DR.V.S.KRISHNA GOVT DEGREE COLLEGE (A), VISAKHAPRATNAM ZOOLOGY SEMESTER-4

TIME: 3Hrs

Max Marks: 60

ANIMAL PHYSIOLOGY, EMBRYOLOGY & ECOLOGY

SECTION-A

- I. Answer any FIVE of the following. Draw a labelled diagrams wherever necessary

 5x8=40
 - 1. (a) Write an essay on types and functions of placenta in mammals
 - (b) Describe the process Cleavages in embryonic development
- 2. (a) Write an essay on the Structure and functions of Heart in mammals **OR**
 - (b) Structure of nephron and counter current mechanism
- 3. (a) Write an essay on endocrine glands and its functions

OR

- (b) Hormonal control of reproduction in mammals
- 4. (a) Describe the important abiotic factors of ecosystem

OR

- (b) Explain the Nutrient cycles
- 5. (a) Describe the Community interactions and its types

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(b) Explain the Zoographical regions

SECTION-B

II. Answer any FIVE of the following. Draw a labelled diagrams wherever necessary 5x4=20

- 6. Fertilization
- 7. Types of eggs
- 8. Cardiac cycle
- 9. Ultra structure of muscle
- 10. Thyroid gland
- 11. Carbon cycle
- 12. Ecological succession
- 13. Ethiopian region