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5 SEM TDC DSE ZOO (CBCS) 3 (H)

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(Held in January/February, 2022)

ZOOLOGY

(Discipline Specific Elective)

(For Honours)

Paper : DSE-3

(**Endocrinology**)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Fill in the blanks : 1×5=5

(a) ADH is released by _____ part of pituitary.

(b) Hyposecretion of _____ hormone leads to cretinism.

(2)

- (c) The hormone insulin is secreted by _____ cells of islet of Langerhans.
- (d) Glucagon and _____ are antagonistic in function.
- (e) Adrenocorticotrophic hormone stimulates _____ part of the adrenal gland.
2. Write briefly on any *four* of the following : $4 \times 4 = 16$
- (a) Classification of hormones
- (b) Physiological effects of estrogen
- (c) Functions of insulin
- (d) Feedback mechanism in regulation of hormone secretion
- (e) Neurohormones

3. What is endocrinology? Write four general characteristics of hormones. Add a note on neurosecretion. $2+4+2=8$

Or

Write a note on the history of endocrinology. Briefly describe the transport of hormones in our body. $5+3=8$

4. "Hypothalamus is known as the bandmaster of endocrine orchestra." Explain. Write the function of any two hormones secreted by adenohypophysis. 8

(3)

Or

What do you mean by hypothalamo-hypophysial portal system? Write briefly the significance of the hormones secreted by neurohypophysis. 4+2+2=8

5. Describe the histological structure of the gland that secretes thyroxine with suitable diagram. How does thyroxine regulate the basal metabolic rate in human? 4+2+2=8

Or

Explain the structure of adrenal cortex with suitable diagram. Write the functions of glucocorticoids. 3+2+3=8

6. What are hormone receptors? How does it help in signal transductions? Write the role of hormone in maintaining homeostasis. 2+3+3=8

Or

Write the general mechanism of action of protein hormones with suitable diagram. 8
