

15P313

(Pages: 2)

Name.....

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2016

(CUCSS - PG)

(Zoology)

CC15P ZO3 C07 - CELL AND MOLECULAR BIOLOGY

(2015 Admission)

Time : Three Hours

Maximum : 36 Weightage

I. Answer *all* fourteen questions. (Weightage – 1)

1. What is Pribnowbox?
2. What is Satellite DNA?
3. Write about anti codon limb of t RNA.
4. Write any two features of transcription terminator regions.
5. Briefly explain RNA polymerase.
6. What are LINES and SINES?
7. What are r protein mutants?
8. What are ribozymes?
9. What is *Hfr* strain?
10. What are Okazaki fragments?
11. Mention the significance of cot value.
12. Write any two features of mismatch pair.
13. What are multigene complexes?
14. Mention the role of RecA protein.

(4 x 1=14 Weightage)

II. Answer *any seven* questions (Weightage – 2)

15. Explain lytic cycle and lysogenic cycle in phages.
16. Describe transposons in maize
17. Briefly describe translational proof reading?
18. Explain the features of interrupted genes.
19. Write brief note on capping of m RNA.
20. Describe mitochondrial genome.
21. With suitable example outline evolutionary clock.
22. Explain wobble hypothesis.

(1)

23. Describe the rolling circle model of DNA replication.

24. Explain the genetic code of Mycoplasma.

(7 x 2 = 14 Weightage)

III. Answer *any two* questions (Weightage – 4)

25. Explain the molecular mechanism of DNA repair.

26. Write an account on extra nuclear genes of inheritance.

27. Discuss the new therapeutic interventions of cancer growth.

28. Discuss the models of replication

(2 x 4 = 8 Weightage)
