

341253(41)**B. Pharmacy (Second Semester) Examination,
April-May 2019****(PCI Scheme)****(Branch : Pharmacy)****BIOCHEMISTRY - THEORY (BP203T)****Time Allowed : Three hours****Maximum Marks : 75**

Note : Question paper is of three parts i.e. (a), (b) and (c). Part (a) consist of 20 MCQs each of 1 mark. All questions are compulsory. Part (b) consists of 3 long answer questions of which attempt any two. Each of 10 marks. Part (c) consists of 9 short answer questions, attempt any seven questions. Each of 5 marks. Draw well labeled diagram wherever necessary.

Section-'A'**(Objective Type Questions) 20×1=20**

Note : Attempt all questions. Each question carries 1 mark.

1. Multiple Choice questions. Attempt all MCQs.

- (i) Translation is the formation of
- DNA from DNA
 - mRNA from DNA
 - Protein through mRNA
 - mRNA from pre mRNA
- (ii) Negative supercoils are introduced in DNA by
- Helicase
 - DNA ligase
 - DNA gyrase
 - DNA polymerase II
- (iii) Okazaki pieces are made up of
- RNA
 - DNA
 - RNA and DNA
 - RNA and proteins
- (iv) The replication of DNA occur in which direction
- 5' to 3'
 - 3' to 5'
 - 3' to 4'
 - 4' to 3'

- (v) Precursor for the biosynthesis of steroids, vitamin D, bile acid
- (a) Cholesterol
 - (b) Phospholipid
 - (c) Sphingomyelin
 - (d) Leukotriens
- (vi) Ketone boides are syntehsized in
- (a) Adipose tissue
 - (b) Liver
 - (c) Muscles
 - (d) Brain
- (vii) Enzyme inhibition caused by a substance resembling substrate molecule is
- (a) Competitive Inhibition
 - (b) Non-Competitive Inhibition
 - (c) Feedback Inhibition
 - (d) Allosteric Inhibitinon
- (viii) Major source of ATP in Aerobic organism
- (a) Oxidative Phosphorylation
 - (b) Substrate level Phosphorylation
 - (c) Hydrogenation
 - (d) Condensation

- (ix) End product of glycolysis under anaerobic condition
- (a) Pyruvate
 - (b) Oxaloacetate
 - (c) Palmitate
 - (d) Lactate
- (x) Metabolic defect associated with glycogen storage and degradation are called :
- (a) Glycogenemia
 - (b) Glycogenosis
 - (c) Glycogenenin
 - (d) Glyconemia
- (xi) Transfer of an amino group from an amino acid to ketoacid
- (a) Transmination
 - (b) Deamination
 - (c) Dacarboxylation
 - (d) Phosphorylation
- (xii) The major site of urea syntehsis is
- (a) Brain
 - (b) Kidneys
 - (c) Liver
 - (d) Muscles

- (xii) Which of the following is called as black urine disease in which patient urine resembles coke color
- (a) Albinism
 - (b) Phenylketonuria
 - (c) Gout
 - (d) Alkaptonuria
- (xiv) Excretory end product of protein (amino acid) metabolism
- (a) Urea
 - (b) Uric acid
 - (c) Ammonia
 - (d) All
- (xv) The Electron transport chain and ATP synthesizing system are located on the
- (a) Outer mitochondrial membrane
 - (b) Inner mitochondrial membrane
 - (c) Mitochondrial Matrix
 - (d) All of the above
- (xvi) Fatty acid are activated to acyl CoA and transported to mitochondria for oxidation by which carrier protein
- (a) Casein
 - (b) Carnitine

- (c) Ferritin
 - (d) Chromatin
- (xvii) The end product of Purine metabolism is
- (a) Uric acid
 - (b) Uric acid
 - (c) Orotidine
 - (d) Alanine
- (xviii) Synthesis of RNA from DNA is known as
- (a) Transcription <http://www.csvtuonline.com>
 - (b) Translation
 - (c) Transduction
 - (d) Transformation
- (xix) The total (DNA) genetic information contained in a living cell (or organism) is called as
- (a) Transcriptome
 - (b) Genome
 - (c) Proteome
 - (d) None of the above
- (xx) Substrate concentration at which an enzyme attains half its maximum velocity is
- (a) Threshold value

- (b) Michaelis-Menton constant
- (c) Concentration level
- (d) None of the above

Section-'B'

(Long Answer Type Questions) 2×10=20

*Note : Attempt any two questions out of 3 question
Each question carries 10 marks.*

- 2. Describe in detail about the reaction, energetic and significance of TCA cycle or Glycolysis.
- 3. Define β oxidation of fatty acid. Describe in detail about the oxidation of palmitic acid.
- 4. Draw the structure of double helix DNA and write its function. Give the diagrammatic explanation of the semi conservative replication of DNA.

Section-'B'

(Short Answer Type Questions) 7×5=35

Note : Attempt any seven questions out of nine questions. Each question carries 5 marks.

341253(41)

PTO

- 5. What is Electron transport chain? Briefly explain mechanism of ETC.
- 6. Give the classification and biological role of carbohydrate.
- 7. Define genetic code and write its characteristics.
- 8. Write the therapeutic and diagnostic application of enzymes.
- 9. Draw and briefly explain urea cycle.
- 10. Write down the biological significance of Cholesterol.
- 11. Briefly describe the steps of RNA synthesis.
- 12. Write is diabetes mellitus? Briefly explain hormonal regulation of blood glucose level.
- 13. Write the properties of IUB classification of enzymes.

http://www.csvtuonline.com

Whatsapp @ 9300930012

Your old paper & get 10/-

पुराने पेपर्स भेजे और 10 रुपये पायें,

Paytm or Google Pay से

1,590]

341253(41)