

# **General Certificate of Secondary Education**

# Science Double Award Modular 3468

Biology A 3413

Module 01: Humans as Organisms

Module Test Answer Keys

March 2007 examination series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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### **Humans as Organisms: Foundation Tier**

Question No.	KEY
One	1 – nucleus 2 – cytoplasm 3 – cell membrane 4 – protein coat
Two	1 – stomach
	2 – pancreas 3 – small intestine 4 – liver
TD1	
Three	1 – artery 2 – valve 3 – atrium 4 – vein
Four	1 – stomach acid 2 – blood clot 3 – skin covering the body 4 – mucus in the breathing organs
Five	1 – brings air to the lungs
	2 – moves inwards when we breathe out 3 – becomes flatter when we breathe in 4 – where gases enter and leave the blood
a:	
Six	amino acid sugar
Seven	alveoli villi
Eight	8.1 – B, 8.2 – B, 8.3 – C, 8.4 – A
Nine	9.1 – A, 9.2 – D, 9.3 – B, 9.4 – A
Ten	10.1 – A, 10.2 – C, 10.3 – C, 10.4 – A

### **Humans as Organisms : Higher Tier**

Question No.	KEY
One	1 – brings air to the lungs 2 – moves inwards when we breathe out
	3 – becomes flatter when we breathe in 4 – where gases enter and leave the blood
Two	1 – mitochondria 2 – carbon monoxide 3 – oxygen
	4 – haemoglobin
Three	alveoli villi
Four	it increases the surface area of fat droplets for lipase action it neutralises the contents of the small intestine
Five	5.1 – B, 5.2 – B, 5.3 – C, 5.4 – A
Six	6.1 – A, 6.2 – D, 6.3 – B, 6.4 – A
Seven	7.1 – A, 7.2 – C, 7.3 – C, 7.4 – A
Eight	8.1 – A, 8.2 – C, 8.3 – B, 8.4 – C
Nine	9.1 - C, 9.2 - C, 9.3 - B, 9.4 - C
Ten	10.1 – C, 10.2 – D, 10.3 – B, 10.4 – D