



Seat No.	
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Set P

**B.Pharm. (Semester – II) (New CBCS) Examination, 2018
BIOCHEMISTRY**

Day and Date : Wednesday, 12-12-2018
Time : 2.30 p.m. to 5.30 p.m.

Max. Marks : 75

1. Multiple Choice Questions.

(20×1=20)

- 1) Edman's reagent contains
 - a) Phenylisothiocyanate
 - b) 1-Fluoro-2, 4-dinitrobenzene
 - c) Urea
 - d) Dansyl chloride
- 2) An aromatic amino acid is
 - a) lysine
 - b) arginine
 - c) phenylalanine
 - d) histidine
- 3) Key and lock hypothesis of enzyme action was given by
 - a) Fischer
 - b) Koshland
 - c) Buchner
 - d) Kuhne
- 4) Guanine is
 - a) 6-Amino purine
 - b) 2-Amino-6-oxypurine
 - c) 2-Oxy-4-aminopyrimidine
 - d) 2, 4-Dioxypyrimidine
- 5) Kerasin consists of
 - a) Nervonic acid
 - b) Lignoceric acid
 - c) Cervonic acid
 - d) Clupanodonic acid
- 6) Higher alcohol present in waxes is
 - a) Benzyl
 - b) Methyl
 - c) Ethyl
 - d) Cetyl
- 7) Hydrolysis of fats by alkali is called
 - a) Saponification number
 - b) Saponification
 - c) Both (a) and (b)
 - d) None of these

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- 8) Cori cycle is
- a) Synthesis of glucose
 - b) Reuse of glucose
 - c) Uptake of glyucose
 - d) Both (a) and (b)
- 9) Stereo isomers which are not mirror images of each other are called
- a) isomers
 - b) stereoisomers
 - c) diastereomer
 - d) enantiomers
- 10) Inter-conversion of α to β form of glucose is called as
- a) inversion
 - b) tautomerism
 - c) muta-rotation
 - d) racemization
- 11) Reducing property of sugars is attributed to presence of _____ group.
- a) free aldehydic
 - b) free aldehydic or ketonic
 - c) ketonic
 - d) aromatic
- 12) Which of the following is essential fatty acid ?
- a) Arachidonic acid
 - b) Lenoleic acid
 - c) Lenolenic acid
 - d) All of the above
- 13) The number of _____ of iodine absorbed by 100 grams of fat is called as iodine number.
- a) Kilograms
 - b) Milligrams
 - c) Grams
 - d) Micrograms
- 14) The no. of ATP produced when 2 molecule of acetyl-CoA is oxidized through TCA cycle
- a) 24
 - b) 38
 - c) 12
 - d) 36
- 15) Example of enzyme specificity
- a) Stereo specificity
 - b) Reaction specificity
 - c) Substrate specificity
 - d) All of these
- 16) An enzyme which is secreted ready for action is called _____ secretion.
- a) Zymase
 - b) Zymogen
 - c) Intracellular
 - d) Extracellular



- 17) Solid alcohol from bile is also known as
- Cholesterol
 - Ergosterol
 - Lanosterol
 - Endosterol
- 18) Phospholipids prevent formation of fatty liver hence they are called as
- eicosanoids
 - lipotropic factor
 - fat factor
 - fat prevention factor
- 19) Histamine is formed from histidine by
- Deamination
 - Dehydrogenation
 - Decarboxylation
 - Carboxylation
- 20) Iodine number denotes
- Degree of unsaturation
 - Saponification number
 - Acid number
 - Acetyl number
2. Long answers (Answer **2** out of 3). (2×10=20)
- Describe β -oxidation of fatty acid. Calculate net ATP yield.
 - Explain in detail TCA cycle with energetics. Add note on its amphibolic nature.
 - What are the different levels at which proteins structure is studied ?
3. Short answers (Answer **7** out of 9). (7×5=35)
- Give structure and functions of mucopolysaccharides.
 - Explain the terms acid value and saponification value.
 - What are epimers ? Write note on anomers and optical rotation.
 - Write note on fatty acids. Give details of EFA.
 - Describe Watson and Crick model of DNA structure.
 - What are high energy compounds ? Give the examples.
 - Explain structure and biosynthesis of cholesterol.
 - Discuss Sanger's and Edman's reactions.
 - Write in details about inhibitors of enzymatic action.