

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

SECOND SEMESTER – APRIL 2010

ZO 2801 - GENETICS

Date & Time: 27/04/2010 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

SECTION A

Answer **ALL** the questions

10 x 2 = 20 marks

1. Define nucleoid.
2. Comment on conservative type of replication.
3. What is transition?
4. Explain somatic luxurience.
5. Enumerate the characteristics of genetic code.
6. Explain nucleolar organizer.
7. Comment on amniocentesis.
8. Explain erythroblastosis foetalis.
9. Name any two phages having single stranded DNA.
10. Name the terminator codons.

SECTION B

Answer any **FOUR** of the following

4 x 10 = 40marks

11. Explain operon hypothesis.
12. Describe the structure of DNA.
13. Explain semi conservative type of replication.
14. Categorize point mutation.
15. Elucidate the importance of prenatal diagnosis.
16. Explain Hardy Weinberg equilibrium.

SECTION -C

Answer any **TWO** of the following

2 x 20 = 40marks

17. Write an essay on eugenics.
18. Discuss sex determination in *Drosophila* and Man.
19. Discuss the role of genes in development.
20. Describe endonucleases.
