Integrated B.Sc. – M.Sc. Clinical Nutrition and Dietetics (CND) First Year Semester-I, February-2020 Examination.

Time: 2.00 Hrs. [Max. Marks: 50]

HUMAN PHYSIOLOGY

Q.P Code: N1010

Your answers should be specific to the questions asked. Draw neat labelled diagrams wherever necessary.

Long Essay 2 X 6 = 12 Marks

1. List the phases of deglutition. Explain the steps involved in second phase of deglutition.

2. Define cardiac cycle. Describe the pressure changes in left ventricle

Short Essay 6X 4 = 24 Marks

3. Explain the role of platelets in formation of temporary hemostatic plug

- 4. Name the muscles involved in respiration.
- 5. List the functions of renin angiotensin mechanism
- 6. List the steps of phagocytosis
- 7. List the hormones secreted by posterior pituitary with its functions
- 8. Define synapse. list two inhibitory neurotransmitters

Short Answer 7 X 2 = 14 Marks

- 9. List the steps involved in urine formation
- 10. List the hormones influencing menstrual cycle
- 11. Classify temporary methods of contraceptives among females
- 12. List the function T lymphocyte
- 13. Give the normal value of PCV in males & females
- 14. List the types of cells in gastric mucosa & give the function of each.
- 15. Define secondary active transport with example

Integrated B.Sc. – M.Sc. Clinical Nutrition and Dietetics (CND) First Year Semester-I, February-2020 Examination.

Time: 2.00 Hrs. [Max. Marks: 50]

NUTRITIONAL BIOCHEMISTRY

Q.P Code: N1020

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

Long Essay 2x6=12Marks

1. Name the ketone bodies. Describe the formation and breakdown of ketone bodies. (1+2.5+2.5)

2. Describe the dietary sources, Recommended Daily Allowance, Biochemical functions and deficiency manifestations of Vitamin A. (1+1+2+2)

SHORT ESSAY 6x4=24Marks

- 3. What are Phospholipids? Classify them with suitable examples and important functions. (1+3).
- 4. Mention normal levels of serum calcium. Describe the factors affecting the absorption and functions of calcium. (1+1.5+1.5)
- 5. What are nucleosides and nucleotides? Give examples. (2+2)
- 6. Define Replication. List the enzymes and proteins of replication with their functions. (1+3)
- 7. Define Enzymes. Explain any 3 factors affecting enzyme activity. (1+3)
- 8. Write the reactions of HMP shunt pathway.

SHORT ANSWERS

7x2=14Marks

- 9. Define homopolysaccharides. Give two examples.
- 10. What are lipotropic factors? Write two examples.
- 11. Name two iron storage disorders.
- 12. Name two biologically important peptides with their biological role.
- 13. Name hormones of pancreas.
- 14. What are uncouplers? List any two uncouplers.
- 15. Write the biological reference interval for: a)FBS b) Blood Urea

Integrated B.Sc. – M.Sc. Clinical Nutrition and Dietetics (CND) First Year Semester-I, February-2020 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=12Marks

1. Explain the Urinary bladder under following headings: External features and Nerve supply

2. Explain the Tongue under following headings: Gross features and Muscles

SHORT ESSAY: 6X4=24Marks

- **3.** Mention the structures in the hilum of both the Lungs
- 4. Classify the synovial joints with examples
- 5. Describe the microscopic structure of Liver
- **6.** List the steps in implantation
- 7. Enumerate the boundaries and contents of Middle ear.
- **8.** List the structures forming Stomach bed with a diagram.

SHORT ANSWER: 7X2=14Marks

- 9 Name the constrictions of ureter
- 10. List the openings in middle meatus
- 11. Name the endocrine glands in Human body
- 12. List the parts of small intestine
- 13. Draw a labelled diagram of microscopic structure of white fibrous cartilage
- 14 Morula
- 15. List the meningeal layers of brain

Integrated B.Sc. – M.Sc. Clinical Nutrition and Dietetics (CND) First Year Semester-I, February-2020 Examination

TIME- 2 Hrs. Max Marks: 50

FOOD FACTS AND PRINCIPLES -I Q.P. CODE: N1041

Your answers should be specific to questions asked. Draw neat labelled diagrams wherever necessary

LONG ESSAY 2x6 = 12 marks

- 1. Explain the sociological and psychological functions of foods
- 2. Explain effects of cooking on nutritive value of cereals

 $\underline{SHORT\ ESSAY} \qquad \qquad 6x4 = 24\ marks$

- 3. Enumerate bound, free and absorbed water with diagrams
- 4. Describe any eight properties of water
- 5. Explain dextrinization process
- 6. Discuss about increase in digestibility and availability of amino acids present in pulses and legume
- 7. Explain the effects of temperature and time of heating on fats and oils
- 8. Explain nutritive value of other vegetables

SHORT ANSWER 7x2 = 14 marks

- 9. Define emulsions and foams with example
- 10. Define PH and mention the PH scale of different foods
- 11. List the examples of bound, free and absorbed water in foods
- 12. List the methods employed to reduce anti-nutrient content in pulses and legumes
- 13. Classify the vegetables and give two examples for each
- 14. Define iodine number and saponification number
- 15. Mention nutritive value of soya bean per 100grams