

Multiple Choice Answers

Q24: D

7(a)	any three from: - breaks down / hydrolyses to / converted to, ADP / AMP, and Pi ; - releases energy / energy donor ; - reversible reaction / high turnover / can be regenerated ; - small / soluble, so can, diffuse / move (freely), in cell ; - AVP ;
7(b)	any six from: - ETC / electron flow, less / stops ; - no / less, energy, available / released / supplied (from electron flow) ; - no / fewer, H⁺ ions / protons, <u>pumped</u> to intermembrane space ; - no / smaller, H⁺ / proton, gradient ; - no / fewer, protons <u>diffuse</u> through ATP synthase ; - no / fewer, electrons reach, last carrier / end of chain ; - no / fewer, electrons can react with oxygen to form water ; (oxidised) <u>NAD</u> not regenerated / lack of <u>NAD</u> ; - no / less, glycolysis / link reaction / Krebs cycle ; - AVP ;

1(a)	any two from: glucose (phosphate) ; fructose (phosphate / bisphosphate) ; triose phosphate ; (named) fatty acid / keto-acid ; glycerol ; amino acid ;
1(b)	any four from: - breaks down / hydrolyses to, ADP / AMP, and Pi ; - releases, energy / 30.5 kJ mol⁻¹ ; - reversible reaction / high turnover / can be regenerated ; - small / soluble, so can, diffuse / move (freely), in cell ; - AVP ;
1(c)	substrate-linked / substrate-level (phosphorylation) ;
1(d)(i)	oxygen ;
1(d)(ii)	presence of oxygen: (ATP yield) increases / is <u>higher</u> ; plus any two from: - oxygen acts as final, electron / proton, acceptor ; - oxidative phosphorylation / chemiosmosis (occurs) ; - energy from, reduced NAD / reduced FAD / electron transport chain ; - proton gradient / H⁺ → into intermembrane space ; - ATP made in Krebs cycle ;