

1. the number of electrons for the oxidation of one glucose is

24

2. one of the following is insoluble in water ?

CH<sub>3</sub>-CH<sub>3</sub>

3. the products for the hydrolysis of one acetyl -CoA ?????

3NADH, ATP ,FADH<sub>2</sub> , 2CO<sub>2</sub>

4. Which of the following are not present in all viruses:

a-membranous envelope .

b-capsomeres.

c-capsid.

d-genome.

e.nuclear acid.

5. the bonds that are distorted of the denaturation of the protein ?

a)ionic   b ) hydrogen   c) disulfide bridges   d) hydrophobic   e ) all of the above

6. which of the following is not a true polymer :

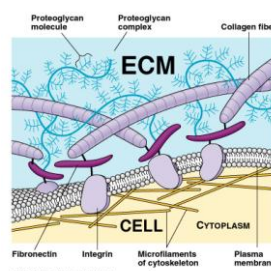
a ) steroids   b ) carbohydrates   c ) proteins   d ) all are polymers   e ) none of the above

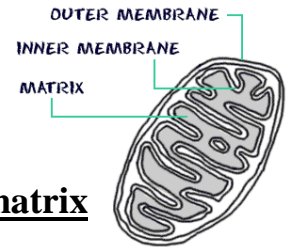
7. The differences between the 20 types of all amino acids are due to ?  
The difference in R groups

8. What region in DNA does the RNA polymerase recognise?  
Promoter.

9. which bonds are broken down when water vaporizes ?  
hydrogen bond between water molecules

10.this picture is found in ?  
animals only





11. in the following picture, there was an arrow pointing into the matrix

12. The similarity between electron transport chain and fermentation ?

Oxidation of NADH to NAD<sup>+</sup>

13. sucrose is an :

(( aldose-ketose )) disaccharide

14. Which is wrong about aquaporins ?

It is a carrier protein

15. Which is wrong about water ?

Low surface tension

16. Which is wrong about cofactors ?

They include ribozymes as well as enzymes

17. Prions infectious : protein particles

18. Virioids ..... circular RNA molecule

19. tertiary structure of DNA ?

R interaction

20. In prokaryotes who removes the RNA primer ?

Dna polymerase 1

21. Osmosis is the movement of water from high concentration of .... To low concentration of .... ?

Free H<sub>2</sub>O molecules . Free H<sub>2</sub>O molecules

**22. Which is not done by golgi apparatus ?**

**degradation of macromolecules**

**23. a question about the step number 5 in Glycolysis , " which is the enzymes does it include ?**

**aldolase & isomerase**

**24. DNA strands joins by ?**

**H-bonds between nitrogen bases**

**25. a question about enzymes included in kelvin cycle >>> rubisco & kinase**

**26. if thymine is 40% then guanine is ? 10%**

**27. what is the mutation that results from UV ?**

**thymine dimer**

**28. the two strands of DNA is ?? antiparallel**

**29. Beadle & Tatum worked with ??**

**Neurospora ,,,**

**30. which one don't need gtp in synthesis of proteins ? release factor**

**31. all of this basis found in DNA except ?**

**Uracil**

32. The 5' end of Okazaki fragment is attached to what?

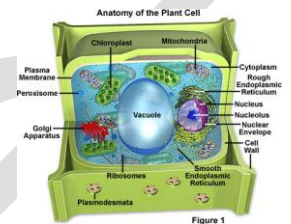
RNA translation 5' end - 3' end, N-term - C-term

33. Reverse transcriptase is used to change what to what?

RNA-DNA + complementary DNA

34. If bacteria contains carotenoids absorbs IR radiation what colour does it appear?

yellow and orange because carotenoids absorb green and blue



35. رسمة فايروس الايدز... عليها سؤالين عن الاجزاء لذلك يفضل حفظهم

36. رسمة الخلية النباتية ( نفس المجاورة بالضبط ) وعليها 6 ارقام واسئلة عن الاجزاء فقط.

37. a picture for endergonic reaction and asking what is the right sentence ...

38. the mismatched sentence is

nucleus = all the DNA

39. a question about two pictures of viruses, pointing in a part in each one and asking about the name of the part.. for the " phage " they point towards " tail fibers " and for influenza viruses towards glycoproteins >> see the book for the images

40. what does the operon model attempt to explain ?

coordinated control of gene expression in bacteria

41. the process in which fats get into the cellular respiration pathways ?

B- oxidation

**42. in the non circular flow what is the first and final electron acceptor ?**

**H<sub>2</sub>O .. NADP<sup>+</sup>**

**43.what is the type of the RNA in the AIDS virus ?**

**2 identical ssRNA**

**44. a question about the figure in page 381 , pointing into two steps of gene expression and asking what is the name of them ... the answers was RNA processing.& .translation**

**45.. what is the mismatched sentence :**

**large subunit- mRNA binding site**

**46.remove intron ?  
(spliceosome)**

**47.insertion or deletion Nucleotide-pair causes:  
Frameshift mutation**

**48.Change a codon into a stop codon called:  
nonsense mutation**

**49.which of the following contribute with the H<sup>+</sup> concentration across the thylakoid membrane**

**NAD<sup>+</sup>/NADPH formation**

**50.if there was a nonsense mutation in the reg. gene what will happened ?**

**continues producing of tryptophan**

51. The most scientific approach that Watson and Crick relied on in their DNA model is **X-RAY CRISTALLOGRAPHY**.

52. cholesterol is entered inter the cell by a significant -oriented way by...  
receptor -mediate cytosis

53. to build the virus proteins it uses :  
the host's free ribosomes & the host's bound ribosomes

54. the integrated viral DNA of HIV with human DNA is called  
provirus

55. which of following is not true about codons?  
each one codes for different amino acid

56. This figure ...first they asked about the ture sentence  
(when both Q and S are present in high concentration N will increase

