

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

**2024**

( November )

**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. Answer the following as directed : 1×5=5

(a) Father of Endocrinology is \_\_\_\_.

( Fill in the blank )

(b) ADH is secreted by \_\_\_\_.

( Fill in the blank )

(c) Gluconeogenesis is controlled by

(i) thyroxine

(ii) cortisol

(iii) Both (i) and (ii)

(iv) None of the above

( Choose the correct answer )



( 2 )

(d) Which of the following hormones never reaches to cytoplasm?

(i) Progesterone

(ii) FSH

(iii) Estrogen

(iv) Testosterone

( Choose the correct answer )

(e) Which of the following is not a second messenger?

(i) Kinase

(ii) cAMP

(iii) Sodium

(iv) Calcium

( Choose the correct answer )

2. Write notes on (any three) :  $4 \times 3 = 12$

(a) Classification of hormones

(b) Physiological effects of estrogen

(c) Functions of insulin

(d) Addison's disease

(e) Neurohormones

3. Describe the various ways of transport of hormones. 5

Or

What is feedback system and why is it important?  $2+3=5$

( 3 )

4. Enumerate the biological effects of male hormone. 5

Or

Explain the structure of thyroid gland and explain the role of hormones secreted by it.  $2+3=5$

5. Explain the hormonal regulation of calcium metabolism with suitable illustration. 8

Or

Describe the structure of adrenal cortex and explain the functions of glucocorticoids.  $3+5=8$

6. Explain any three types of endocrine disorders mentioning their causes, symptoms and possible treatments. 8

Or

Discuss the role of cAMP as second messenger in hormone action with suitable illustration. 8

7. Discuss regulation of hormone action at cellular and molecular level.  $5+5=10$

Or

Describe the structural and functional relationships between hypothalamus and the pituitary gland.  $5+5=10$

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