

Question Number	Answer	Additional guidance	Mark
7(c)	<p>A description that includes the following points:</p> <ul style="list-style-type: none"> • reference to post transcriptional changes / (pre-)RNA splicing (1) • {introns / P, R, T, V and X} removed by enzymes (1) • rearrangement of {exons / Q, S, U and W} / removal of some exons (1) • credit two different permutations of exon order given (1) • (therefore) a different {primary sequence / sequence of amino acids / polypeptide} (1) 	<p>ACCEPT spliceosomes</p> <p>ACCEPT not all exons used</p> <p>ACCEPT different sequence of amino acids can result in differences in {folding / bonding} giving a different protein (3D) shape</p>	(5)

Question Number	Answer	Additional guidance	Mark
7(d)	<p>An answer that includes the following points:</p> <ul style="list-style-type: none"> • (activity of) gene T decreases (during development) and gene U increases (1) • (because) gene T is switched off (1) • {product of gene T not needed / (gene T) protein not produced} once blastocyst stage reached (1) • product of gene U is needed at higher levels after the {8-cell / morula} stage (1) 	<p>ACCEPT pieced together</p> <p>ACCEPT description</p> <p>ACCEPT product of gene T not needed after 8-cell stage reached</p> <p>ACCEPT gene U is involved in specialisation of the cells / correct description of role of gene U protein</p>	(3)