

B.Sc (Hons) FNS (Rep) Semester-2 Examination
FNS 123

Nutritional Physiology
April-2024

Time : 2-30 Hours]

[Max. Marks : 70

Instructions:

All questions are compulsory.

Illustrate your answers with neat diagrams wherever necessary.

Question - 1

Write the following

- i) Write a short note on microtubule. [07]
- ii) Explain chromosome packaging in nucleus. [07]

OR

- i) Explain: vesicle mediated transportation across the cell. [07]
- ii) What is cell junction? Explain any two types in detail. [07]

Question - 2

Write the following

- i) How food digested and absorbed in large intestine? [07]
- ii) Explain different types of salivary gland and their function. [07]

OR

- i) Explain Dalton's Law and Henry's Law for exchange of O₂ and CO₂. [07]
- ii) Explain functions of various organs of respiratory track. [07]

Question - 3

Write the following

- i) Explain erythropoiesis and degradation of RBC. [07]
- ii) Explain Different types of WBC present in blood. [07]

OR

- i) Explain the process of urine formation. [07]
- ii) Explain cardiac cycle. [07]

Question - 4

Write the following

- i) Explain structure of neuron in detail. [07]
- ii) Explain thyroid gland present in human body with its functions. [07]

OR

- i) Explain function of Skeletal system in detail. [07]
- ii) What types of cells present in heart tissue? [07]

Question - 5

Attempt any seven out of twelve

- i) What is Glycocalyx? [14]
- ii) What is the function of mitochondria?

N66-2

- iii) How lysosome maintain internal pH5?
- iv) Cite functions of epithelial tissue.
- v) Explain types and function of bone tissue.
- vi) Define Inspiratory reserve volume and Expiratory reserve volume.
- vii) Explain HCL secretion by parietal cells.
- viii) What is the role of ACTH hormone in kidney?
- ix) What are the major functions of Heart.
- x) A person with type B positive blood receives a transfusion of type AB positive blood. What will happen?
- xi) How many types of nerve cells are there in nervous system?
- xii) Define neuro-muscular junction.

→