

**19P315**

(Page: 1)

Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2020**

(CBCSS-PG)

**CC19P ZO3 C08 - DEVELOPMENTAL BIOLOGY AND ENDOCRINOLOGY**

(Zoology)

(2019 Admission Regular)

Time: Three Hours

Maximum: 30 Weightage

I. Answer any *four* questions.

1. Comment on cellular interactions in organogenesis.
2. Explain polyphenism.
3. Write on environmental disruptions of normal development.
4. Describe homeotic selector genes.
5. What are the physiological actions of androgens?
6. Discuss the role of glucocorticoids.
7. Comment on eicosanoids.

**(4 x 2 = 8 Weightage)**

II. Answer any *four* questions.

8. Explain hormonal control of amphibian metamorphosis.
9. Describe the causes of aging.
10. Explain the anterior posterior patterning in *Drosophila*.
11. Discuss the histological processes during regeneration.
12. Discuss second messenger hormone action.
13. Describe the anatomy and functions of parathyroid gland.
14. Explain the synthesis and chemistry of thyroid hormones.

**(4 x 3 = 12 Weightage)**

III. Answer any *two* questions.

15. Discuss in detail gene expression during development.
16. Describe the hormonal and molecular basis of insect metamorphosis.
17. Write an essay on the mechanism of fertilization.
18. Explain the general mechanism of hormone action.

**(2 x 5 = 10 Weightage)**

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