

**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**

**(A DEEMED TO BE UNIVERSITY)**

**B.Sc. Allied Health Sciences Second Year (Semester-III)**

**July-2019 Examination**

**B.Sc. Medical Laboratory Technology (MLT)**

**Time : 2.30 Hrs.**

**[Max. Marks : 80]**

**BIOCHEMISTRY**

**Q.P Code : AHS-105**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define balanced diet. Explain the steps in planning a balanced diet for an adult.
2. Define denaturation. What are the changes seen in denatured protein?

**SHORT ESSAY (Answer any Six)**

**6 X 5 = 30 Marks**

3. Define lipids and classify lipids with examples.
4. Define respiratory quotient. Name two conditions associated with lowering of respiratory quotient.
5. Explain Watson and crick model of DNA.
6. Explain the structure and functions of hemoglobin.
7. Explain the mechanism of glucose transport.
8. Explain the fluid mosaic model of membrane structure.
9. Write the importance of following subcellular organelles.
  - a. Lysosomes
  - b. endoplasmic reticulum
10. Explain the specific dynamic action of food.

**SHORT ANSWERS (Answer any Ten)**

**10 X 3 = 30 Marks**

11. Classify polysaccharides with examples.
12. What are the advantages of consuming cellulose in the diet by the human beings.
13. Write the difference between starch and glycogen.
14. Name any three polyunsaturated fatty acids.
15. What is Nitrogen balance?
16. Write the functions of mRNA.
17. Name the biologically important nucleotides.
18. Name the two transport proteins and their importance.
19. Explain the physical properties of normal urine.
20. Classify the proteins according to shape with examples.
21. What are the abnormal constituents present in the urine in uncontrolled diabetes mellitus.
22. Name any two nutritional disorders and write the deficiencies.