

- Biochem. Final Exam Qus 2013 :

** Notes : The exam was 50 qus , for the chapters (17 , 18 , 19 , 20 , 21 , 23)

** I will mention the hardest qus only that I could remember

- Lovastatin is a drug that works by :

- a) decrease the HDL
- b) increae the HDL
- c) inhibit HMG-reductase

Answer : C (this qus is from chapter 21 , regarding the cholesterol)

- the delta G for the conversion of (Pyruvate into Acetyl-coA) is :

- a) exergonic and equal to -38
- b) endergonic and equal to 38
- c) exergonic and equal to -33.4
- d) endergonic and equal to 33.4

Answer : C (chapter 19 table 19.2 ..)

- The amount of ATP that is produced from 1 phosphoenolpyruvate by entering the Krebs cycle , and the ETC :

- a) 16
- b) 27
- c) 13.5
- d) 11.5

Answer : C (1 PEP will give 1 ATP in the glycolysis , and it will be converted to 1 pyruvate , this pyruvate will give 1 NADH to be converted into Acetyl-CoA (which equal to 2.5) now the 1 acetyl-CoA will give 10 ATP) >> I might be wrong in this calculations but the choices were like this and I spend 5 min thinking of this qus :P but just make sure and do it by ur self ☺

- according to metabolic water , Kangaroo rats , which is wrong about them :

- a) they eat seeds which contain enough lipid and water for them
- b) they are able to extract water from lipids during metabolism

Answer : A (all the choices as I remembre were 100% correct except the 1st one , cause in the book , and the doctor mention this in the lecture “ this type of animals don't drink water at all it just eat the seeds , and from the metabolism of the lipids they get their water) so there is no water in the seeds ☺

- regarding cholesterol , what is the correct statement :

- a) 12 carbon atoms from the **carboxyl carbon** of the acetyl group
- b) 6 units of **isoprene** condense to form squalene
- c) 15 carbon atoms from the **methyl carbon** of the acetyl group
- d) all of the above

Answer : D (I really can't remember the exact choices so I made them all correct but pls be careful they might change any word in any choice so it will change everything ! just notice this qus is from chapter 21 , regarding the cholesterol biosyn.)

- The correct sequence of reactions to convert succinly-CoA into oxaloacetae is :

- a) oxidation – hydration – oxidation - hydrolyze
- b) hydrolyze – oxidation – hydration - oxidation
- c) oxidation – oxidation – hydration – hydrolyze

Answer : B

- regarding the conversion of propinoyl into succinly-coA , what is the wrong :

- a) it need ATP
- b) it need vitamin B6 which contain cobalt
- c) this case happen in the odd number of fatty acids

Answer : B (it needs vitamin B 12)

- which of the following can transfer 2 electrons and is important in Q cycle :

- a) complex 1
- b) CoQ
- c) FMN

Answer : B

* qus regarding chapter 23 :

- the nitrogenase enzyme contain :

- a) ferredoxin
- b) dinitrogenase reductase
- c) dintriogenase
- d) all of the above

Answer : D

(That what I could remember from the final exam , these were the hardest qus only , the other qus where simple and direct and u can answer them easily inshallah)

Best wishes to all of you 😊

Done by : omar sawas