

CBSE TEST PAPER-01
CLASS - XI BIOLOGY
(Chemical Co – Ordination and Integration)

General Instruction:

- All questions are compulsory.
 - Question No. 1 to 3 carry one marks each. Question No. 4 to 6 carry two marks each. Question No. 7 and 8 carry three marks each. Question No. 9 carry five marks.
-

1. What are hormones.
2. Name the gland of emergency.
3. Which gland secrete glucagon?
4. Differentiate hormone & neurohormone?
5. What are gonadotropics?
6. Why oxytocin is called as 'birth hormone'?
7. Describe the physiological functions & disorders of thyroid gland.
8. Write full form of ADH and describe how it affects the functioning of kidney tubules.
9. Name the hormone that regulates each of the following and mention the source of it.
 - 1) urinary elimination of water.
 - 2) storage of glucose as glycogen.
 - 3) Na⁺ and K⁺ metabolism.
 - 4) Basal metabolic rate
 - 5) Descent of testes into scrotum

CBSE TEST PAPER-01
CLASS - XI BIOLOGY (Chemical Co – Ordination and Integration)
[ANSWERS]

Ans 01. Hormones (endocrines) are the secretions of endocrine glands.

Ans 02. Adrenals.

Ans 03. Pancreas.

Ans 04.

Hormone		Neurohormone	
1.	Secreted by endocrine glands.	1.	Secreted by neuro – secretary cells.
2.	It stimulates the growth & metabolism of endocrine glands and body cells.	2.	It stimulates the secretion of hormones of pituitary.

Ans 05. These are the gonad stimulating hormones secreted by the anterior lobe of pituitary e.g.- follicle stimulating Hormone and prolactin.

Ans 06. Oxytocin causes the contraction of smooth muscles of uterus during child birth. So it is called ‘birth hormone’.

Ans 07. Thyroid gland consists of a two lobed structure in the region of larynx. It secretes the hormone thyroxin which contains Iodine the thyroxin stimulates the rate of cellular oxidation and control the basal metabolic rate. It also maintains balance of the Ca^{++} in blood thyroid hormones also promotes growth of body tissues both physical growth and mental development are stimulated.

They stimulate tissue differentiation because of this action they promote metamorphosis of tadpoles into adult frogs.

Thyroid secretes the hormones which stimulate all metabolic actions. They are controlled by hormones secreted by anterior pituitary gland.

Disorders –

1) Hyperthyroidism :- It reduces the basic metabolic rate

2) Cretinism:- The delayed growth (mental, bodily and sexual). The patient is pot – bellied and pigeon – cheated and has a protruding tongue.

3) Myxedema (Adult) :- Dry coarse skin, loss of hair, reduced cerebration, temperature and pulse rate, slowed speech. The patient gains weight, reproductive failure and has a puffy appearance and lacks alertness.

Ans 08. ADH – Anti diuretic hormone

It affects kidney tubules in following ways –

1) It renders the distal convoluted tubule, collecting tubule and collecting duct of the nephrons permeable water so that water is reabsorbed from filtrate in these segments and urine becomes hypertonic.

2) It also regulates the arterial blood pressure.

Ans 09.

	Activity	Hormone	Source
1.	Urinary elimination of water.	ADH	Posterior pituitary
2.	Storage of glucose as glycogen	Insulin Glucagon	Islets of langerhans
3.	Na ⁺ & K ⁺ metabolism	Aldosterone	Adrenal cortex
4.	Basal Metabolic Rate	Thyroxin, Triiodothyroxin	Thyroid gland
5.	Descends of testis into scrotum	FSH	Anterior pituitary