Reg. No		Name:		
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MSc DEGREE END SEMESTER EXAMINATIONS – NOVEMBER 2015

SEMESTER- 1, SUBJECT: ZOOLOGY COURSE: P1ZOOT03-BIOCHEMISTRY

Time: Three Hours Max. Marks: 75

Part A

(Answer any 8 questions. Each carries 2 marks)

- 1. Distinguish between 'epimerism' and 'anomerism'.
- 2. What is saponification number?
- 3. Mention the hemiacetal formation in glucose.
- 4. What is ketosis?
- 5. Comment on the function of Prostaglandins.
- 6. What is sphingolipids?
- 7. Comment on the Urea cycle.
- 8. Write a brief note on the structure of t-RNA.
- 9. Comment on the active site of an enzyme.
- 10. What is Transamination?
- 11. Differentiate iso-enzymes and co-enzymes.
- 12. Write the structure of Thymine.

 $(2 \times 8 = 16)$

Part B

(Answer any 7 questions. Each carries 5 marks)

- 13. Mention the structure of heteroglycans with suitable examples.
- 14. Describe the secondary structure of protein.
- 15. Comment on the structure and biological importance of cholesterol.
- 16. Describe the characteristic features of B-DNA.
- 17. Comment on fibrous proteins.
- 18. Explain how glucose is formed from glycogen?
- 19. Briefly describe the β oxidation of fatty acids.

- 20. Give a short note on role of minor nutrients.
- 21. Mention the feedback inhibition of enzyme activity.
- 22. Mention the pentose phosphate pathway?

 $(5 \times 7 = 35)$

Part C

(Answer any 2 questions. Each carries 12 marks)

- 23. Explain the Michaelis-Menten equation on enzyme kinetics.
- 24. Give an account on the classification of aminoacids with suitable examples.
- 25. Describe the catabolism of purines.
- 26. Discuss the steps involved in glycolysis.

 $(12 \times 2 = 24)$
