Roll No. | | | | | | | | | | | | | Total No. of Pages : 03

Total No. of Questions : 22

B.Pharma (2017 & Onwards) (Sem.–2)

BIOCHEMISTRY

Subject Code : BP-203T

M.Code : 74969

Time : 3 Hrs. Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**
3. **SECTION-C contains NINE questions carrying FIVE marks each and students have to attempt any SEVEN questions.**

SECTION-A

Choose correct answer of the following objective type questions :

1. In nucleotide nitrogenous base is linked with ribose by_____

   A. N-glycosidic bond B. O-glycosidic bond

   C. Peptide bond D. Phosphodiesterase

2. Glycogen is _____ of glucose :

   A. Homo polysaccharide B. Hetero polysaccharide

   C. Oligosaccharide D. Disaccharide

3. Storage material of fuel in plant is :

   A. Starch B. Glycogen

   C. Glucose D. Galactose

4. Amino acids in proteins are usually in :

   A. L-isomer B. D-isomer

   C. A & B both D. None of above

5. For endergonic reactions ΔG is_____

A. Positive B. Negative

C. Zero D. Slightly negative

6. Expand the short form 'PRPP'

A. 5-Phosphoribosyl 1-pyrophosphate

B. 1-Phosphoribosyl 5-pyrophosphate

C. 5-Phosphoribosyl 2-pyrophosphate

D. 5-Phosphoribosyl 3-pyrophosphate

7. How many NADH molecules are generated in complete oxidation of one molecule of Acetyl -CoA

A. 4 B. 2

C. 5 D. 3

8. Synthesis of fatty acid takes place in

A. Cytosol B. Mitochondria

C. Both in A & B D. Membrane

9. Coenzyme derived from vitamin B_3 is

A. NAD B. NADP

C. A& B both D. FAD

10. Nonsense coden is_____

A. UAA B. UGA

C. UAG D. All three

SECTION-B

11. Compare reactions of glycolysis and HMP shunt. Comment on deficiency of G6PD

12. Describe various steps of de nove synthesis of pamitic acid. Explain the role citrate shuttle.

13. Describe various steps of protein synthesis. Comments on its inhibitors.

SECTION-C

14. Classify amino acid on the basis of side chain.

15. Draw structure of ATP and describe its biological, significance as high energy molecules.

16. Name three enzymes involved in glycogenolysis. Describe their reactions.

17. Differentiate between oxidative phosphorylation and substrate level phosphorylation.

18. Describe formation and utilization of ketone bodies.

19. Describe the biological significance and biosynthesis of adrenaline.

20. Discuss the metabolic disorder of tyrosine.

21. Discuss the semi-conservative model of DNA replication.

22. Describe reactions of urea cycle.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.