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

**2 0 2 1**

( 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

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