Consider the reaction A → B knowing that the Keq = 0,75 and that [A] = 10mM and [B] = 15mM what will happen?

A>B
B>A
Equilibrium

In the same reaction, what will be the value of ΔG?
- 410
410
170
-170

Will you say that the reaction A → B is:
Endergonic
Exergonic
At equilibrium
None of the above

What is the net equation of photosynthesis?
6H20 + 6CO2 → C6H1206 + 6O2
5H20 + 6CO2 → C5H1206 + 6O2
6C6H1202 + 6O2 → 6H2O + 6CO2
6H2O + 6CO2 → 6C6H12O6 + 6O2

What is the enzyme catalysing the reaction fructose 6P → 1,6 P Fructose?
Hexokinase
1,6P Fructophosphatase
Phosphofructokinase
2,6 P Fructokinase

What is the intermediate product formed during the fermentation of ethanol?
Lactate
AcetylCoA
Acetaldehyde
Acetylethanol

What are the irreversible steps in glycolysis?
the phosphorylations
the isomerisations
the hydrolysis

How are those steps regulated?
Inhibited by ADP
Activated by ADP
Inhibited by ATP
Activated by ATP

What is the ultimate consequence of the accumulation of 2,6 bisPfructose?
More gluconeogenesis
More Beta oxydation
Accumulation of lactic acid
More glycolysis

Where does the neoglucogenesis taking place?
Brain
Liver
Muscle
Blood

What is the effect of the accumulation of cAMP on glycogen synthesis/hydrolysis?
Phosphorylation of Glycogene sythase → activation
Protein Phosphatase activated
Phosphorylation of glycogen phosphorylase
Inhibition of Glycogen phosphorylase kinase

What regulated enzyme in the TCA cycle resembles the pyruvate dehydrogenase complex?
Succinyl CoA dehydrogenase
Succinyl CoA synthase
α -ketoglutarate dehydrogenase complex
isocitrate dehydrogenase

What will happen to the FADH2 oxidized in peroxisome?
exported in the cytosol
exported in the mitochondria
re-oxidized by oxidase
reduced by the catalase

What step of the beta oxidation requires CoA?
Dehydrogenation
Hydration
Thyolysis
Oxydation

What kind of transporter is GLUT1?
Uniporter
Symporter
Antiporter
Ions channel

Succinate + FAD + 2e-+ 2H+→ fumarate + FADH2+ 2e-+ 2H+ In that reaction, which of
the following is the reducing agent?
FAD
Fumarate
Succinate
FADH2

Which of the following represents the most likely order, from most negative to most positive, of the standard redox potential of the electron carriers in complex III?
CoQH2 – FeS- Cytc1- CytC
CytC-Cytc1-FeS-CoQH2
CoQ, Fe-S, FMN
CoQH2 – Cua – FeS – O2

How many protons are transfered from matrix to inter-membrane space during the oxidation of 1 NADH?
8
12
10
4

On which subunits of the ATP synthase does the synthesis of ATP take place?
A & b
A, b &c
γ & β
α β γ

What type of transporter is the ADP/ATP translocase?
Uniporter
Symporter
Antiporter
Ions channel

What uncouplers are doing?
Inhibit complex II in the respiratory chain.
Inhibit ATP synthase
Discharge proton gradient
Inhibit the oxydation of NADH

Which of the following is the strong reducing agent of the photosynthesis?
Chlorophyll a
Plastoquinone
Reaction center
Oxygen

What type of protein is shown on that Hydropathy plot?
TypeI
TypeII
TypeIII
TypeIVa
TypeIVb

What type of transport is represented here?
Anterograde transport
Retrograde transport
Cisternal transport
TransGolgi – Endosome transport