

Question	Marking Guidance	Mark	Comments
01.1	(Insulin stimulates release of osteocalcin – no mark) 1. Osteocalcin causes more (release of) insulin; 2. (More) insulin causes more (inactive) osteocalcin (release);	2	1. and 2. Idea of more required but other words can be used 1. and 2. Ignore ref. to further 1. and 2. Ignore ref. to more B cells / osteoblasts stimulated
01.2	1. (Change in pH) changes / breaks ionic / hydrogen bonds; 2. Changes tertiary structure;	2	1. Ignore ref. to peptide or sulfur-sulfur bonds 1. Accept polar bonds 2. Ignore changes to primary structure 2. Reject ref. to active site / enzyme 2. Accept forms binding site 2. Ignore 3D 2. Accept 3 ^o
01.3	1. (Insulin) leads to more transport proteins / channel (proteins) / carrier (proteins) for glucose; 2. More glucose (for respiration / glycolysis) enters cell;	2	Idea of more required once to cover both mark points 1. Ignore references to opening channels 1. Accept co-transport / GLUT 1 or 4 protein 2. Ignore references to glycogen formation / fat metabolism / enzyme activation