

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086**  
**(For candidates admitted during the academic year 2009 – 10 & thereafter)**  
**SUBJECT CODE: BY/PC/CM14**

**M. Sc. DEGREE EXAMINATION, NOVEMBER 2010**  
**BIOTECHNOLOGY**  
**FIRST SEMESTER**

**COURSE : CORE**  
**PAPER : CELL AND MOLECULAR BIOLOGY**  
**TIME : 3 HOURS**

**MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL QUESTIONS:**

**(20 x 1 = 20)**

1. Pribnow Box
2. RNase
3. Colchicine
4. Apoptosis
5. Attenuation
6. Dancing genes
7. Triplet code
8. Promoters
9. Retroviral gene
10. Signal peptide
11. Methylase
12. Fimbriae
13. Lac Z gene
14. Calmodulin
15. Prophage
16. Peripheral proteins
17. Histones
18. Reverse Transcriptase
19. Chitin
20. Methylcytosine.

**SECTION – B**

**ANSWER ANY FOUR QUESTIONS:**

**(4 x 10 = 40 )**

21. Describe the organisation of eukaryotic genome.
22. Discuss the transcription in prokaryotes.
23. Explain different types of RNA.
24. Explain programmed cell death.
25. Write a note lytic growth in bacteriophage.
26. Elaborate on cell – cell interactions.

**SECTION – C**

**ANSWER ANY TWO QUESTIONS: DRAW DIAGRAMS WHEREVER  
NECESSARY:**

**( 2 X 20 = 40 )**

27. Discuss the replication of DNA in prokaryotes.
28. Describe protein synthesis in eukaryotes.
29. Explain Meiosis and Mitosis cycle in bacteria.
30. Write on cell and subcellular organisation in eukaryotes.

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