

OPTION-B

(Endocrinology)

Paper : ZOO-HE-5036

1. Answer the following question as directed :
(any seven) 1×7=7

(a) Which of the following hormones is a glycoprotein ?

(i) Thyrotropin

(ii) Cortisone

(iii) Oxytocin

(iv) Adrenaline

(Choose the correct answer)

(b) In adrenal gland, glucocorticoids are secreted by _____ .

(Fill in the blank)

(c) The hormone transported by the hypothalamo-hypophysial portal system is

(i) Oxytocin

(ii) Prolactin

(iii) Gonadotropin-releasing hormone

(iv) Adrenocorticotrophic hormone

(Choose the correct answer)

(d) Estrogen/Progesterone/Cortisol/
Glucagon is not a steroid hormone.
(Choose the correct answer)

(e) Islets of Langerhans produce a hormone
which controls diabetes is insuline.
(Fill in the blank)

(f) State the function of the hormone
'vasopressin'.

(g) Hypothalamus controls the secretion of
melanophore stimulating hormone
(MSH). (Write True **or** False)

(h) Which of the following is a
neurohormone?

(i) Thyronine

(ii) Prolactin

(iii) Gonadotropin-releasing hormone

(iv) Cortisol

(Choose the correct answer)

(i) What is calcitonin?

(j) The hormone which acts through a nuclear receptor is

(i) Growth hormone

(ii) Insulin

(iii) Oxytocin

(iv) Thyroid hormone

(Choose the correct answer)

(k) Regression of corpus luteum is associated with the withdrawal of progesterone.

(Write True **or** False)

(l) What is calmodulin ?

2. Answer the following questions : (**any four**)

2×4=8

(a) Write a brief note chemical nature of hormone.

(b) Mention the adenohypophysis hormones.

(c) Distinguish between corpus luteum and corpus albicans.

(d) Name *two* adrenal medullary hormones.

- (e) What is pinealocytes ?
- (f) What are hormone receptors ?
- (g) Name the cells present in parathyroid gland.
- (h) Why is iodine as a nutrient, important to our body ?

3. Write short notes on : **(any three)**

5×3=15

- (a) Physiological functions of endocrine pancreas
- (b) Histological structure of adrenal gland with suitable diagram
- (c) Functions of Glucocorticoid hormones
- (d) Disorders of thyroid gland
- (e) Hypothalamo-hypophysial axis
- (f) Genetic control of hormone regulation
- (g) Growth hormone
- (h) Mechanism of action of protein hormones

4. Answer **any three** from the following questions : 10×3=30

(a) Describe the histological structure of thyroid gland with suitable diagram. Give an account of the functions of thyroid hormones. 5+5=10

(b) What is Rathke's pouch? Discuss various physiological functions of the posterior pituitary hormones. 2+8=10

(c) Describe the histology and endocrine functions of mammalian ovary with suitable diagrams. 5+5=10

(d) Explain the feedback mechanisms of hormone secretion.

(e) Give an account of the chemical classes of hormones.

(f) Discuss the hormonal control of calcium homeostasis.

(g) Define tropic hormone. Discuss major tropic hormones secreted by pituitary gland. 2+8=10

(h) What is neuro-hormone? Describe the secretion and regulation of neuro-hormone. 2+4+4=10