Reg. No…….. Name…… **U508**

B.SC DEGREE END SEMESTER EXAMINATION OCTOBER 2016

SEMESTER – 5: ZOOLOGY (CORE COURSE)

COURSE: **U5CRZOO5– CELL BIOLOGY AND MOLECULAR BIOLOGY**

Time: Three Hours Max. Marks: 60

Part A

*Answer **all** questions. Each question carries 1 mark.*

1. What are PPLOs?
2. Give two examples for microfilaments.
3. What is Recon?
4. What is the role of c-AMP?
5. Write any two characteristics of Z-DNA?
6. Define one gene one enzyme hypothesis?
7. Comment on Desmosomes
8. What are microtubules? (1 x 8 = 8)

Part B

*Answer **any Six** questions. Each question carries 2 marks.*

9. Give an account on cell coat and its function.
10. What do u mean by GERL Concept?
11. Define cell theory.
12. Differentiate heterochromatin and euchromatin
13. Enumerate the characteristics of Genetic Code.
14. Briefly explain signal hypothesis?
15. What do you mean by cell recognition?
16. Draw a diagram of nuclear pore complex and label its parts.
17. Discuss the contributions of Har Gobind Khorana.
18. What are suicidal bags? Why are they called so?. (2 x 6 = 12)

Part C

*Answer **any Four** questions. Each question carries 4 marks.*

19. Explain a typical bacterial cell?
20. Describe polymorphism in Lysosomes.
21. List the major functions of Golgi body.
22. Explain the features of Watson and Crick's double helix model of DNA.
23. Plasma membrane is a quasi-fluid membrane. Why?
24. Distinguish between prokaryotes and eukaryotes? (4 x 4 = 16)

Part D

*Answer **any Two** questions. Each question carries 12 marks.*

25. Describe gene regulation in eukaryotes?
26. Briefly explain the different modifications of plasma membrane with diagrams?
27. Explain the major events involved in the process of translation in eukaryotes
28. Explain the structure and function of mitochondria. (12 x 2 = 24)