

# 7. Human nutrition

## 7.5 Absorption

### Paper 3 and 4

#### Marking Scheme

## Q1.

(b)(i)	one label line and label that identifies a <u>capillary</u> <b>and</b> one label line and label that identifies the <u>lacteal</u> ;	1	
(b)(ii)	small intestine ;	1	
(b)(iii)	absorption / transport of, fatty acids / glycerol / fat / lipids ;	1	
(c)	<i>any two from:</i> 1 (amino acids / products of protein digestion) move in(to) <u>capillaries</u> (in villi / Fig. 6.1) ; 2 (amino acids / products of protein digestion) are carried in (blood) <u>plasma</u> ; 3 (amino acids / products of protein digestion travel to the) <u>hepatic portal vein</u> ;	2	

## Q2.

(a)(i)	lacteal ;	1	
(a)(ii)	goblet (cell) ;	1	
(a)(iii)	trachea / bronchi / bronchioles / AVP ;	1	
(a)(iv)	<i>any four from:</i> microvilli ; (microvilli) provide a large surface area ;  epithelium / lining, one cell thick / thin / AW ; ref. to diffusion ; ref. to enzyme production ;  good blood supply ; (good blood supply) to maintain a steep concentration gradient ;  ref. to lacteal / N, and fat transport ;  AVP ;	4	
(b)	hepatic portal vein ;	1	

## Q3.

(d)	absorbs, fats / fatty acids (and glycerol) ; transports, fats / fatty acids, into, lymph(atic) vessels / lymph(atic) system / lymph ;	2	
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## Q4.

(d)	increase / large, (surface) area ; for absorption (of named substances) / described; AVP ;	2	
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