Total Pages : 8

LN-380

D.Pharmacy (Part-II) Examination, 2023

BIOCHEMISTRY AND CLINICAL PATHOLOGY

Time Allowed : Three Hours

Maximum Marks : 80

Note : Question paper is divided into three sections. Attempt question of all three sections as per direction. Distribution of marks is given in each section.

SECTION-A

(Long Answer Type Questions)

Note : Attempt **any six** questions of the following. [6x5=30]

1. (i) Define and classify carbohydrates and write their chemical properties.

(ii) Write the biological role of proteins and amino acids.

(iii) Explain in detail the structure and functions of DNA.

(iv) Discuss the TCA cycle.

(v) Explain the electron transport chain.

(vi) Explain the composition of body fluids and physiological importance of electrolytes.

(vii) Write the functions of Liver and clinical significance of Liver function test.

SECTION-B

(Short Answer Type Questions)

Note : Attempt **any ten** questions of the following. [10x3=30]

2. (i) Give the scope of biochemistry in pharmacy.

(ii) Draw the structure of glucose, fructose and galactose.

(iii) Define and classify proteins.

(iv) Write the functions of amino acids.

(v) Write the structure and functions of cholesterol.

(vi) Write the identification tests for Lipids.

(vii) Briefly discuss fat soluble vitamins.

(viii) Discuss the diseases related to carbohydrate metabolism.

(ix) Write the functions of iron and calcium.

(x) Write the functions of water.

(xi) Name the normal and abnormal constituents of urine.

SECTION-C

(Very short/MCQs/Objective Type Questions)

Note : Attempt all questions of the following. [20x1=20]

3. (i) Define biotechnology.

(ii) Two examples of Polysaccharides.

(iii) Name two tests for identification of carbohydrates.

(iv) Name two protein deficiency diseases.

(v) Scurvy is related to :

(a) Vitamin A

(b) Vitamin C

(c) Vitamin D

(d) Vitamin K

(vi) Vitamin D deficiency in children causes :

(a) Dementia

(b) Pellagra

(c) Dermatitis

(d) Rickets

(vii) _____is an inactive form of enzyme.

(a) Proenzyme

(b) Zymogen

(c) Both (a) and (b)

(d) None of the above

(viii) An example of oligosaccharide is :

(a) Sucrose

(b) Raffinose

(c) Lactose

(d) Fructose

(ix) Deficiency of Zinc causes :

(a) Hepatic porphyria

(b) Proteinuria

(c) Delayed wound healing

(d) All of the above

(x) Fats are liquid at room temperature. [T/F]

(xi) Catabolism refers to degradation of complex matter. [T/F]

(xii) Glycogenesis is the process of conversion of glucose into glycoge. [T/F]

(xiii) Kwashiorkor occurs due to protein deficiency. [T/F]

(xiv) Folate deficiency causes _____ anemia.

(xv) Give an example of reducing sugar.

(xvi) Pyruvate kinase is required in _____ pathway.

(xvii) The precursor compound for tyrosine is _____.

(xviii) What is invert sugar?

(xix) Uronic acid pathway is concerned with synthesis of vitamin _____.

(xx) Name two diseases related to Lipid metabolism.

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