

17. Inheritance

17.3 Meiosis

Paper 3 and 4

Marking Scheme

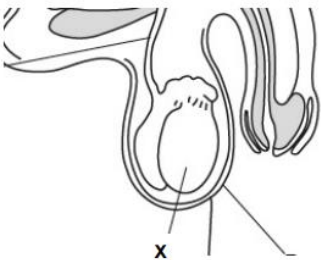
Q1.

(a)(i)	letter in Fig. 3.1	meiosis	mitosis	3	R rows with more than one tick 5 rows correct = 3 marks 3 rows or 4 rows correct = 2 marks 2 rows correct = 1 mark 1 row or no rows correct = 0 marks
	P	✓			
	Q		✓		
	R	✓			
	S		✓		
	T		✓		
...					
(a)(ii)	fertilisation ;			1	
(a)(iii)	1 unspecialised / undifferentiated ; 2 mitosis ; 3 specialised / differentiated ; 4 expressed / AW ; 5 protein(s) / (poly)peptide(s) ;			5	

Q2.

(a)	repair ; asexual ; separate ; diploid ; zygote ; fertilisation ;	6	
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Q3.

(c)	X on testis / label line on testis with X ; 	1	
(d)(i)	one set of chromosomes ;	1	
(d)(ii)	23 ;	1	

Q4.

(b)	to produce, gametes / sperm ; for <u>sexual</u> reproduction ; to halve the number of chromosomes / produce haploid cells ; so that when fertilisation occurs the number of chromosomes return to the, same / diploid, number / AW ; creates (genetic) variation / AW ;	3	
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