

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2011 – 12)

SUBJECT CODE: 11BY/PC/BC14

M. Sc. DEGREE EXAMINATION, NOVEMBER 2011
BIOTECHNOLOGY
FIRST SEMESTER

COURSE : CORE
PAPER : BIOCHEMISTRY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS:

(20 x 1 = 20)

DEFINE / EXPLAIN THE FOLLOWING.

1. Acidosis
2. Define pH
3. Ketone bodies
4. Mitochondria – marker
5. Zymogen
6. Transamination
7. Cofactor
8. Allosteric site
9. Metabolism
10. Thromboxanes
11. Growth hormone
12. Motifs
13. PUFA
14. Zwitter ions
15. Peptide bond
16. Feedback inhibition
17. Xenobiotics
18. Intracellular buffer
19. Cytochrome P450
20. Glycolysis

SECTION – B**ANSWER ANY FOUR QUESTIONS:****(4 x 10 = 40)**

21. How the pH of body fluids are maintained?
22. Explain the structure & property of porphyrins.
23. Give the classification of enzymes.
24. Explain ETC.
25. Explain biosynthesis of cholesterol.
26. How are foreign substances metabolized in the body?

SECTION – C**ANSWER ANY TWO QUESTIONS: DRAW DIAGRAMS WHEREVER NECESSARY:
(2 X 20 = 40)**

27. Explain TCA cycle & calculate the number of ATPs produced.
28. Describe the changes in the liver in fed state in relation to carbohydrates, fats & proteins.
29. How are cell fractions obtained & identified?
30. Describe the applications of any 5 enzymes in diagnosis.
