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S. No. of Question Paper : 8057

Unique Paper Code : 2233010015

Name of the Paper : DSE-Human Endocrinology

Name of the Course : B.Sc. (H) Zoology

Semester : VI (NEP-UGCF)

Duration : 3 Hours

Maximum Marks : 90

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt any ~~five~~ questions, including

Question No. 1, which is compulsory.

1. (a) Define the following terms :

1½×6=9

- (i) Sleep apnea
- (ii) Neurohormone
- (iii) Osteoporosis
- (iv) Goitre
- (v) Virilism
- (vi) Trophic Hormones

P.T.O.

(b) Differentiate between the following :

2×4=8

- (i) Zona glomerulosa and Zona Fasciculata
- (ii) Receptor agonist and antagonist
- (iii) Somatotropin and Somatostatin
- (iv) Type I and Type II diabetes

(c) Give the full form of the following abbreviations (any six) :

6×1=6

- (i) DHEA
- (ii) 3 β HSD
- (iii) HRE
- (iv) DAG
- (v) MSH
- (vi) PVN
- (vii) GnRH.

(d) Match the following :

1×7=7

S.N.	Column A	Column B
1	Tamoxifen	Cortisol
2	PRL	Thyroxine
3	Immunosuppressant	Antiestrogen
4	TSH	Adenohypophysis
5	Endogenous rhythms	Hypothalamus
6	Mineralocorticoids	Pineal gland
7	Dopamine	Adrenal gland

2. (a) Briefly describe the positive feedback mechanism of hormones using a suitable example.
- (b) Describe the GPCR-mediated signaling pathways of peptide hormones involving different second messenger systems with examples. 5,10
3. (a) The pineal gland is considered as the biological clock of the body. Comment
- (b) Elaborate on the different types of disorders of the pituitary gland, clearly identifying their causes and symptoms. 5,10
4. (b) Explain the process of blood glucose regulation with emphasis on the role of insulin and glucagon
- (b) Discuss the functions of hormone released from the Parathyroid. 10,5
5. (a) Diagrammatically explain the histology and the function of the Adrenal gland.
- (b) Explain the significance of the renin-aldosterone-angiotensin system. 10,5

P.T.O.

6. Write short notes on any *three* of the following :

3×5=15

- (a) HRT in menopause
- (b) Receptor tyrosine kinase
- (c) Thyroid gland disorders
- (d) Cushing syndrome.