

Reg. No. : .....

Name : .....

Fourth Semester M.Sc. Degree Examination, September 2019

Zoology

Special Subject – Endocrinology

ZO 241: VERTEBRATE ENDOCRINOLOGY

(2013 Admission Onwards)

Time : 3 Hours

Max. Marks : 75

SECTION – A

Write very brief notes on any **ten** of the following. Each question carries **2**-marks

1. Chalcones
2. Neurotransmitters
3. Prostacyclins
4. Thromboxanes.
5. Leukotriens.
6. Steroid hormones.
7. Receptor ligand.
8. Peptide hormones
9. Receptor crosstalk.



10. Threonine kinase
11. Somatomedins
12. PDGF
13. HGF.
14. Carcinogens
15. Genetic engineering

(10 × 2 = 20 Marks)

SECTION – B

Write short notes on any **six** of the following. Each question carries **4** marks

16. Functions of hormones
17. Molecular mechanism of action of amines.
18. Receptors as mediators of endocrine signals.
19. Cyclic nucleotides.
20. Receptor with tyrosine kinase activity.
21. Receptors coupled with ligand gated ion channels.
22. Direct membrane action of steroid hormones.
23. Types of growth factors.
24. Ectopic production of hormone.
25. Hormone receptor status of breast cancer.

(6 × 4 = 24 Marks)



## SECTION – C

Write short essay on any **three** of the following. Each question carries **7** marks

26. Development of cancers from in appropriate hormonal treatment.
27. Oncogenes and hormonal function.
28. Role of hormones in behaviour of animals.
29. Radio isotopic studies.
30. Recombinant DNA techniques.

(3 × 7 = 21 Marks)

## SECTION – D

Write an essay on any **one** of the following. Each question carries **10** marks

31. General classes of chemical messengers.
32. Morphology and anatomy of endocrine glands.

(1 × 10 = 10 Marks)

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