



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.Sc. Molecular Biology & Human Genetics

First Year (Semester-I) November 2024 Examination

Time: 3 Hrs.

[Max. Marks: 100]

Biochemistry
Q.P Code: M1540

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 20 = 40 Marks

1. What is Protein Energy Malnutrition (PEM)? Classify it and explain the causes, clinical features and biochemical findings in PEM. Define balanced diet and mention the basic principle in prescribing a balanced diet. Add a note on are dietary fibers and give the beneficiary effect & disadvantage of dietary fibers (2+8+5+5)
2. What are nucleosides and nucleotides? Give two examples and mention their biomedical importance. What are the different types of DNAs? Describe the structure of B-DNA with a neat labelled diagram. Mention the types of RNA and write the functions. (5+3+7+5)

SHORT ESSAY

6X 10 = 60 Marks

3. Define Enzymes. Describe in detail the various factors affecting enzyme activity. Illustrate with suitable graphs (2+8).
4. Define Carbohydrates. Classify them with suitable examples & write their biomedical importance (1+6+3).
5. Describe the chemistry, Recommended Daily Allowance, Biochemical functions and deficiency manifestations of Vitamin A (2+1+4+3).
6. Describe in detail the structural organization of Proteins with diagrams
7. Give an account on Principle, different types, instrumentation, procedure and applications of Electrophoresis (1+2+2+3+2).
8. Describe Colorimeter with respect to Principle, instrumentation, Application, advantage & disadvantage (2+3+2+3).

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