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Reg. No.....

Name.....

M.Sc. DEGREE (C.S.S.) EXAMINATION, FEBRUARY 2018

First Semester

Faculty of Science

Branch VIII—Zoology

ZY1CT03—BIOCHEMISTRY

(2012 Admission onwards)

Time : Three Hours

Maximum Weight : 30

Section 1 (Short Answer Type Questions)

Answer any **ten** *out of twelve questions.*
Weight 1 *each.*

1. C DNA.
2. Dextrans.
3. Ketolysis.
4. Hyaluronic acid.
5. Importance of glycolysis.
6. Beta oxidation.
7. Iodine number.
8. Domains and motifs.
9. Rancidity.
10. Name a cyclic fatty acid and comment on.
11. Restriction endonucleases.
12. Ketosis.

(10 × 1 = 10)

Section 2 (Short Essay Type Questions)

Answer any **five** *out of eight questions.*
Weight 2 *each.*

13. Discuss various structural polysaccharides and their role.
14. Give the importance of lipids in terms of structure and role.
15. Describe the regular repeating structure of protein.
16. Explain Cori cycle.

Turn over

17. Explain Pentose Phosphate pathway.
18. Describe the degradation of phenylalanine.
19. Write notes on key enzymes and enzyme engineering.
20. Explain De novo synthesis of fatty acids.

(5 × 2 = 10)

Section 3 (Long Essay Type Questions)

Answer any **two** *out of three questions.*
Weight 5 *each.*

21. Explain in detail the process of glycolysis.
22. Describe the structure, significance and role of isoenzymes with suitable examples.
23. Explain in details the process of oxidation of saturated fatty acids.

(2 × 5 = 10)