

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH



(A DEEMED TO BE UNIVERSITY)

**Integrated B.Sc. – M.Sc. Clinical Nutrition and Dietetics (CND)
First Year Semester-I March 2023 Examination**

Time: 2.00 Hrs.

[Max. Marks: 50]

FUNCTIONAL HUMAN ANATOMY

Q.P Code: N1030

*Your answer should be specific to the questions asked
Draw neat labeled diagrams wherever necessary.*

LONG ESSAY:

6X2=12 Marks

1. Describe the External features and blood supply of Heart
2. Describe the stomach under following headings: Parts, Relations and arterial supply

SHORT ESSAY:

6X4=24 Marks

3. Mention the nerve supply of Tongue
4. Mention the gross features and blood supply of Pancreas
5. Describe the microscopic structure of transverse section of Bone.
6. Describe the gross features and relations of Urinary Bladder
7. Classify the cartilage with examples
8. Mention the differences between hila of right and left lungs

SHORT ANSWER:

7X2=14 Marks

9. List the contents of porta hepatis
10. Mention the derivatives of neural crest cells
11. Mention relations of Right Suprarenal gland
12. Draw a labelled diagram of microscopic structure of mucous salivary gland
13. Mention the microscopic differences between artery and vein.
14. Mention the structures at the hilum of kidney.
15. What are Hassall's corpuscles?

* * *



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

Integrated BSc. MSc Clinical Nutrition and Dietetics

First Year I Semester March 2023 Examination

Time: 2.30 Hrs.

[Max. Marks: 80]

NUTRITIONAL BIOCHEMISTRY

QP CODE: N1360

Your answers should be specific to questions asked.

Draw neat labelled diagrams wherever necessary

Long Essay

2x10=20marks

1. Define Glycolysis. Write the reactions by which glucose is converted to lactate. Add a note on its Energetics 1+6+3
2. Define Enzymes. Classify enzymes. Give one example for each class. 1+6+3

Short Essay

6x5=30 marks

3. Define Carbohydrates. Classify them with examples. 1+4
4. What are Phospholipids? Classify them with suitable examples and enumerate the important function of any two of them. 1+2+2
5. Explain the primary structure of proteins? What is its significance? 4+1
6. List the Transport mechanisms across cell membrane and give one suitable example for each 3+2
7. What is oxidative phosphorylation and substrate level phosphorylation? Give one example for each. 2.5+2.5
8. What are Lipoproteins? List the different types of lipoproteins. 1+4

Short answers

10x3=30 marks

9. Compare and contrast Lactose and Maltose with reference to source, composition and osazone crystals. 1+1+1
10. What are essential amino acids? Name them. 1+2
11. What are Trans fatty acids? What is its significance? 1+2
12. What are Isoenzymes? Give two examples. 1+2
13. What are lipotropic factors? Give 2 examples. 1+2
14. Define Transamination. Give two examples of Transaminases. 1+2
15. Write the biological reference range of Serum Magnesium. List any two functions of Magnesium. 1+2
16. Name the thyroid Hormones. Mention any two functions of thyroid hormones. 1+2
17. Compare and contrast DNA and RNA with reference to a)Composition and structure b)Location c)Function 1+1+1
18. What are buffers? List the buffer systems in plasma. 1.5+1.5

* * * *



**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH
(A DEEMED TO BE UNIVERSITY)**

INTEGRATED B.Sc. –M.Sc. CLINICAL NUTRITION AND DIETETICS (CND)

First Year Semester-I March 2023 Examination

TIME – 2.30 HRS

MAX MARKS: 80

Food Facts and Principles -I

QP CODE: N1381

Your answers should be specific to questions asked.

Draw neat labelled diagrams wherever necessary

Long Essay

2x10 = 20marks

1. Define Food and discuss the physiological functions of foods.
2. Explain in detail structure and composition of wheat,

Short Essay

6x5 = 30 marks

3. Explain the properties of acids and bases with examples
4. Explain the importance of in nutrients cereals and millets
5. Differentiate between soluble and insoluble fibres and list their sources.
6. Describe the functional properties of fats and oils
7. Explain the effects of processing on pigments present in fruits and vegetables
8. Describe the process of post-harvest changes in fruits

Short Answer

10x3=30marks

9. List the Anti-Nutritional Factors present in legumes and pulses
10. Define sols, gels with examples
11. Write a note on Dextrinization
12. Write a note on pulse protein concentrate
13. List the factors that extend the shelf life of vegetables and fruits.
14. Mention the classification of food based on their shelf life
15. Write about the molecular structure of water
16. Define Tyndall effect.
17. List the major and minor millets.
18. Write about the cereal enzymes used in food industry.

* * * *