

Question Number	Answer	Mark
4(a)(i)	<ol style="list-style-type: none"> 1. idea that {cell B / eq} can give rise to {many / eq} cell types ; 2. idea that cell B cannot give rise to {embryonic cells / eq} ; 	max (2)

Question Number	Answer	Mark
4(a)(ii)	(red) bone marrow (of long bones / ribs) ;	(1)

Question Number	Answer	Mark
4(a)(iii)	<ol style="list-style-type: none"> 1. different genes active in different cells / different genes active at different times / some genes {active / inactive} / eq ; 2. active genes make mRNA / eq ; 3. active genes make proteins / polypeptides / eq ; 4. (proteins) control cell {processes / eq} ; 5. idea of permanent change (to cell) / eq ; 	max (3)

Question Number	Answer	Mark
4(b)	the gender of turtles is determined by the temperature of the ground in which the eggs are laid ;	(1)