

10(a)	any three from : 1 myelin sheath / Schwann cells, acts as an insulator / prevents movement of ions ; 2 depolarisation / action potential, only occurs at the nodes ; I impulses 3 action potentials jump from node to node / saltatory conduction ; I impulses 4 long(er) local circuits ; 5 AVP ; e.g. wide axon diameter
10(b)	any four from : 1 ACh binds to receptors on <u>sarcolemma</u> ; 2 (ligand-gated) Na⁺ channels open or Na⁺ enters, muscle cell / sarcoplasm ; 3 <u>sarcolemma</u> depolarised ; 4 depolarisation / action potential, spreads, to / down, T-tubules ; 5 voltage-gated Ca²⁺ channels open ; 6 Ca²⁺, diffuse / move, out of sarcoplasmic reticulum (and bind to troponin) ;
10(c)	any three from : 1 (decreased rate of respiration so), no / less, ATP produced ; 2 no / less, Ca²⁺ pumped back into sarcoplasmic reticulum ; 3 no / less, release of myosin heads from actin / cross bridges broken or no / less, hydrolysis of ATP by myosin head / return of myosin head to original position ; AW 4 sarcomere, permanently contracted / cannot relax ; A paralysis 5 slower sarcomere contraction / less sarcomere shortening / weaker power stroke ;