

Chemical Coordination and Integration

I. Select the correct answer from the following questions:

Question 1.

Blood pressure is under the control of

- (a) Pituitary
- (b) Adrenal
- (c) Thyroid
- (d) Thymus

▼ [Answer](#)

Answer: (b) Adrenal

Question 2.

Master endocrine gland is

- (a) Pituitary
- (b) Parathyroid
- (c) Thyroid
- (d) Pineal

▼ [Answer](#)

Answer: (a) Pituitary

Question 3.

Largest completely endocrine gland is

- (a) Adrenal
- (b) Thyroid
- (c) Pituitary
- (d) Parathyroid

▼ [Answer](#)

Answer: (b) Thyroid

Question 4.

Implantation of embryo and production of placenta is controlled

- (a) FSH
- (b) Oestrogen
- (c) Progesterone
- (d) Estradiol

▼ [Answer](#)

Answer: (c) Progesterone

Question 5.

Insulin is secreted by pancreas in

- (a) Acinus
- (b) a cells
- (c) P cells
- (d) y cells

▼ [Answer](#)

Answer: (c) P-cells

Question 6.

Hormone is

- (a) Nerve impulse
- (b) Chemical messenger
- (c) Excretory product
- (d) Enzymatic product

▼ [Answer](#)

Answer: (b) Chemical messenger

Question 7.

The hormone that causes change in appearance of males during puberty is

- (a) Thyroxine
- (b) Progesterone
- (c) Testosterone
- (d) Oestrogen

▼ [Answer](#)

Answer: (c) Testosterone.

Question 8.

Diabetes insipides is caused by reduced activity in

- (a) Thyroid
- (b) Anterior lobe of pituitary
- (c) Intermediate pituitary lobe
- (d) Posterior lobe of pituitary

▼ [Answer](#)

Answer: (d) Posterior lobe of pituitary

Question 9.

The hormone converts glucose to glycogen inside liver, is pro-duced in

- (a) Thymus
- (b) Pancreas
- (c) Parathyroid
- (d) Adrenal

▼ [Answer](#)

Answer: (b) Pancreas

Question 10.

Iodine of iodised salt is stored in

- (a) Pituitary
- (b) Thyroid
- (c) Liver
- (d) Parathyroid

▼ [Answer](#)

Answer: (b) Thyroid

Question 11.

Hormone produced during emotional stress is

- (a) Adrenaline
- (b) Melatoijiri
- (c) Calcitonin
- (d) Norepinephrine

▼ [Answer](#)

Answer: (a) Adrenaline

Question 12.

Which of the following is a hormonal disease

- (a) Scurvy
- (b) Malaria
- (c) Prolactin
- (d) Insulin

▼ [Answer](#)

Answer: (d) Insulin

Question 13.

Adrenaline is secreted by

- (a) Adrenal medulla
- (b) Thymus
- (c) Pineal
- (d) Adrenal cortex

▼ [Answer](#)

Answer: (a) Adrenal medulla

Question 14.

Control of body temperature depends on the

- (a) Pancreas
- (b) Medulla
- (c) Pituitary
- (d) Hypothalamus

▼ [Answer](#)

Answer: (b) Medulla

Question 15.

Which of the following is not an endocrine gland:

- (a) Thyroid
- (b) Pancreas
- (c) Pituitary
- (d) Sebaceous

▼ [Answer](#)

Answer: (d) Sebaceous

Question 16.

The excess secretion of a growth hormone during adulthood produces

- (a) Acromegaly
- (b) Myxoedema
- (c) Dwarf
- (d) Giant

▼ [Answer](#)

Answer: (a) Acromegaly

Question 17.

Estrogen is produced by

- (a) Liver
- (b) Ovary
- (c) Testosterone
- (d) None of these

▼ [Answer](#)

Answer: (b) Ovary

Question 18.

Hormone secreted by thyroid gland

- (a) Thyroxin
- (b) Tryoxin
- (c) Insulin
- (d) None of these

▼ [Answer](#)

Answer: (a) Thyroxin

Question 19.

Hormones are carried around in the body by

- (a) blood
- (b) nerves
- (c) Lymph
- (d) both blood and lymph

▼ [Answer](#)

Answer: (d) Both blood and lymph

Question 20.

Pituitary gland is found:

- (a) in the neck
- (b) at the base of the brain
- (c) beneath the stomach
- (d) near the kidneys

▼ [Answer](#)

Answer: (b) At the base of the brain

II. Fill in the blanks:

Question 1.

Endocrine glands lack ducts and are hence, called

▼ [Answer](#)

Answer: ductless glands

Question 2.

The endocrine glands and hormone producing diffuse located in different parts of our body constitute the

▼ [Answer](#)

Answer: tissues/cells, endocrine system

Question 3.

Hypothalamus is the basal part of, and it regulates a wide spectrum of body functions.

▼ [Answer](#)

Answer: diencephalon, forebrain

Question 4.

The is under the direct neural regulation of the hypothalamus.

▼ [Answer](#)

Answer: posterior pituitary

Question 5.

Pituitary gland is divided into and

▼ [Answer](#)

Answer: adenohypophysis, a neurohypophysis

Question 6.

..... stimulates synthesis and secretion of thyroid hormones from the thyroid gland.

▼ [Answer](#)

Answer: TSH

Question 7.

ACTH stimulates the synthesis and secretion of steroid hormones called from the adrenal cortex.

▼ [Answer](#)

Answer: glucocorticoids

Question 8.

..... stimulate gonadal activity and hence are called gonadotrophins.

▼ [Answer](#)

Answer: FSH

Question 9.

The is located on the dorsal side of forebrain.

▼ [Answer](#)

Answer: pineal gland

Question 10.

Pineal secretes a hormone called

▼ [Answer](#)

Answer: melatonin

Question 11.

Thyroid hormones control the metabolism of, and

▼ [Answer](#)

Answer: carbohydrates, proteins, fats

Question 12.

The parathyroid glands secrete a peptide hormone called

▼ [Answer](#)

Answer: parathyroid hormone (PTH).

Question 13.

Thymosins play a major role in the differentiation of Tlymphocytes, which provide

▼ [Answer](#)

Answer: cell-mediated immunity.

Question 14.

The centrally located tissue is called the, and outside this lies the

▼ [Answer](#)

Answer: adrenal medulla, adrenal cortex

Question 15.

The two main types of cell in the Islet of langerhans are called and

▼ [Answer](#)

Answer: α -cell, β -cells.

III. Mark the statement True (T) or False (F):

Question 1.

Glucagon is a hyperglycemic hormone.

▼ [Answer](#)

Answer: True

Question 2.

Pupillary dilation, piloerection, sweating the hormones increase the heart beat, the strength of heart contraction and the rate of respiration.

▼ [Answer](#)

Answer: True

Question 3.

Ovary is composed of ovarian follicles and stromal tissues.

▼ [Answer](#)

Answer: True

Question 4.

The atrial wall of our heart secretes a very important peptide hormone called atrial natriuretic factor

▼ [Answer](#)

Answer: True

Question 5.

Secretion acts on the exocrine pancreas and stimulates secretion of water and bicarbonate ions.

▼ [Answer](#)

Answer: True

Question 6.

CCK inhibits gastric secretion and motility

▼ [Answer](#)

Answer: False

Question 7.

On the basis of their chemical nature, hormones can be divided into groups, (i) Peptide, polypeptide, protein hormones.

▼ [Answer](#)

Answer: True

Question 8.

Kidney produces erythropoietin which stimulates erythropoiesis.

▼ [Answer](#)

Answer: True

Question 9.

Adenohypophysis consist of two portions, pars distalis and pars inter media.

▼ [Answer](#)

Answer: True

Question 10.

In males, FSH and androgens regulate the corpus luteum

▼ [Answer](#)

Answer: False

Question 11.

Parathyroid hormone (PTH) increases Ca^{2+} levels in the blood.

▼ [Answer](#)

Answer: True

Question 12.

The thymus gland is a lobular structure located on the dorsal side of the heart and the aorta.

▼ [Answer](#)

Answer: True

Question 13.

In our body, cortisol is the main glucocorticoid.

▼ [Answer](#)

Answer: True

Question 14.

Heart patients are successfully treated with insulin therapy.

▼ [Answer](#)

Answer: False

Question 15.

Due to the action of GIP, the blood vessels are dilated and consequently the blood pressure declines.

▼ [Answer](#)

Answer: False

IV. Match the items of the column I with appropriate items of Column II.

Column I	Column II
(a) Pineal gland	1. Lower blood glucose levels

(b) Insulin	2. Secreted by the adrenal medulla
(c) Hormone	3. steroid
(d) Adrenaline	4. Product of an endocrine gland
(e) Lipid-soluble hormones	5. Source of melatonin
(f) Parathyroid hormone	6. β -cells
(g) Adrenal cortex	7. α -cells
(h) Insulin	8. Stimulates secretion of milk
(i) Glucagon	9. androgens, testosterone
(j) Insulin therapy	10. GIP
(k) Ovary	11. Zona reticularis, zona fasciculata
(l) Testis	12. Estrogen and progesterone
(m) Gastric inhibitory peptide	13. Diabetes mellitus
(n) When blood pressure is increased	14. anti-diuretic hormone
(o) ADH	15. special cells secrete ANF

▼ Answer

Answer:

Column I	Column II
(a) Pineal gland	5. Source of melatonin
(b) Insulin	1. Lower blood glucose levels
(c) Hormone	4. Product of an endocrine gland
(d) Adrenaline	2. Secreted by the adrenal medulla
(e) Lipid-soluble hormones	3. steroid
(f) Parathyroid hormone	8. Stimulates secretion of milk
(g) Adrenal cortex	11. Zona reticularis, zona fasciculata
(h) Insulin	6. β -cells
(i) Glucagon	7. α -cells
(j) Insulin therapy	13. Diabetes mellitus
(k) Ovary	12. Estrogen and progesterone
(l) Testis	9. androgens, testosterone
(m) Gastric inhibitory peptide	10. GIP
(n) When blood pressure is increased	15. special cells secrete ANF
(o) ADH	14. anti-diuretic hormone