S.No. 1758 **12UBCA02**

(For the candidates admitted from 2012–2013 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Second Semester

Allied – BIOCHEMISTRY – II

(Common for Biotechnology/ Microbiology)

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define buffers.
2. Define viscosity.
3. What is glycogenolysis?
4. Name any two saturated fatty acids.
5. Define transamination.
6. What is decarboxylation?
7. Define oxidative phosphorylation.
8. Name any two high energy compounds.

9. Define hormones.

10. Name the disorders of glucagon activity.

PART B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Derive the Henderson - Hasselbalch equation.

Or

(b) Comment on dialysis.

12. (a) Explain the reactions of glycolysis.

Or

(b) Write a short note on omega oxidation of fatty acids.

13. (a) Describe non-oxidative deamination with examples.

Or

(b) Explain the reactions of urea cycle.

14. (a) Discuss the mechanism of oxidative phosphorylation.

Or

(b) Explain the role of high energy compounds.

15. (a) Write about the classification of hormones.

Or

(b) Describe the biological functions of thyroxine.

PART C — (3 × 10 = 30 marks)

Answer any THREE out of Five.

16. Discuss the principle and applications of paper chromatography.

17. Explain the reactions and significance of citric acid cycle.

18. Describe the inter relationship between carbohydrate and protein metabolism.

19. Write a detailed note on the reactions of respiratory chain.

20. Explain the biological functions and disorders of insulin.

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