

AU-311

M.Sc. (Part-I) Semester-II (CBCS Scheme) Examination

ZOOLOGY

(Endocrinology)

Paper-VII

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory and carry equal marks.

(2) Draw labelled diagrams wherever necessary.

1. Describe the following :

- (a) Histology of Adrenal gland
- (b) Histological structure of testis
- (c) Melatonin and depressive disorders
- (d) Structure of Islets of Langerhans.

OR

- (e) Histology of Thymus gland
- (f) Melatonin and Cancer
- (g) Urohypophysis
- (h) Histology of Ovary.

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2. Describe the mechanism of hormone action at genetic level.

OR

Describe the role of hormone and regulation in growth and reproduction.

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3. Describe the following :

- (i) Metabolism of estrogen
- (j) Biosynthesis of T₃ and T₄
- (k) Chemical structure of prostaglandins
- (l) Biosynthesis of insulin.

OR

- (m) Biosynthesis of epinephrine
- (n) Metabolism of T3 and T4
- (o) Functions of prostaglandins
- (p) Ectohormones in mammals.

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4. Explain the following :

- (q) Parathyroid hormone disorders
- (r) Diabetic kidney problems
- (s) Addison's disease
- (t) Role of steroid hormones in female reproduction.

OR

- (u) Thyroid hormone disorders
- (v) Functions of Adrenaline and Noradrenaline
- (w) Diabetic nerve problems
- (x) Role of gonadotrophins in male reproduction.

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5. Give an account on Renin-Angiotensin mechanism.

OR

Describe neuroendocrine mechanism in insect metamorphosis.

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