2: Genes and health.

### **Overview of assessment**

- 1. The unit is assessed through a 1-hour and 30 min examination paper set and marked by Edexcel.
- 2. The total number of marks is 80 and contains objective questions, short-answered and structured questions.
- 3. Grades A-E are available.
- 4. Grades assessment by year:

Year	Raw Marks to	Raw Marks to
	90 % UMS - A*	80 % UMS grade 'A'
Jan 2009		52
Jun 2009		49
Jan 2010	-	57
Jun 2010	-	54
Jan 2011	-	56
Jun 2011	-	58
Jan 2012	-	59
Jun 2012	-	56
Jan 2013	-	63
Jun 2013	-	58
Jun 2013 -R	-	58
Jun 2014	-	54
Jun 2014 -R	-	54
Jun 2015	?	?

# **Edexcel AS GCE Biology**



# How BioChem Tuition prepares their students for 6BI01: Lifestyle, Transport, Genes and Health?

BioChem Tuition has a three-pronged strategy to attack AS unit 6BI01 that prepares students for A or A\*.

1. **Detailed 6BI01 knowledge:** The students will study the specification of Edexcel 6BI01 alongside extensive practice of examination style questions to help them retain the content of the specification. The students will receive detailed 6BI01 notes prepared by BioChem Tuition..

## **Key features**

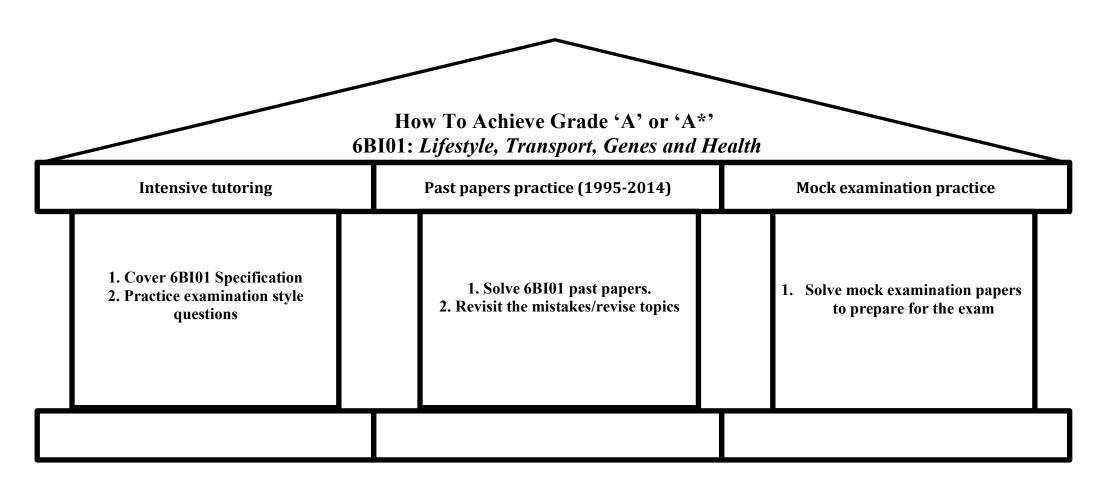
- ✓ 6BI01 specification notes.
- ✓ 6BI01 examination style past examination questions.
- ✓ 1-2-1 help in understanding the key examiner points.
- ✓ Revision notes and charts to aid revision.
- 2. **Practice Edexcel past examination papers (1995-2014):** The students will complete at least 10 years of Edexcel 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 of scientific questions.

## **Key features**

- ✓ 10 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 6BI01 style questions from AQA, CIE and OCR exam boards.
- 3. **Mock examination practice:** Mock 6BI01 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.



# **6BI01 Tuition Plan**

Tuition Plan for 6BI01: Lifestyle, Transport, Genes and Health		
Stage 1: Specification Topics	Tuition time	
Module 1: Lifestyle, Health and Risk	10 hours	
<ul> <li>Importance of water as a solvent.</li> <li>Structures of mono-,di-, polysaccharides.</li> <li>Condensation reactions to form disaccharides and polysaccharides.</li> <li>Triglycerides: structure and function.</li> <li>Cardiac cycle and structure of blood vessels.</li> <li>Effect of Caffeine on heart rate and blood clotting process</li> <li>Atherosclerosis and risks/benefits/treatments of CVD.</li> <li>HDLs and LDLs and the affect of diet, exercise and smoking to reduce the risk of coronary heart disease.</li> <li>Investigating the content of vitamin C in food and drink.</li> <li>Diet, obesity and health risk factors.</li> </ul>	5 hour	
<ul> <li>Practice of past examination style questions on Lifestyle, Health and Risk.</li> </ul>	5 hours	

Module 2: Genes and health	12 hours
<ul> <li>Fluid mosaic model of cell membrane</li> <li>Movement of substances in and out of the cell – diffusion, active transport and osmosis.</li> <li>Effect of temperature and alcohol concentration on membrane permeability.</li> <li>Process of gas exchange in living organisms.</li> <li>Describe the basic structure of amino acids and primary structure of proteins.</li> <li>The mechanism and specificity of enzymes.</li> <li>Effect of concentrations on the rate of reactions and using initial rates method to practically determine the rate of reaction.</li> <li>The structure of DNA and the process of DNA replication including the Meselson and Stahl's classic experiment as an evidence of semi-conservative replication.</li> <li>Genetic code, transcription and translation.</li> <li>Gene mutations, cystic fibrosis, genetic terminology and genetic pedigree diagrams.</li> <li>Gene therapy and germ line therapy, and prenatal screening along with social and ethical considerations of the process.</li> </ul>	6 hours
<ul> <li>Practice of past examination style questions on Genes and health.</li> </ul>	6 hours

Stage 2: Past paper practice	10 hours
<ul> <li>Practice of past examination papers from 1995 to 2014 relevant to 6BI01: Lifestyle, Transport, Genes and Health.</li> <li>✓ At least 10 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>✓ 6BI01 style questions from other exam boards such as AQA, CIE and OCR can extend the practice of relevant questions.</li> </ul>	10 hours