

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**SEMESTER EXAMINATIONS****APRIL - 2018****15CABC4A****ALLIED : BIOCHEMISTRY****Time : 3 Hours****Max. Marks : 75****SECTION – A (10 x 2 = 20)****Answer ALL the questions.**

1. Name few foods that contain carbohydrates. Which type of carbohydrate is the best to be included in eating pattern?
2. Write the molecular and Howarth formula for D - Glucose.
3. What are essential amino acids?
4. Define isoelectric point.
5. What is a peptide?
6. Which type of bonding is predominantly involved in the formation of beta - pleated sheet structure of proteins?
7. What is saponification number?
8. What are lecithin?
9. Define nucleoside and nucleotide.
10. Quote various functions played by mRNA, rRNA, tRNA.

SECTION – B (5 x 5 = 25)**Answer any FIVE of the following questions.**

11. Explain in detail about Mutarotation.
12. Write in detail about osazone formation.
13. Write in detail about Zwitterions of amino acids
14. What is denaturation? Quote various denaturing factors. Explain, how to denature the given protein sample by adopting any one of the factor.
15. Define lipids. Quote various functions of dietary lipids.
16. What are bile acids? Quote its major functions.
17. Write the differences between DNA and RNA.
18. Draw and explain the structure of t - RNA.

SECTION – C (3 x 10 = 30)**Answer ALL the questions.**

19. (a) Explain in detail about the double helical structure of DNA. Write various biological functions of DNA.

(Or)

- (b) Write the broad spectrum of classification of carbohydrate with example and quote its various functions.

20. (a) Classify amino acids in to different groups based on their side chain. Write one example for each type.

(Or)

(b) Write a detail note on structure of protein.

21. (a) Write a note on chemistry of starch. How will you identify the presence of starch in given food sample? Quote various functions played by starch.

(Or)

(b) Explain classification and functions of Lipid.

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