

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI –600 086
(For candidates admitted during the academic year 2011– 12 & thereafter)
SUBJECT CODE: 11 BY/PI/TE24

M. Sc. DEGREE EXAMINATION, NOVEMBER 2014

COURSE : INDEPENDENT ELECTIVE
PAPER : TISSUE ENGINEERING
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL THE QUESTIONS

(20 x 1 = 20)

1. ECM
2. Integrins
3. PLLA acid
4. Biocompatibility
5. Angiogenesis
6. Chondrocytes
7. RAD
8. Cell adhesion molecules
9. Anchorage-dependent cells
10. Mesenchymal stem cells
11. Dialysis
12. Hydrogels
13. Hemofiltration
14. BMP
15. Fibronectin
16. IDDM
17. Dental implants
18. Multicomponent capsule
19. Huntington's disease
20. Syneresis

SECTION – B

ANSWER ANY FOUR QUESTIONS IN ABOUT 600 WORDS

(4 x 10 = 40)

21. Give an account on scaffolds used for tissue engineering.
22. Write an account on periodontal application in tissue engineering.
23. Give and account on growth factors.
24. Explain cell-cell interaction.
25. Give an account of bio reactors used in tissue engineering.
26. What is artificial womb?

SECTION – C

ANSWER ANY TWO QUESTIONS IN ABOUT 1500 WORDS

(2 x 20 = 40)

27. Give an account on brain implants.
28. Write a note on red blood substitutes.
29. Give an account on skin regeneration template, nerve regeneration template and regeneration of knee meniscus
30. Explain tissue assembly in microgravity.
