



## BIOLOGY

### BOOKS - MTG BIOLOGY (ENGLISH)

## CHEMICAL COORDINATION AND INTEGRATION

### Chemical Coordination And Integration

1. Endocrine glands have\_\_\_ to carry their secretions to the specific organ.

A. capillaries

B. tubules

C. no ducts

D. ducts

**Answer: C**



Watch Video Solution

2. Which of the following statements regarding hormones is incorrect?

- A. Hormones are non-nutrient chemicals which act as intercellular messengers.
- B. Hormones are molecules of low molecular weight and are produced in traces.
- C. Hormones provide energy and also effect growth and metabolic activities of target cell.
- D. Many hormones are produced in inactive form.

**Answer: C**



Watch Video Solution

3. Enzymes, vitamins and hormones can be classified into a single category of biological chemicals, because all of these

- A. help in regulating metabolism
- B. are exclusively synthesised in the body of a living organism as at present
- C. are conjugated proteins
- D. enhance oxidative metabolism.

**Answer: A**



**Watch Video Solution**

**4. Which one of the following statements is correct?**

- A. Endocrine glands regulate neural activity. But not vice versa.
- B. Neurons regulate endocrine activity, but not vice versa.
- C. Endocrine glands regulate neural activity, and nervous system regulates endocrine glands.

D. Neither hormones control neural activity nor the neurons control endocrine activity.

**Answer: C**



**Watch Video Solution**

5. Secretion of which of the following is under control of neurosecretory nerve cells?

A. Pineal

B. Adrenal cortex

C. Anterior pituitary

D. Thymus

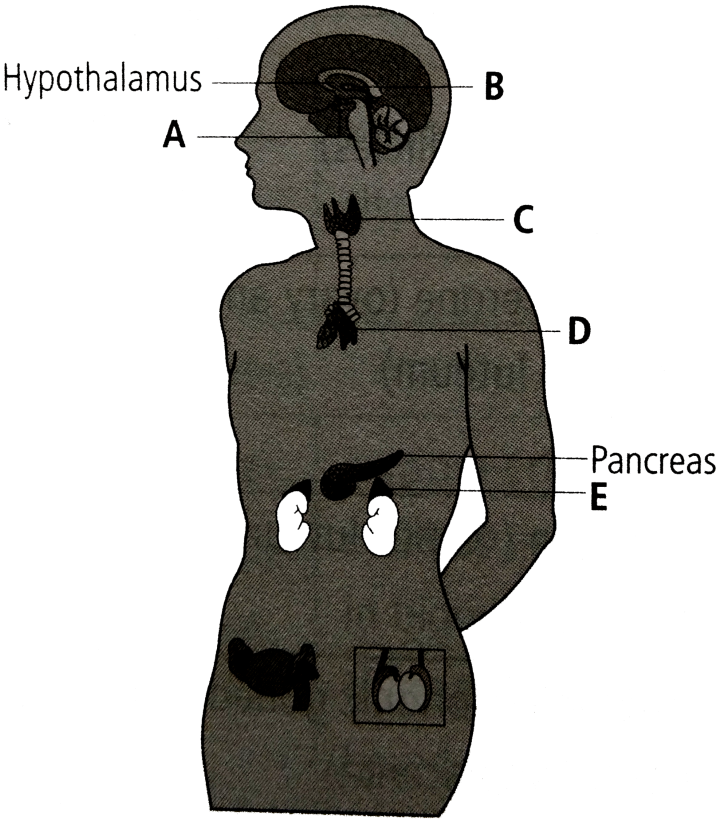
**Answer: C**



**Watch Video Solution**



6. The given figure shows main endocrine glands in human body identify A to E and select the correct option.



A.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pineal	Pituitary	Thyroid and parathyroid	Thymus	Adrenal

B.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pituitary	Pineal	Thyroid and parathyroid	Adrenal	Thymus

C.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pituitary	Pineal	Thyroid and parathyroid	Thymus	Kidney

D.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pituitary	Pineal	Thyroid and parathyroid	Thymus	Adrenal

**Answer: D**



**View Text Solution**

7. What is the effect of GnRH produced by hypothalamus?

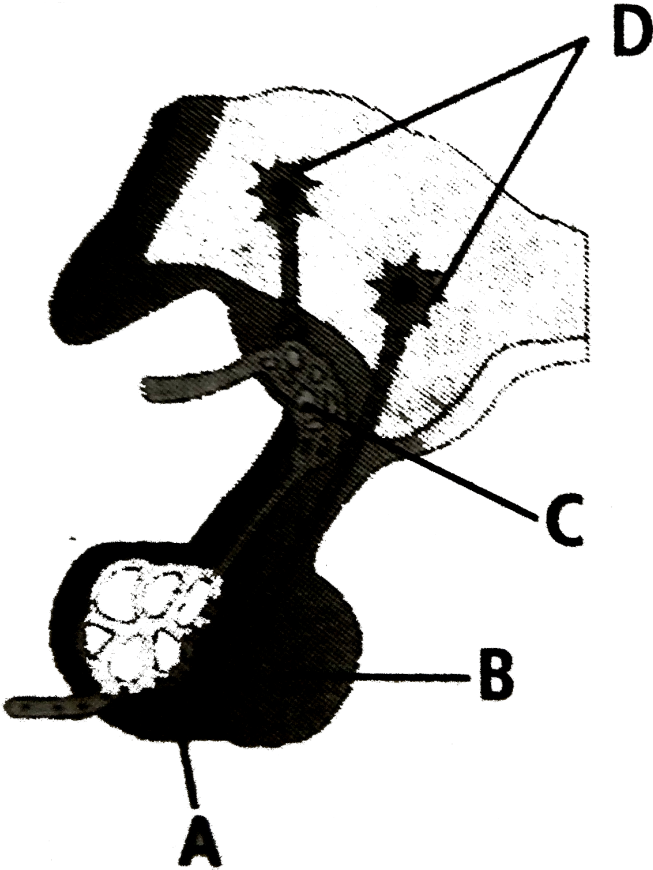
- A. Stimulates the synthesis and secretion of androgens
- B. Stimulates secretion of milk in mammary glands
- C. Stimulates fetal ejection reflex.
- D. Stimulates synthesis of carbohydrates from non-carbohydrates in liver

**Answer: A**



**Watch Video Solution**

8. Select the option that correctly identifies the labels A,B, C and D in the given diagram.



A. *A* *B* *C* *D*  
Anterior pituitary Posterior Blood vessel Thalamus

B.  
*A* *B* *C* *D*  
Posterior pituitary Anterior pituitary Hypothalamus Thalamus

C.

<i>A</i>	<i>B</i>	<i>C</i>	
Anterior pituitary	Posterior pituitary	Portal circulation	Hypothalamus

D.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Hypothalamic neurons	Posterior pituitary	Anterior pituitary	Portal circulation

**Answer: C**



**Watch Video Solution**

**9. TSH (thyroid stimulating hormone) is produced by**

- A. adrenal cortex
- B. middle pituitary lobe
- C. anterior pituitary lobe
- D. posterior pituitary lobe.

**Answer: C**



**Watch Video Solution**

10. Adrenocorticotrophic hormone is secreted by

- A. thyroid
- B. Adrenal cortex
- C. pancreas
- D. anterior pituitary.

**Answer: D**



**Watch Video Solution**

11. MSH is secreted by

- A. anterior lobe of pituitary
- B. middle lobe of pituitary
- C. posterior lobe of pituitary

D. endostyle.

**Answer: B**



**Watch Video Solution**

**12.** FSH is secreted by

- A. anterior lobe of pituitary
- B. hypothalamus
- C. gonads
- D. posterior lobe of pituitary.

**Answer: A**



**Watch Video Solution**

**13.** Which of the following statements about 'neurohypophysis' is correct?

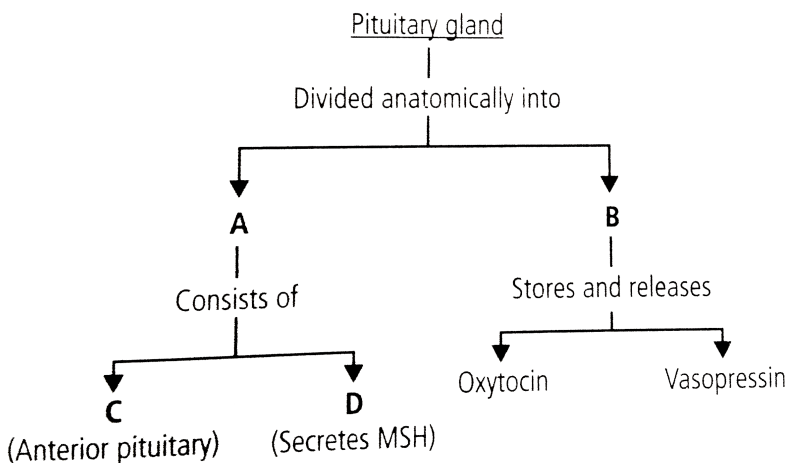
- A. It stores the hormones produced by adenohypophysis.
- B. It is poorly developed and functionless in humans.
- C. It stores and releases hormones secreted by hypothalamus.
- D. It secretes its own hormones.

**Answer: C**



**Watch Video Solution**

**14.** Identify A,B,C and D in the given flow chart and select the correct option.



A.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Neurohypophysis	Adenohypophysis	Pars distalis	Pars intermedia

B.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Adeno-hypophysis	Neurohypophysis	Pars intermedia	Pars distalis

C.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Adenohypophysis	Neuro-hypophysis	Pars distalis	Pars intermedia

D.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Neuro-hypophysis	Adeno-hypophysis	Pars intermedia	Pars distalis

**Answer: C**



**Watch Video Solution**

**15.** With reference to the pituitary, which of the following statements is correct?

A. Neurohypophysis synthesis vasopressin and oxytocin.



- B. Adenohypophysis stores TSH and STH secreted by neurohypophysis.
- C. Neurohypophysis collects and stores vasopressin and oxytocin.
- D. Adenohypophysis secretes vasopressin and oxytocin.

**Answer: C**



**Watch Video Solution**

**16.** Pituicytes are under the control of

- A. adenohypophysis
- B. hypothalamus
- C. Neurohypophysis collects and stores vasopressin and oxytocin.
- D. both a and c

**Answer: B**



**Watch Video Solution**

17. Which of the following hormones does not have a particular target organ in the body?

- A. Growth hormone
- B. TSH
- C. Oxytocin
- D. FSH

**Answer: A**



**Watch Video Solution**

18. Oxytocin

- A. Progesterone
- B. LH
- C. Prolactin
- D.

**Answer: D**



**View Text Solution**

**19.** Identify from the following, a hormone produced by the pituitary gland in both males and females but functional only in females.

A. Vasopressin

B. Relaxin

C. Prolactin

D. Somatotrophic hormone

**Answer: C**



**Watch Video Solution**

**20.** Excess secretion of growth hormone in adults leads to \_\_\_\_\_.

A. acromegaly

B. goitre

C. gigantism

D. dwarfism

**Answer: A**



**Watch Video Solution**

**21.** The gonadotropic hormones are secreted by

A. an anterior lobe of pituitary

B. interstitial cells of testes

C. adrenal cortex

D. posterior part of thyroid.

**Answer: A**



**Watch Video Solution**

**22.** LH and FSH are collectively called

- A. somatotropins
- B. oxytocin
- C. gonadotropins
- D. luteotropic hormones.

**Answer: C**



**Watch Video Solution**

**23.** Sertoli cells are regulated by the pituitary hormone known as

- A. LH
- B. FSH
- C. GH

D. prolactin.

**Answer: B**



**Watch Video Solution**

**24.** Ovulation in females is under the control of

A. ADH and LH

B. LH

C. TSH and LH

D. LTH and TSH.

**Answer: B**



**Watch Video Solution**

**25.** Secretion of progesterone by corpus luteum is initiated by

A. testosterone

B. thyroxine

C. MSH

D. LH.

**Answer: D**



**Watch Video Solution**

**26.** Match column I with column II and select the correct option from the given codes.

Column I

*FSH*

*MSH*

Vasopressin (ADH)

Pars intermedia

Column II

(i) Transported axonally to neurohypophysis from I

(ii) Acts on melanocytes and regulates pigmentation

(iii) Stimulates the growth and development of ovaries

(iv) In humans, it is almost merged with pars distalis

A. iii,ii,i,iv

B. i,ii,iii,iv

C. iv,iii,ii,i

D. iii,ii,iv,i

**Answer: A**



**Watch Video Solution**

**27.** The function of oxytocin is to help in

- A. child birth q
- B. gametogenesis
- C. growth
- D. all of these

**Answer: A**



**Watch Video Solution**

**28.** Diabetes insipidus occurs due to the hyposecretion of



A. thymosine

B. oxytocin

C. growth

D. vasopressin

**Answer: D**



**Watch Video Solution**

**29.** The hormone, which is related to the urine concentration in mammals, is

A. antidiuretic hormone

B. testosterone

C. oxytocin

D. all of these

**Answer: A**

**30.** Adh

- A. increases water absorption
- B. decreases water absorpition
- C. synthesis salt
- D. controls sugar level of blood.

**Answer: A**

**31.** Melatonin is secreted by

- A. pinearl body
- B. skin
- C. Pituitary gland

D. thyroid.

**Answer: A**



**Watch Video Solution**

**32.** The function of pineal body is to

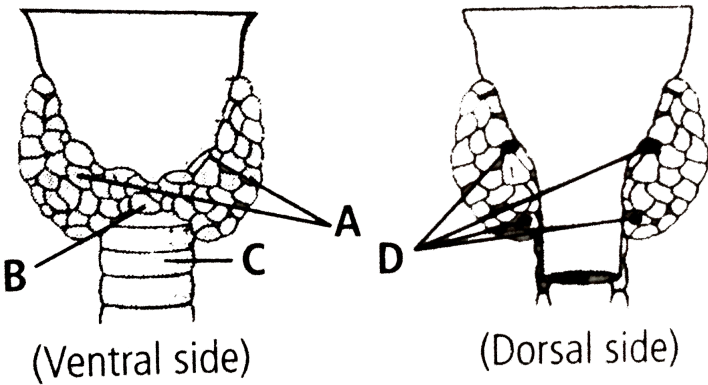
- A. lighten the skin colour
- B. control sexual behaviour
- C. regulate the period puberty
- D. all of these

**Answer: D**



**Watch Video Solution**

33. Observe the given figures and select the option that correctly identifies the labers A,B,C and D.



- A. *A* *B* *C* *D*  
Parathyroid gland Isthmus Trachea Thyroid gland
- B. *A* *B* *C* *D*  
Thyroid gland Isthmus Trachea Parathyroid gland
- C. *A* *B* *C* *D*  
Thyroid gland Isthmus Larynx Parathyroid gland
- D. *A* *B* *C* *D*  
Thyroid gland Corpus luteum Trachea Parathyroid gland

Answer: B



View Text Solution

**34.** Which one of the following endocrine glands stores its secretion in the extracellular space before discharging in into the blood?

- A. Testis
- B. Thyroid
- C. Pancreas
- D. Adrenal

**Answer: B**



**Watch Video Solution**

**35.** Goitre is a pathological condition associated with

- A. glucagon
- B. progesterone
- C. thyroxine
- D. testosterone.

**Answer: C**



**Watch Video Solution**

**36.** Exophthalmic goitre is also called \_\_\_\_.

- A. Addison's disease
- B. diabetes insipidus
- C. Grave's disease
- D. acromegaly

**Answer: C**



**View Text Solution**

**37.** The hormone which regulates the basal metabolism in our body is secreted from

- A. adrenal cortex
- B. pancreas
- C. Pituitary gland
- D. thyroid.

**Answer: D**



**Watch Video Solution**

**38.** What is the function of calcitonin?

- A. it increases calcium level in blood.
- B. It decreases calcium level in blood
- C. It stimulates steroid synthesis.
- D. It increases absorption of water in kidney tubules.

**Answer: B**



**Watch Video Solution**

**39.** Which hormone promotes cell division, protein synthesis and bone growth?

- A. PTH
- B. ACTH
- C. ADH
- D. GH

**Answer: D**



**Watch Video Solution**

**40.** Which of the following statements is correct for parathormone?

- A. It increases blood calcium level and decreases calcium store of the bone.



B. It decreases blood calcium level and increases calcium store of the bone.

C. It increaes blood glucose level and decreaes calcium store of the bone.

D. If decrease blood glucose level and increases calcium store of the bone.

**Answer: A**



**Watch Video Solution**

**41.** The blood calcium level is lowered by the dificiency of

A. thyroxine

B. calcitonin

C. parathormone

D. both a and b

**Answer: C**



**Watch Video Solution**

**42.**  $Ca^{2+}$  level in body is controlled by

- A. thyroid gland
- B. parathyroid gland
- C. adrenal gland
- D. both a and b

**Answer: D**



**Watch Video Solution**

**43.** A person is having problem with calcium and phosphorus metabolism in his body which one of the following glands may not be functioning properly?

- A. Parotid
- B. Pancreas
- C. Adrenal cortex
- D. Parathyroid

**Answer: D**



**Watch Video Solution**

**44.** Increase in bleeding time and delay in blood coagulation is due to the deficiency of which hormone?

- A. Adrenaline
- B. Noradrenaline
- C. Parathormone
- D. Thyroxine

**Answer: C**



[Watch Video Solution](#)

**45.** Which gland atrophies in adults?

- A. Pancreas gland
- B. Thymus gland
- C. Adrenal gland
- D. Thyroid gland

**Answer: B**



[Watch Video Solution](#)

**46.** Which one of the following is termed temporary gland?

- A. Pineal
- B. Thymus gland
- C. Pancreas

D. Kidney

**Answer: B**



**Watch Video Solution**

**47.** Adrenals are located above

A. stomach

B. liver

C. pancreas

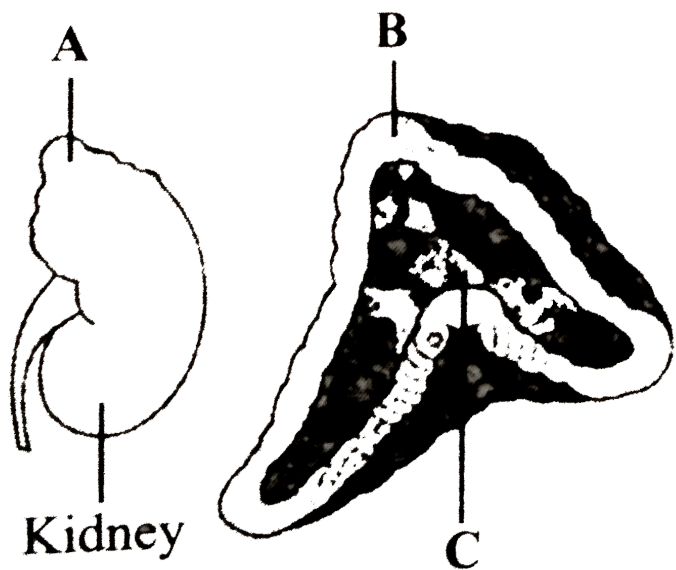
D. kidney.

**Answer: D**



**Watch Video Solution**

48. Identify the parts labelled A,B and C in the given figure and select the correct option (second figure is the cross section of 'A').



- |    |               |          |               |  |                 |
|----|---------------|----------|---------------|--|-----------------|
|    | <i>A</i>      |          | <i>B</i>      |  | <i>C</i>        |
| A. | Adrenal gland |          | Cortex        |  | Medulla         |
|    | <i>A</i>      | <i>B</i> | <i>C</i>      |  |                 |
| B. | JGA           | Cortex   | Medulla       |  |                 |
|    | <i>A</i>      |          | <i>B</i>      |  | <i>C</i>        |
| C. | Adrenal gland |          | Medulla       |  | Cortex          |
|    | <i>A</i>      |          | <i>B</i>      |  | <i>C</i>        |
| D. | Adrenal gland |          | Pars distalis |  | Pars intermedia |

Answer: A



Watch Video Solution

49. underproduction of hormones by adrenal cortex alters carbohydrate metabolism causing active weakness and fatigue de hydration and metabolic acidosis this disease is called

- A. Addison's disease
- B. diabetes mellitus
- C. diabetes insipidus
- D. Grave's disease

**Answer: A**



**Watch Video Solution**

50. Feeling the tremors of an earthquake, a scared resident of seventh floor of a multistorey building starts climbing down the stairs rapidly. Which hormone initiated this action?

A. Adreanline

B. Glucagon

C. Gastrin

D. Thyroxine

**Answer: A**



**Watch Video Solution**

**51. Which of the following is called emergency gland of the body?**

A. Testis

B. Adrenal cortex

C. Thymus

D. Pituitary

**Answer: B**



**Watch Video Solution**



52. Adrenaline directly affects

- A. SA node
- B.  $\beta$  – cels of Langerhans
- C. dorsal root of spinal nerve
- D. epithelial cells of stomach.

**Answer: A**



**Watch Video Solution**

53. Which hormone causes dilation of blood vessels, increased oxygen consumption and glucogenesis?

- A. Glucagon
- B. ACTH
- C. Insulin

D. Adrenaline

**Answer: D**



**Watch Video Solution**

**54.** Reabsorption of  $Na^+$  is controlled by which one of the following hormones?

A. Aldosterone

B. Estrogen

C. Glucocorticoids

D. Testosterone

**Answer: A**



**Watch Video Solution**

55. Which of the following is a mineralocorticoid?

- A. Testosterone
- B. Progesterone
- C. Adrenaline
- D. Aldosterone

**Answer: D**



**Watch Video Solution**

56. In which of the following options, hormone is not matching with its source and function?

Hormone	Source	Function
A. Glucocorticoids	Adrenal Cortex	Produces anti inflammatory reactions
Hormone	Source	Function
B. Vasopressin	Posterior pituitary	Stimulates resorption of water and electrolytes

Hormone	Source	Function
C. Parathyroid hormone	Thyroid	Decreases the blood $\text{Ca}^{2+}$ level
Hormone	Source	Function
D. Melatonin	Pineal gland	Maintains sleep-wake Cycle

**Answer: C**



**Watch Video Solution**

**57.** Match column I with column II and select the correct option from the codes given below.

Column I      Column II

Thyroid      (i) Acts on the renal tubules

Adrenal      (ii) Regulates blood calcium level

Pituitary      (iii) Maintains diurnal rhythm of our body

Pineal      (iv) Acts on the melanocytes

A. iv,iii,ii,i

B. iii,iv,i,ii

C. iv,ii,iii,i

D. ii,i,iv,iii

**Answer: D**



**Watch Video Solution**

**58.** Besides corticotropin releasing hormone (CRH) which other hormone also stimulates the release of adrenocorticotrophic hormone (ACTH) ?

A. Glucagon

B. Insulin

C. Aldosterone

D. Epinephrine

**Answer: D**



**Watch Video Solution**

**59.** The islets of Langerhans are found in

- A. Liver
- B. pancreas
- C. stomach
- D. alimentary canal.

**Answer: B**



**Watch Video Solution**

**60.** Insulin is secreted by \_\_\_\_ of pancreas.

- A.  $\alpha$  – cells`
- B.  $\partial$  – cells
- C.  $\beta$  – cells
- D. none of these

**Answer: C**



**Watch Video Solution**

61. The source of somatostatin is same as that of

- A. thyroxine and calcitonin
- B. insulin and glucagon
- C. somatotropin and prolactin
- D. vasopressin and adrenline.

**Answer: B**



**Watch Video Solution**

62. Which of the following match is correct ?

Hormone	Effect
(a) Oxytocin	Milk ejection hormone
(b) Glucagon	Decreases blood sugar level
(c) Adrenaline	Decreases heart rate
(d) Thyroxine	Decreases BMR



**Watch Video Solution**

**63.** Which of the following statements regarding glucagon is false?

- A. It is secreted by  $\alpha$  — cells of langerhans.
- B. It acts antagonistically t insulin.
- C. It decrease blod sugar level.
- D. The gland responsible for its secretion is a heterocrine gland.

**Answer: C**



**Watch Video Solution**



64. Select the correct matching of a hormone, its source and function.

Hormone	Source	Function
(1) Vasopressin	Posterior Pituitary	Increases loss of water through urine
(2) Norepinephrine	Adrenal medulla	Increases heart beat, rate of respiration & alertness
(3) Glucagon	Beta-cells of Islets of Langerhans	Stimulates glycolysis
(4) Prolactin	Posterior Pituitary	Regulates growth of mammary glands and milk formation in females

A.

Hormone	Source	Function
Vasopressin	Posterior pituitary	Increases loss of water through u

B.

Hormone	Source	Function
Norepi-nephrine	Adrenal medulla	Increases heart beat rate of rep

C.

Hormone	Source	Function
Glucagon	Beta-cells of islets of Langerhans	Stimulates glycogeno

D.

Hormone	Source	Function
Prolactin	Posterior pituitry	Regulates growth of mammary gland

**Answer: B**



**Watch Video Solution**

**65.** Which of the following is synthesised in both the brain and endocrine glands?

A. ACTH

B. Cortisol

C. Oxytocin

## D. Somatostatin

Answer: D

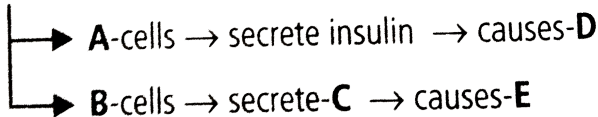


Watch Video Solution

66. Select the option that correctly identifies A to E in the given flow char.

Islets of Langerhans

has 2 types  
of main cells



- A.  $\begin{matrix} A & B & C & D & E \\ \alpha & \beta & \text{Glucagon} & \text{Hyperglycaemia} & \text{Hypoglycaemia} \end{matrix}$
- B.  $\begin{matrix} A & B & C & D & E \\ \beta & \alpha & \text{Cortisol} & \text{Hypoglycaemia} & \text{Hyperglycaemia} \end{matrix}$
- C.  $\begin{matrix} A & B & C & D & E \\ \beta & \alpha & \text{Cortisol} & \text{Hyperglycaemia} & \text{Hypoglycaemia} \end{matrix}$
- D.  $\begin{matrix} A & B & C & D & E \\ \beta & \alpha & \text{Glucagon} & \text{Hypoglycaemia} & \text{Hyperglycaemia} \end{matrix}$

Answer: D



Watch Video Solution

**67.** Which one of the following is not the function of insulin?

- A. Increases the permeability of cell membrane to glucose
- B. Increases the oxidation of glucose in the cells
- C. Initiates the conversion of glycogen to glucose
- D. Initiates the formation of hepatic glycogen from excess of glucose

**Answer: C**



Watch Video Solution

**68.** Select the mismatched pair from the following.

- A. Insulin-Gluconeogenesis
- B. Glucagon-Glycogenolysis
- C. Oxytocin-Contraction of uterine muscles

D. Prolactin-Milk production in mammary glands.

**Answer: A**



**Watch Video Solution**

**69.** Which of the following is not a characteristic of insulin?

- A. It stimulates the process of gluconeogenesis.
- B. It binds to glycoprotein receptors on cell membrane.
- C. Its deficiency leads to diabetes mellitus.
- D. Its oversecretion leads to insulin shock.

**Answer: A**



**Watch Video Solution**

70. A patient of diabetes mellitus excretes glucose in urine even when he is kept on a carbohydrate free diet. It is because

- A. fats are catabolised in adipose tissues to form glucose
- B. amino acids are catabolised in kidney to form glucose
- C. amino acids are discharged in blood stream from liver
- D. glycogen from muscles is released in blood stream.

**Answer: A**



**Watch Video Solution**

71. Given below are your statements (A-D) each with one or two blanks.

Select the option which correctly fills the blanks in any two statements.

- (A) Thymus secretes (i) which help in differentiating of ii
- (B) The adrenal medulla secretes i which stimulates the breakdown of ii to increased the blood glucose concentration during emergency situations.
- (C) The Leydig's cells or i present in the intertubular spaces in testis,

produce a group of hormones called ii

(D) Thyroid gland secretes i and triiodothyronine which contain ii

A. i melatonin, ii T-lymphocytes

i adrenaline, ii fat

B. i catecholamine, ii glycogen

i interstitial cells, ii LH

C. i catecholamine, ii glycogen

i thyroxine, ii iodine

D. i parathyroid hormone, ii calcium

i thymosin, ii B-lymphocytes

**Answer: C**



**Watch Video Solution**

**72.** Which one of the following statements is incorrect?

- A. Glucagon is secreted by pancreas.
- B. Androgens are produced by ovary.
- C. Thyrogens is secreted by thyroid.
- D. Oxytocin is secreted by pituitary.

**Answer: B**



**Watch Video Solution**

**73.** Read the given statements that define functions of a particular hormone.

- (i) Regulates the development, maturation and functions of epididymis, vas deferens, seminal vesicle, prostate gland, urethra, etc.
- (ii) Stimulates muscular growth of facial and axillary hair, aggressiveness, low pitch of voice, etc.
- (iii) Stimulates spermatogenesis.
- (iv) Act on CNS and sexual behaviour (Libido).
- (v) Produce anabolic (synthetic) effect on protein and carbohydrate



metablosim.

(vi) The Leydig's cells/interstitial cells (present in interbular space). Secrete this hormone under the influence of LH.

Which of the following hormones is referred here?

- A. FSH
- B. Progestrone
- C. Androgen
- D. Melatonin

**Answer: C**



**Watch Video Solution**

**74.** Match Column I with column II and select the correct option from the codes given below.

Column I	Column II
----------	-----------

Testis	(i) Pigmentation
--------	------------------

Ovaries	(ii) Atrophies in adult
---------	-------------------------

Thymus	(iii) Estrogen
--------	----------------

Melanin	(iv) Testosterone
---------	-------------------

A. iii,iv,i,ii

B. ii,iii,iv,i

C. iv,iii,ii,i

D. i,iv,ii,iii

**Answer: C**



**Watch Video Solution**

**75.** Given below is an incomplete table about certain hormones, their source glands and one major effect of each on the body in humans.

Identify the correct option for the three blanks A, B and C.

GLAND	SECRETION	EFFECT ON BODY
A	Oestrogen	Maintenance of secondary sexual characters
Alpha cells of Islets of Langerhans	B	Raises blood sugar level
Anterior pituitary	C	Over secretion leads to gigantism

- A. *A*      *B*      *C*  
 Placenta   Glucagon   Calcitonin
- B. *A*      *B*      *C*  
 Ovary   Glucagon   Growth hormone
- C. *A*      *B*      *C*  
 Placenta   Insulin   Vasopressin
- D. *A*      *B*      *C*  
 Ovary   Insulin   Calcitonin

**Answer: B**



**Watch Video Solution**

76. Match column I with column II and select the correct option from the given codes.

{:("column I","Column II"),("Hypothalamus",(i)"Relaxin"),("Anterior Pituitary",  
(ii)"Progesterone"),("Testis",(iii)"FSH & LH"),("Ovary",(iv)"Androgen"),(  
(v)"Gonadotropin releasing hormone"):]}

A. v,iii,iv,ii

B. v,iii,ii,iv

C. i,ii,iv,iii

D. iii,v,iv,ii

**Answer: A**



**Watch Video Solution**

77. Which one of the following pairs is incorrectly matched?

A. Glucagon-Beta cells(source)

- B. Somatostatin-Delta cells (Source)
- C. Corpus luteum-Relaxis (secretion)
- D. Corpus luteum-Relaxin (secretion)

**Answer: A**



**Watch Video Solution**

**78.** Which of the following hormones is necessary for the development of secondary sexual characters in human beings?

- A. Estrogen
- B. FSH
- C. Testosterone
- D. Both a and c

**Answer: D**



**Watch Video Solution**

79. Match the source gland with its respective hormone and function and select the correct option

A. 

B. 

C. 

D. 

**Answer: B**



[View Text Solution](#)

80. Match column I with Column II and select the correct option from the given codes.

Column I	Column II
Oxytocin	(i) Stimulates ovulation
Prolactin	(ii) Implantation and maintenance of pregnancy
Lutealising	(iii) Milk production in mammary glands
Progesterone	(iv) Uterine contraction during labour
	(v) Reabsorption of water by nephrons

A. v,iv,i,ii

B. iv,i,ii,iii

C. iv,iii,i,ii

D. v,iii,ii,i

**Answer: C**



**Watch Video Solution**

**81.** Low level of progesterone and estrogen in blood stimulate

A. FSH-RH production

B. LH production

C. GH production

D. all of these

**Answer: A**



**Watch Video Solution**

**82.** Match column I with column II and select the correct option from the codes given below

Column I      Column II

ANF            (i) Regulates blood calcium levels

MSH           (ii) Decreases blood pressure

GIP            (iii) Pigmentation

CT             (iv) Inhibits gastric secretion

A. iv,i,ii,iii

B. ii,i,iv,iii

C. iv,i,iii,ii

D. ii,iii,iv,i

**Answer: D**



**Watch Video Solution**



83. Which part of body secretes the hormone secretin?

- A. Stomach
- B. Oesophagus
- C. Ileum
- D. Duodenum

**Answer: D**



**Watch Video Solution**

84. Select the correctly matched pair.

- |                       |   |   |
|-----------------------|---|---|
| Pineal gland          | — | Does not influence menstrual cycle      |
| Corpus luteum         | — | secretes oxytocin                       |
| A. Interstitial cells | — | Erythropoietic                          |
| Cholecystokinin       | — | Stimulates pancreatic enzyme secretions |
| B.                    |   |   |

C.

D.

**Answer: D**



**Watch Video Solution**

**85.** Read the given paragraph and select the option that correctly fills the blanks in it. Hormones produce their effect on target tissue by binding to specific A called hormone receptors located in the target tissues only water soluble hormones usually need B receptor that generate C messenger for regulating through cell membrane and bind to E receptors, mostly nuclear receptors. The hormone receptor complex enter the nucleus and mostly regulate gene expression or chromosome function by interaction of hormone receptor complex with the genome.

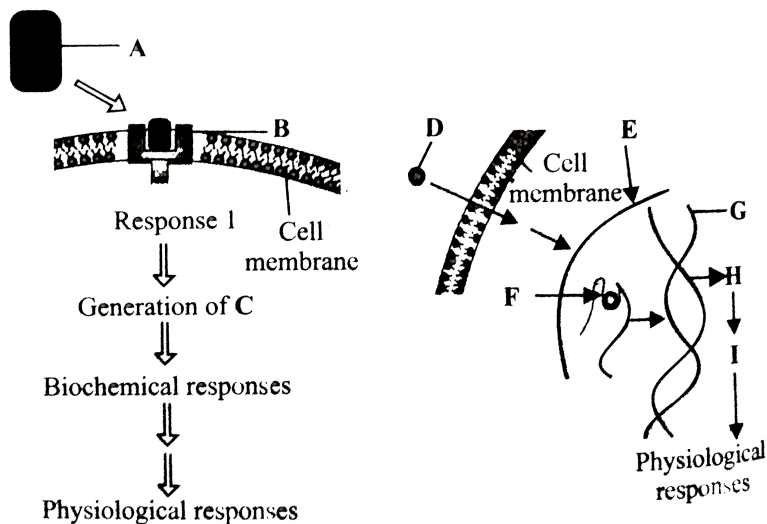
- A. *A*      *B*                      *C*      *D*      *E*  
proteins   membrane-bound   second   lipid   Intracellular
- B. *A*      *B*                      *C*      *D*      *E*  
lipids   membrane-bound   second   water   intracellular
- C. *A*      *B*                      *C*      *D*      *E*  
proteins   intracellular   second   lipid   extracellular

D.      *A*                      *B*                      *C*                      *D*                      *E*  
          proteins    membrane    primary    lipid    intracellular

**Answer: A**

 **Watch Video Solution**

**86.** The given diagram represents the mechanism of action for two categories of hormones. Which of the following option correctly identifies the labels A to I?



A. A-Steroid hormone, B-Receptor, C-Secondary messenger, D-Non-steroid hormone, E-Nucleus F-Hormone-receptor complex, G-

OGenome,H-mRNA I-protein

B. A-Non-steroid hormon,B-Receptor,C-secondary messenger, D-steroid hormone,E-Nucleus, F-Hormone-receptor complex,G-genome, H-mRNA, I-protein

C. A-Steroid hormone, B-Receptor,C-Primary messenger D-Non-steroid hormone, E-Nucleus, F-Hormone-receptor complex, G-Genome, H-mRNA-Iprotein.

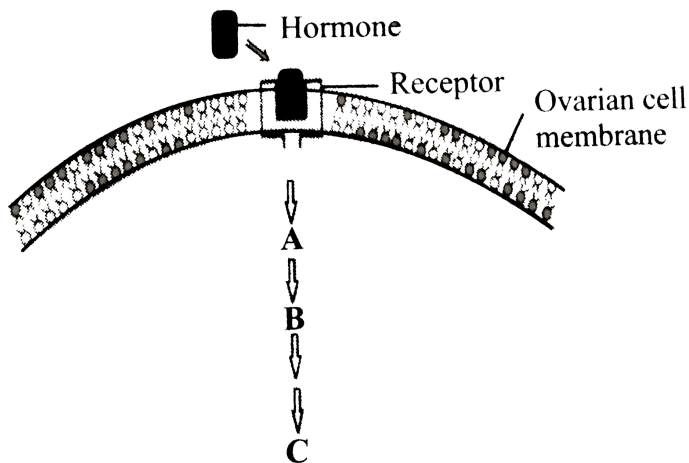
D. A-steroid hormone, B-Enzyme,C-Secondary messenger, D-Non-steroid hormone,E-Nucleus, F-Hormone-receptor complex, G-Genome, H-mRNA,I-protein

**Answer: B**



**Watch Video Solution**

**87.** Refer to the given diagrammatic representation of the mechanism of action of a protein hormone.



In which of the following options correct labelling of A,B and C is given?

A.

*A*

*B*

*C*

Generation of second messenger    Physiological    Biochemical responses

B.

*A*

*B*

*C*

Activation of genes    Biochemical responses    Generation of second messenger

C.

*A*

*B*

*C*

Generation of second messenger    Biochemical responses    Physiological responses

D.

*A*

*B*

*C*

Biochemical    Activation of genes    Physiological responses

**Answer: C**



**Watch Video Solution**

**88.** What is the correct to say about the hormone action in humans?

- A. Glucagon is secreted by  $\beta$  – cells of islets of Langerhans and stimulated glycogenolysis.
- B. Secretion of thymosin is stimulated with aging.
- C. In females, FSH first binds with specific receptors on ovarian cell membrane.
- D. FSH stimulates the secretion of androgens.

**Answer: C**



**Watch Video Solution**

**89.** According to the accepted concept of hormone action, if receptor molecules are removed from target organs, then the target organ will

- A. continue to respond to the hormone without any difference

B. not respond to the hormone

C. continue to respond to the hormone but will require

D. higher concentration

**Answer: B**



**Watch Video Solution**

**90.** Which one of the following is proteinaceous in chemical nature?

A. Thyroxine

B. FSH

C. Progesterone

D. Oxytocin is secreted by pituitary.

**Answer: B**



**Watch Video Solution**

**91.** Insulin is a/an

- A. polysaccharide
- B. protein
- C. amino acid derivative
- D. lipid.

**Answer: B**



**Watch Video Solution**

**92.** Insulin receptors are

- A. extrinsic proteins
- B. intrinsic proteins
- C. G-proteins
- D. trimeric proteins.



**Answer: A**



**Watch Video Solution**

**93.** All hypophysiotropic hormones are peptides except

- A. corticotropin releasing hormone
- B. growth hormone inhibitory hormone
- C. somatostatin
- D. prolactin release inhibiting hormone.

**Answer: D**



**Watch Video Solution**

**94.** Which of the following hormones is a steroid?

- A. Epinephrine

B. Throxine

C. Estrogen

D. Gonadotropin

**Answer: C**



**Watch Video Solution**

**95.** Hormones of which of the following endocrine glands lacks peptides, amines and sulphur?

A. Thyroid and adrenal gland

B. Anterior pituitary

C. Testes

D. Poserior pituitary and pancreas

**Answer: C**



**Watch Video Solution**

96. Which of the following hormones is not a polypeptide?

A. LH

B. FSH

C. Insulin

D. Thyroxine

**Answer: D**



**Watch Video Solution**

97. The given table enlists various hormones and their chemical nature.

Select the option which completes the table



- |    |          |         |               |             |
|----|----------|---------|---------------|-------------|
|    | (i)      | (ii)    | (iii)         | (iv)        |
| A. | Cortisol | Steroid | Polypeptide   | Estradiol   |
| B. | Oxytocin | Protein | Iodothyronine | Epinephrine |

- C. (i) Cortisol (ii) Protein (iii) Amine (iv) Estradiol
- D. (i) Oxytocin (ii) Steroid (iii) Iodothyronine (iv) Epinephrine

**Answer: D**



**View Text Solution**

**98.** Which one of the following hormones never reaches to cytoplasm?

- A. Estrogen
- B. FSH
- C. Progesterone
- D. testosterone.

**Answer: B**



**Watch Video Solution**

99. The signal transduction of steroid hormone across cell is thorough

- A. binding of hormone to the cytoplasmic receptor and the complex binds to hormone response element on DNA within promoter DNA
- B. binding of hormone to the transmembrane receptor which initiates the production of second messenger that activates enzymes which further activates transcription factors
- C. binding of hormone to the transmembrane receptor which diffuses inside the cell cytoplasm and then activates the enzyme necessary for the activation of transcription factors.
- D. binding of hormone to the cytoplasmic receptor that initiates the production of second messenger which activates enzymes that further activates transcription factors.

**Answer: A**



**Watch Video Solution**

**100.** Estrogen and testosterone are steroid hormones, and most likely bind to

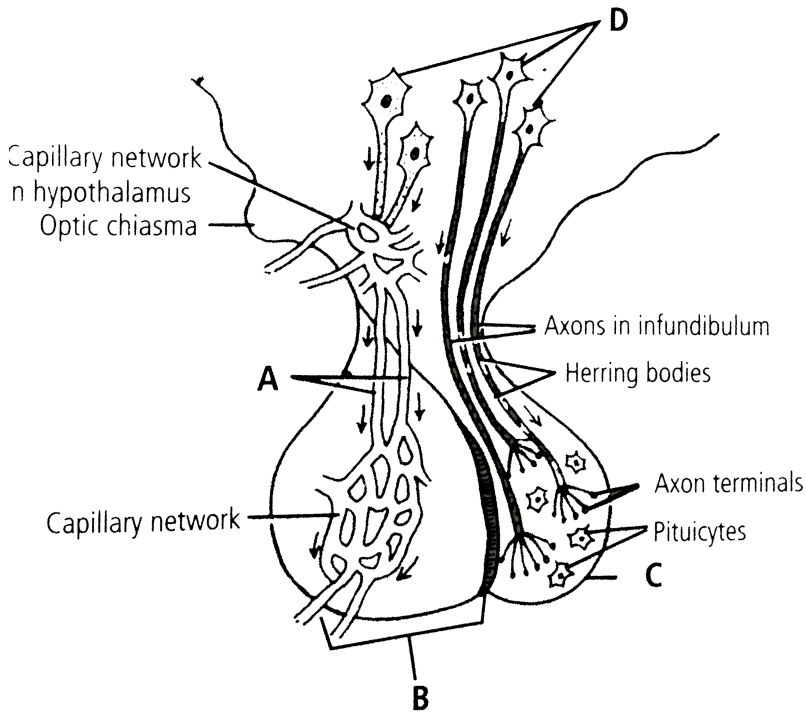
- A. membrane ion channel
- B. enzyme-linked membrane receptors
- C. G-protein coupled membrane receptors
- D. cytoplasmic receptors.

**Answer: D**



**Watch Video Solution**

**101.** Refer to the given figure of pituitary gland and select the correct option for the question that follows.



What will be the effect if part C is been removed?

- A. Oxytocin and ADH will not be synthesised.
- B. Oxytocin and ADH will be synthesised but could not be stored.
- C. only synthesis of oxytocin will occurs
- D. Only synthesis of ADH will occurs.

**Answer: B**



**Watch Video Solution**

102. The given figure shows\_\_\_\_\_

Metabolic fuels



Liver



Adipose cell



Muscle

- A. the major target sites and the metabolic actions of the anabolic hormone secreted by the beta cells of heterocrine gland
- B. the major target sites and the metabolic action of the hormone secreted by alpha cells of pancreas
- C. the major target sites and the functions of the hormone secreted by the anterior pituitary gland.
- D. the major target sites and the metabolic actions of the hormone secreted by the parafollicular C cells

**Answer: A**



**Watch Video Solution**



**103.** A scientist was studying the production of a protein that was released by an animal cell into a culture medium, she found that the protein only appeared in the culture medium after she added a few drops of a hormone to the cell. Before adding the hormone, she labelled the protein inside the cell with a fluorescent dye and looked at the cell under the light microscope. The dye was seen in flattened sheets and tube-like structures throughout the cell, and in stacks of flattened sac-like structures. After adding the hormone, the dye was also seen as small dots clustered against the cell membrane. Which statement most likely explains these observations?

- A. The hormone stimulates protein synthesis in the cell vacuole, the protein is then passed to the Golgi apparatus, and eventually passes through the cell membrane by passive diffusion.
- B. The hormone triggers the synthesis of the protein in the endoplasmic reticulum and it is then secreted outside of the cell via channel proteins in the cell membrane

C. The protein is made in the endoplasmic reticulum, is passed to the Golgi apparatus and is secreted through hormone-stimulated exocytosis.

D. The protein is made in the Golgi apparatus, is passed to the endoplasmic reticulum and is secreted through hormone-stimulated pinocytosis.

**Answer: C**



**Watch Video Solution**

**104.** Pancreas has two types of cells namely islets of Langerhans and acinar cells. In the early years of research on diabetes, extract of this gland was tested on diabetic patients. Results are tabulated below. (i)

Extract of pancreas -

(ii) Islet cell extract +

(iii) Acinar cell extract -

The correct interpretation is that

- A. anti-diabetic factor in extract 'C' was inactivated by extract 'A'
- B. anti-diabetic factor present in 'A' was destroyed by 'B'
- C. both 'A' and 'C' destroyed the anti-diabetic factor present in 'B'
- D. anti diabetic factor present in 'B' was destroyed by

**Answer: D**



**Watch Video Solution**

**105.** The anterior pituitary gland facilitates growth of an individual by release of the human growth hormone (HGH) which in turn is regulated by two hormones namely growth hormone releasing hormone (GHRH) and growth hormone inhibiting hormone (GHIH). Imbalance of these hormones could result in gigantism, dwarfism or acromegaly. Interpret the data given below and select the appropriate statement.



A. 1 and 3 will lead to gigantism while 4 and 5 will show dwarfism.

B. 3 will show gigantism, 1 will show acromegaly and 4 and 5 will show dwarfism.

C. 2,3 and 4 will show normal growth.

D. 1 will show gigantism, 3 will show acromegaly and 5 will show dwarfism.

**Answer: D**



**View Text Solution**

**106.** Select the right match of endocrine gland and their hormones among the options given below

- |                    |                         |
|--------------------|-------------------------|
| A. Pineal          | (i) Epinephrine         |
| B. Thyroid         | (ii) Melatonin          |
| C. Ovary           | (iii) Estrogen          |
| D. Adrenal medulla | (iv) Tetraiodothyronine |

A. iv,ii,iii,i

B. ii,iv,i,iii

C. iv,ii,i,iii

D. ii,iv,iii,i

**Answer: D**



**Watch Video Solution**

**107.** Which of the following hormones is not secreted by anterior pituitary?

A. Growth hormone

B. Follicle stimulating hormone

C. Oxytocin

D. Adrenocorticotrophic hormone

**Answer: C**



**Watch Video Solution**

**108.** Mary is about to face an interview. But during the first five minutes before the interview she experiences sweating. Which hormone is responsible for her restlessness?

- A. Estrogen and progesterone
- B. Oxytocin and vasopressin
- C. Adrenaline and noradrenaline
- D. Insulin and glucagon

**Answer: C**



**Watch Video Solution**

**109.** The steroid responsible for balance of water and electrolytes in our body is

- A. Insulin-Gluconeogenesis
- B. melatonin

C. testosterone

D. Aldosterone.

**Answer: D**



**Watch Video Solution**

**110.** Thymosin is responsible for balance of water and electrolytes in out body is

A. raising the blood sugar level

B. raising the blood calcium level

C. differentiation of T-lymphocytes

D. decrease in blood RBC.

**Answer: C**



**Watch Video Solution**

111. In the mechanism of action of a protein hormone, one of the second messengers is

A. cyclic AMP

B. insulin

C.  $T_3$

D. gastrin.

**Answer: A**



**Watch Video Solution**

112. Leydig cells produce a group of hormones called

A. androgens

B. estrogens

C. aldosterone

D. gonadotropins.



**Answer: A**



**Watch Video Solution**

**113.** Corpus luteum secretes a hormone called

- A. prolactin
- B. progesterone
- C. aldosterone
- D. testosterone.

**Answer: B**



**Watch Video Solution**

**114.** Cortisol is secreted from

- A. Pancreas

B. thyroid

C. adrenal

D. thymus.

**Answer: C**



**Watch Video Solution**

**115.** A hormone responsible for normal sleep wake cycle is

A. epinephrine

B. gastrin

C. melatonin.

D. insulin.

**Answer: C**



**Watch Video Solution**

**116.** Hormones are called chemical signals that stimulate specific target tissues. Which is the correct location of these receptors in case of protein hormones?

- A. Extracellular matrix
- B. Blood
- C. Plasma membrane
- D. Nucleus

**Answer: C**



**Watch Video Solution**

**117.** Choose the correct option among the following.



- A. ii, i, iii, iv
- B. iv, i, iii, ii

C. I,ii,iii,iv

D. I,iv,ii,iii

**Answer: B**



**View Text Solution**

**118.** Which of the following does not play any role in calcium balance in the human body?

A. Vitamin D

B. Parathyroid hormone

C. Thyrocalcitonin

D. Thymosin

**Answer: D**



**Watch Video Solution**

**119.** All the following tissues in mammals except one consists of a central 'medullary' region surrounded by a cortical region. Mark the wrong entry:

1. Ovary
2. Adrenal
3. Liver
4. Kidney

- A. Ovary
- B. Adrenal cortex
- C. Liver
- D. Kidney

**Answer: C**



**Watch Video Solution**

**120.** Which of the following conditions is not linked to deficiency of thyroid hormone?

A. Cretinism

B. Goitre

C. Myxodema

D. Exophthalmia

**Answer: D**



**Watch Video Solution**

**121.** Assertion: Neurohypophysis is under the direct regulation of the hypothalamus.

Reason: Neurohypophysis stores and releases two hormones called oxytocin and vasopressin which are actually synthesised by the hypothalamus.



**Watch Video Solution**

**122.** Assertion: Oxytocin is called 'milk-ejection hormone'

Reason: Oxytocin acts on the smooth muscles of uterus and stimulates its contraction. \



[Watch Video Solution](#)

**123.** Assertion: Melatonin influences the menstrual cycle, Pigmentation and defense capability.

Reason: Melatonin plays an important role in the regulation of diurnal rhythm of our body.



[Watch Video Solution](#)

**124.** Assertion: Thyroid hormones promote physical growth and development of mental faculties.

Reason: Hypothyroidism in adults causes retarded sexual development.



[Watch Video Solution](#)

**125.** Assertion: PTH is a hypercalcemic hormone.

Reason: Thymus degenerates in old individuals.

- A. Assertion and reason are both true
- B. Assertion and reason are both false
- C. assertion is true but the reason is false
- D. assertion is false but the reason is true

**Answer: A**



**Watch Video Solution**

**126.** Assertion: Immune response of old persons become weak.

Reason: Thymus degenerates in old individuals.



**Watch Video Solution**



**127.** Assertion: Adrenal cortex is not vital for survival and may be removed without subsequently leading to death.

Reason: Adrenal cortex secretes a number of steroid hormones which have only cumulative effects on the hormones of other glands.



[Watch Video Solution](#)

**128.** Assertion: Adrenal medullary hormones help in combating the stress condition.

Reason: Both adrenaline and noradrenaline act on same organs and produce similar effects.



[Watch Video Solution](#)

**129.** Assertion: Cortisol produces anti-inflammatory reactions and suppresses the immune response.

Reason: Cortisol stimulates gluconeogenesis, lipogenesis and proteogenesis.



[Watch Video Solution](#)

**130.** Assertion: Insulin stimulates glycogenolysis and gluconeogenesis and gluconeogenesis resulting in hyperglycemia.

Reason: Prolonged hyperglycemia leads to complex disorder called diabetes insipidus.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion
- B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion
- C. (c) If Assertion is true but Reason is false
- D. (d) If Assertion is false but Reason is true

**Answer: D**



[Watch Video Solution](#)

**131.** Assertion: Insulin is an anabolic hormone.

Reason: A fall in blood amino acids also increases insulin secretion.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion
- B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion
- C. (c) If Assertion is true but Reason is false
- D. (d) If Assertion is false but Reason is true

**Answer: C**



**Watch Video Solution**

**132.** Assertion: Androgens stimulate muscular growth.

Reason: Androgens produce anabolic effects on protein and carbohydrate metabolism.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion
- B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion
- C. (c) If Assertion is true but Reason is false
- D. (d) If Assertion is false but Reason is true

**Answer: A**



**Watch Video Solution**

**133.** Assertion: The estrogen level falls after menopause.

Reason: The estrogen is synthesised and secreted mainly by uterine lining.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion

B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion

C. (c) If Assertion is true but Reason is false

D. (d) If Assertion is false but Reason is true

**Answer: C**



**Watch Video Solution**

**134.** Assertion: Renal cells are involved in stimulating the formation of RBCs.

Reason: The juxtaglomerular cells of kidney produce erythropoietin.

A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion

B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion

C. (c) If Assertion is true but Reason is false

D.

**Answer: A**



**Watch Video Solution**

**135.** Assertion: Insulin forms hormone receptor complex which regulate gene expression.

Reason: Insulin is a peptide hormone which can easily pass cell membrane to interact with hormone-receptor complex.

A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion

B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion

C. (c) If Assertion is true but Reason is false

D. (d) If Assertion is false but Reason is true

**Answer: C**



**Watch Video Solution**

**Others**

1. Endocrine glands have\_\_\_ to carry their secretions to the specific organ.

A. capillaries

B. tubules

C. no ducts

D. ducts

**Answer: C**



**Watch Video Solution**

2. Which of the following statements regarding hormones is incorrect?

- A. Hormones are non-nutrient chemicals which act as intercellular messengers.
- B. Hormones are molecules of low molecular weight and are produced in traces.
- C. Hormones provide energy and affect growth and metabolic activities of target cell.
- D. Many hormones are produced in inactive form.

**Answer: C**



**Watch Video Solution**

3. Enzymes, vitamins and hormones can be classified into a single category of biological chemicals, because all of these

- A. help in regulating metabolism



- B. are exclusively synthesised in the body of a living organism as at present
- C. are conjugated proteins
- D. enhance oxidative metabolism.

**Answer: A**



**Watch Video Solution**

**4. Which one of the following statements is correct?**

- A. Endocrine glands regulate neural activity. But not vice versa.
- B. Neurons regulate endocrine activity, but not vice versa.
- C. Endocrine glands regulate neural activity, and nervous system regulates endocrine glands.
- D. Neither hormones control neural activity nor the neurons control endocrine activity.

**Answer: C**



**Watch Video Solution**

5. Secretion of which of the following is under control of neurosecretory nerve cells?

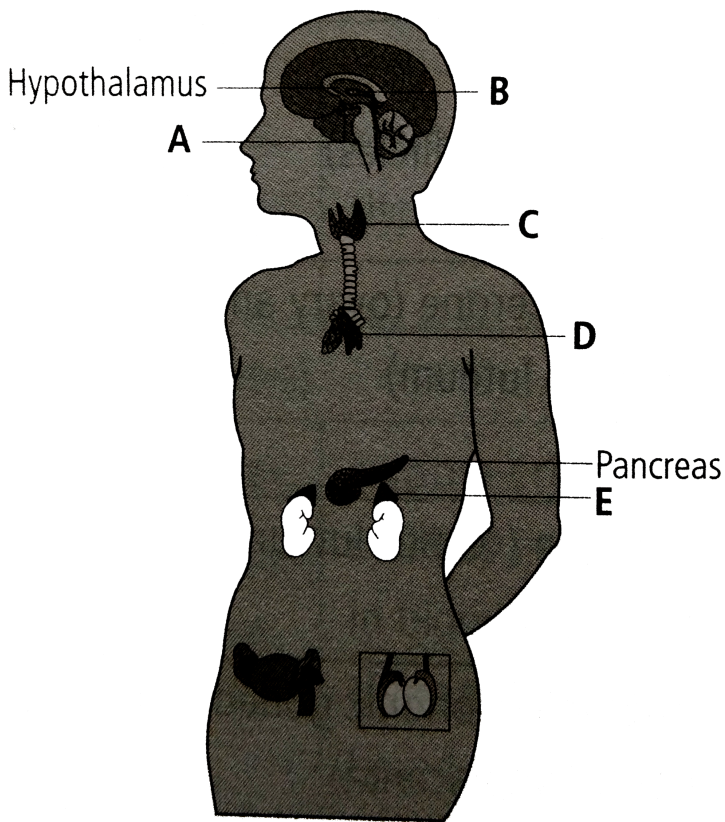
- A. Pineal
- B. Adrenal cortex
- C. Anterior pituitary
- D. Thymus

**Answer: C**



**Watch Video Solution**

6. The given figure shows main endocrine glands in human body identify A to E and select the correct option.



A.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pineal	Pituitary	Thyroid and parathyroid	Thymus	Adrenal

B.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pituitary	Pineal	Thyroid and parathyroid	Adrenal	Thymus

C.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pituitary	Pineal	Thyroid and parathyroid	Thymus	Kidney

D.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pituitary	Pineal	Thyroid and parathyroid	Thymus	Adrenal

**Answer: D**



**View Text Solution**

7. What is the effect of GnRH produced by hypothalamus?

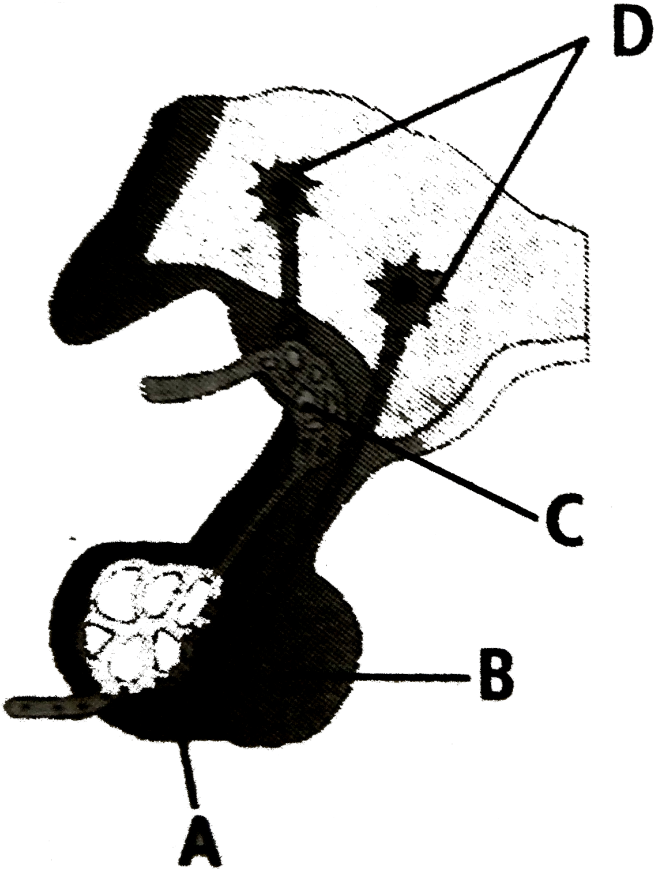
- A. Stimulates the synthesis and secretion of androgens
- B. Stimulates secretion of milk in mammary glands
- C. Stimulates fetal ejection reflex.
- D. Stimulates synthesis of carbohydrates from non-carbohydrates in liver

**Answer: A**



**Watch Video Solution**

8. Select the option that correctly identifies the labels A,B, C and D in the given diagram.



A. *A* *B* *C* *D*  
Anterior pituitary    Posterior    Blood vessel    Thalamus

B. *A* *B* *C* *D*  
Posterior pituitary    Anterior pituitary    Hypothalamus    Thalamus

C.

<i>A</i>	<i>B</i>	<i>C</i>	
Anterior pituitary	Posterior pituitary	Portal circulation	Hypothalamus

D.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Hypothalamic neurons	Posterior pituitary	Anterior pituitary	Portal circulation

**Answer: C**



**Watch Video Solution**

**9. TSH (thyroid stimulating hormone) is produced by**

- A. adrenal cortex
- B. middle pituitary lobe
- C. anterior pituitary lobe
- D. posterior pituitary lobe.

**Answer: C**



**Watch Video Solution**

10. Adrenocorticotrophic hormone is secreted by

- A. thyroid
- B. Adrenal cortex
- C. pancreas
- D. anterior pituitary.

**Answer: D**



**Watch Video Solution**

11. MSH is secreted by

- A. anterior lobe of pituitary
- B. middle lobe of pituitary
- C. posterior lobe of pituitary

D. endostyle.

**Answer: B**



**Watch Video Solution**

**12.** FSH is secreted by

- A. anterior lobe of pituitary
- B. hypothalamus
- C. gonads
- D. posterior lobe of pituitary.

**Answer: A**



**Watch Video Solution**

**13.** Which of the following statements about 'neurohypophysis' is correct?

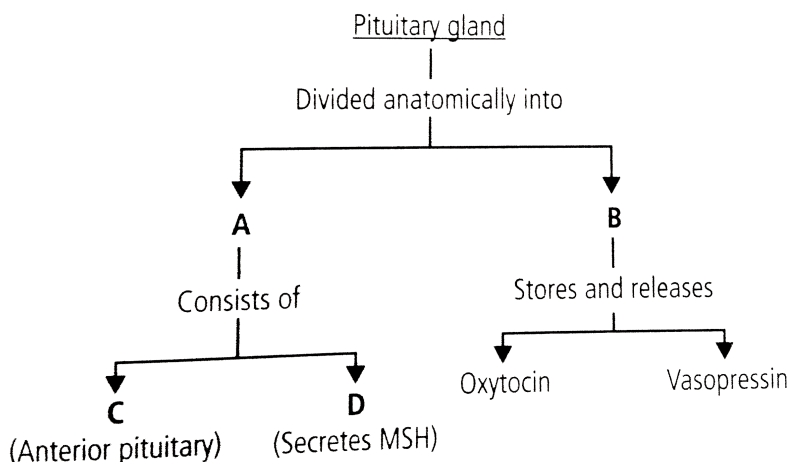


- A. It stores the hormones produced by adenohypophysis.
- B. It is poorly developed and functionless in humans.
- C. It stores and releases hormones secreted by hypothalamus.
- D. It secretes its own hormones.

**Answer: C**

 **Watch Video Solution**

**14.** Identify A,B,C and D in the given flow chart and select the correct option.



A.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Neurohypophysis	Adenohypophysis	Parsdistalis	Pars intermedia

B.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Adeno-hypophysis	Neurohypophysis	Pars intermedia	Pars distalis

C.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Adenohypophysis	Neuro-hypophysis	Parsdistalis	Pars intermedia

D.

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Neuro-hypophysis	Adeno-hypophysis	Pars intermedia	Pars distalis

**Answer: C**



**Watch Video Solution**

**15.** With reference to the pituitary, which of the following statements is correct?

A. Neurohypophysis synthesis vasopressin and oxytocin.

- B. Adenohypophysis stores TSH and STH secreted by neurohypophysis.
- C. Neurohypophysis collects and stores vasopressin and oxytocin.
- D. Adenohypophysis secretes vasopressin and oxytocin.

**Answer: C**



**Watch Video Solution**

**16.** Pituicytes are under the control of

- A. adenohypophysis
- B. hypothalamus
- C. Neurohypophysis collects and stores vasopressin and oxytocin.
- D. both a and c

**Answer: B**



**Watch Video Solution**

17. Which of the following hormones does not have a particular target organ in the body?

- A. Growth hormone
- B. TSH
- C. Oxytocin
- D. FSH

**Answer: A**



**Watch Video Solution**

18. Oxytocin

- A. Progesterone
- B. LH
- C. Prolactin
- D.

**Answer: D**



**View Text Solution**

**19.** Identify from the following, a hormone produced by the pituitary gland in both males and females but functional only in females.

A. Vasopressin

B. Relaxin

C. Prolactin

D. Somatotrophic hormone

**Answer: C**



**Watch Video Solution**

**20.** Excess secretion of growth hormone in adults leads to \_\_\_\_\_.

A. acromegaly

B. goitre

C. gigantism

D. dwarfism

**Answer: A**



**Watch Video Solution**

**21.** The gonadotropic hormones are secreted by

A. an anterior lobe of pituitary

B. interstitial cells of testes

C. adrenal cortex

D. posterior part of thyroid.

**Answer: A**



**Watch Video Solution**

**22.** LH and FSH are collectively called

- A. somatotropins
- B. oxytocin
- C. gonadotropins
- D. luteotropic hormones.

**Answer: C**



**Watch Video Solution**

**23.** Sertoli cells are regulated by the pituitary hormone known as

- A. LH
- B. FSH
- C. GH

D. prolactin.

**Answer: B**



**Watch Video Solution**

**24.** Ovulation in females is under the control of

A. ADH and LH

B. LH

C. TSH and LH

D. LTH and TSH.

**Answer: B**



**Watch Video Solution**

**25.** Secretion of progesterone by corpus luteum is initiated by



A. testosterone

B. thyroxine

C. MSH

D. LH.

**Answer: D**



**Watch Video Solution**

**26.** Match column I with column II and select the correct option from the given codes.

Column I

*FSH*

*MSH*

Vasopressin (ADH)

Pars intermedia

Column II

(i) Transported axonally to neurohypophysis from I

(ii) Acts on melanocytes and regulates pigmentation

(iii) Stimulates the growth and development of ovaries

(iv) In humans, it is almost merged with pars distalis

A. iii,ii,i,iv

B. i,ii,iii,iv

C. iv,iii,ii,i

D. iii,ii,iv,i

**Answer: A**



**Watch Video Solution**

**27.** The function of oxytocin is to help in

- A. child birth q
- B. gametogenesis
- C. growth
- D. all of these

**Answer: A**



**Watch Video Solution**

**28.** Diabetes insipidus occurs due to the hyposecretion of

- A. thymosine
- B. oxytocin
- C. growth
- D. vasopressin

**Answer: D**



**Watch Video Solution**

**29.** The hormone, which is related to the urine concentration in mammals, is

- A. antidiuretic hormone
- B. testosterone
- C. oxytocin
- D. all of these

**Answer: A**

**30.** Adh

- A. increases water absorption
- B. decreases water absorption
- C. synthesis salt
- D. controls sugar level of blood.

**Answer: A**

**31.** Melatonin is secreted by

- A. pineal body
- B. skin
- C. Pituitary gland

D. thyroid.

**Answer: A**



**Watch Video Solution**

**32.** The function of pineal body is to

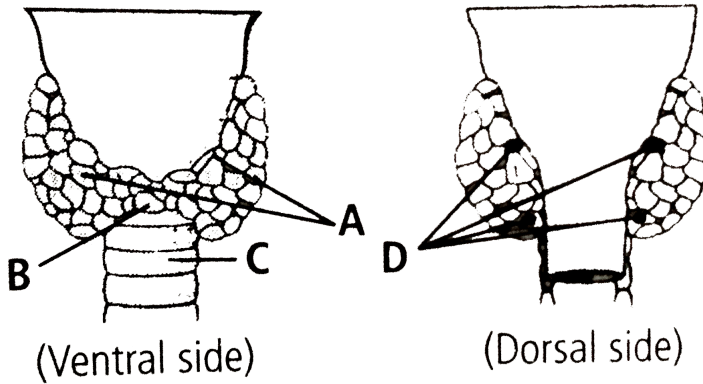
- A. lighten the skin colour
- B. control sexual behaviour
- C. regulate the period puberty
- D. all of these

**Answer: D**



**Watch Video Solution**

33. Observe the given figures and select the option that correctly identifies the labers A,B,C and D.



- |    |                   |               |          |                   |
|----|-------------------|---------------|----------|-------------------|
|    | <i>A</i>          | <i>B</i>      | <i>C</i> | <i>D</i>          |
| A. | Parathyroid gland | Isthmus       | Trachea  | Thyroid gland     |
|    | <i>A</i>          | <i>B</i>      | <i>C</i> | <i>D</i>          |
| B. | Thyroid gland     | Isthmus       | Trachea  | Parathyroid gland |
|    | <i>A</i>          | <i>B</i>      | <i>C</i> | <i>D</i>          |
| C. | Thyroid gland     | Isthmus       | Larynx   | Parathyroid gland |
|    | <i>A</i>          | <i>B</i>      | <i>C</i> | <i>D</i>          |
| D. | Thyroid gland     | Corpus luteum | Trachea  | Parathyroid gland |

Answer: B



View Text Solution

**34.** Which one of the following endocrine glands stores its secretion in the extracellular space before discharging in into the blood?

- A. Testis
- B. Thyroid
- C. Pancreas
- D. Adrenal

**Answer: B**



**Watch Video Solution**

**35.** Goitre is a pathological condition associated with

- A. glucagon
- B. progesterone
- C. thyroxine
- D. testosterone.

**Answer: C**



**Watch Video Solution**

**36.** Exophthalmic goitre is also called \_\_\_\_.

- A. Addison's disease
- B. diabetes insipidus
- C. Grave's disease
- D. acromegaly

**Answer: C**



**View Text Solution**

**37.** The hormone which regulates the basal metabolism in our body is secreted from



- A. adrenal cortex
- B. pancreas
- C. Pituitary gland
- D. thyroid.

**Answer: D**



**Watch Video Solution**

**38.** What is the function of calcitonin?

- A. it increases calcium level in blood.
- B. It decreases calcium level in blood
- C. It stimulates steroid synthesis.
- D. It increases absorption of water in kidney tubules.

**Answer: B**



**Watch Video Solution**

**39.** Which hormone promotes cell division, protein synthesis and bone growth?

- A. PTH
- B. ACTH
- C. ADH
- D. GH

**Answer: D**



**Watch Video Solution**

**40.** Which of the following statements is correct for parathormone?

- A. It increases blood calcium level and decreases calcium store of the bone.

B. It decreases blood calcium level and increases calcium store of the bone.

C. It increaes blood glucose level and decreaes calcium store of the bone.

D. If decrease blood glucose level and increases calcium store of the bone.

**Answer: A**



**Watch Video Solution**

**41.** The blood calcium level is lowered by the dificiency of

A. thyroxine

B. calcitonin

C. parathormone

D. both a and b

**Answer: C**



**Watch Video Solution**

**42.**  $Ca^{2+}$  level in body is controlled by

- A. thyroid gland
- B. parathyroid gland
- C. adrenal gland
- D. both a and b

**Answer: D**



**Watch Video Solution**

**43.** A person is having problem with calcium and phosphorus metabolism in his body which one of the following glands may not be functioning properly?

- A. Parotid
- B. Pancreas
- C. Adrenal cortex
- D. Parathyroid

**Answer: D**



**Watch Video Solution**

**44.** Increase in bleeding time and delay in blood coagulation is due to the deficiency of which hormone?

- A. Adrenaline
- B. Noradrenaline
- C. Parathormone
- D. Thyroxine

**Answer: C**



[Watch Video Solution](#)

**45.** Which gland atrophies in adults?

- A. Pancreas gland
- B. Thymus gland
- C. Adrenal gland
- D. Thyroid gland

**Answer: B**



[Watch Video Solution](#)

**46.** Which one of the following is termed temporary gland?

- A. Pineal
- B. Thymus gland
- C. Pancreas

D. Kidney

**Answer: B**



**Watch Video Solution**

**47.** Adrenals are located above

A. stomach

B. liver

C. pancrease

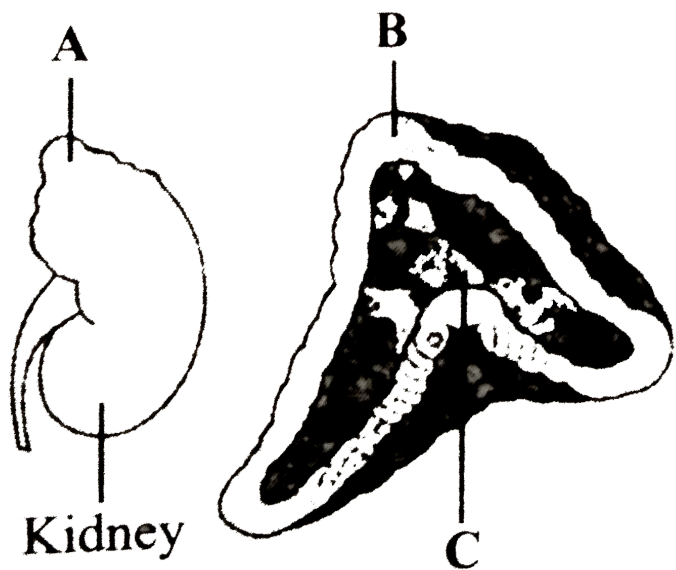
D. kidney.

**Answer: D**



**Watch Video Solution**

48. Identify the parts labelled A,B and C in the given figure and select the correct option (second figure is the cross section of 'A').



- |    |               |               |                 |
|----|---------------|---------------|-----------------|
|    | <i>A</i>      | <i>B</i>      | <i>C</i>        |
| A. | Adrenal gland | Cortex        | Medulla         |
|    | <i>A</i>      | <i>B</i>      | <i>C</i>        |
| B. | JGA           | Cortex        | Medulla         |
|    | <i>A</i>      | <i>B</i>      | <i>C</i>        |
| C. | Adrenal gland | Medulla       | Cortex          |
|    | <i>A</i>      | <i>B</i>      | <i>C</i>        |
| D. | Adrenal gland | Pars distalis | Pars intermedia |

Answer: A



49. underproduction of hormones by adrenal cortex alters carbohydrate metabolism causing active weakness and fatigue dehydration and metabolic acidosis this disease is called

- A. Addison's disease
- B. diabetes mellitus
- C. diabetes insipidus
- D. Grave's disease

**Answer: A**



**Watch Video Solution**

50. Feeling the tremors of an earthquake, a scared resident of seventh floor of a multistorey building starts climbing down the stairs rapidly. Which hormone initiated this action?

A. Adreanline

B. Glucagon

C. Gastrin

D. Thyroxine

**Answer: A**



**Watch Video Solution**

**51. Which of the following is called emergency gland of the body?**

A. Testis

B. Adrenal cortex

C. Thymus

D. Pituitary

**Answer: B**



**Watch Video Solution**

52. Adrenaline directly affects

- A. SA node
- B.  $\beta$  – cels of Langerhans
- C. dorsal root of spinal nerve
- D. epithelial cells of stomach.

**Answer: A**



**Watch Video Solution**

53. Which hormone causes dilation of blood vessels, increased oxygen consumption and glucogenesis?

- A. Glucagon
- B. ACTH
- C. Insulin

D. Adrenaline

**Answer: D**



**Watch Video Solution**

**54.** Reabsorption of  $Na^+$  is controlled by which one of the following hormones?

A. Aldosterone

B. Estrogen

C. Glucocorticoids

D. Testosterone

**Answer: A**



**Watch Video Solution**

55. Which of the following is a mineralocorticoid?

- A. Testosterone
- B. Progesterone
- C. Adrenaline
- D. Aldosterone

**Answer: D**



**Watch Video Solution**

56. In which of the following options, hormone is not matching with its source and function?

Hormone	Source	Function
A. Glucocorticoids	Adrenal Cortex	Produces anti inflammatory reactions
Hormone	Source	Function
B. Vasopressin	Posterior pituitary	Stimulates resorption of water and electrolytes

Hormone	Source	Function
C. Parathyroid hormone	Thyroid	Decreases the blood $\text{Ca}^{2+}$ level
Hormone	Source	Function
D. Melatonin	Pineal gland	Maintains sleep-wake Cycle

**Answer: C**



**Watch Video Solution**

**57.** Match column I with column II and select the correct option from the codes given below.

Column I      Column II

Thyroid      (i) Acts on the renal tubules

Adrenal      (ii) Regulates blood calcium level

Pituitary      (iii) Maintains diurnal rhythm of our body

Pineal      (iv) Acts on the melanocytes

A. iv,iii,ii,i

B. iii,iv,i,ii

C. iv,ii,iii,i

D. ii,i,iv,iii

**Answer: D**



**Watch Video Solution**

**58.** Besides corticotropin releasing hormone (CRH) which other hormone also stimulates the release of adrenocorticotrophic hormone (ACTH) ?

A. Glucagon

B. Insulin

C. Aldosterone

D. Epinephrine

**Answer: D**



**Watch Video Solution**

**59.** The islets of Langerhans are found in

- A. Liver
- B. pancreas
- C. stomach
- D. alimentary canal.

**Answer: B**



**Watch Video Solution**

**60.** Insulin is secreted by \_\_\_\_ of pancreas.

- A.  $\alpha$  – cells`
- B.  $\partial$  – cells
- C.  $\beta$  – cells
- D. none of these

**Answer: C**



**Watch Video Solution**



61. The source of somatostatin is same as that of

- A. thyroxine and calcitonin
- B. insulin and glucagon
- C. somatotropin and prolactin
- D. vasopressin and adrenline.

**Answer: B**



**Watch Video Solution**

62. Which of the following match is correct ?

Hormone	Effect
(a) Oxytocin	Milk ejection hormone
(b) Glucagon	Decreases blood sugar level
(c) Adrenaline	Decreases heart rate
(d) Thyroxine	Decreases BMR



**Watch Video Solution**

**63.** Which of the following statements regarding glucagon is false?

- A. It is secreted by  $\alpha$  — cells of langerhans.
- B. It acts antagonistically t insulin.
- C. It decrease blod sugar level.
- D. The gland responsible for its secretion is a heterocrine gland.

**Answer: C**



**Watch Video Solution**

64. Select the correct matching of a hormone, its source and function.

Hormone	Source	Function
(1) Vasopressin	Posterior Pituitary	Increases loss of water through urine
(2) Norepinephrine	Adrenal medulla	Increases heart beat, rate of respiration & alertness
(3) Glucagon	Beta-cells of Islets of Langerhans	Stimulates glycolysis
(4) Prolactin	Posterior Pituitary	Regulates growth of mammary glands and milk formation in females

A.

Hormone	Source	Function
Vasopressin	Posterior pituitary	Increases loss of water through u

B.

Hormone	Source	Function
Norepi-nephrine	Adrenal medulla	Increases heart beat rate of rep

C.

Hormone	Source	Function
Glucagon	Beta-cells of islets of Langerhans	Stimulates glycogeno

D.

Hormone	Source	Function
Prolactin	Posterior pituitry	Regulates growth of mammary gland

**Answer: B**



**Watch Video Solution**

**65.** Which of the following is synthesised in both the brain and endocrine glands?

A. ACTH

B. Cortisol

C. Oxytocin

## D. Somatostatin

Answer: D

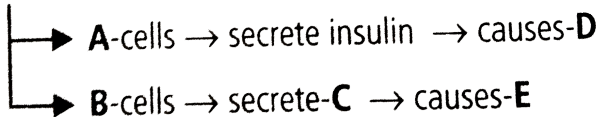


Watch Video Solution

66. Select the option that correctly identifies A to E in the given flow char.

Islets of Langerhans

has 2 types  
of main cells



- A.  $\begin{matrix} A & B & C & D & E \\ \alpha & \beta & \text{Glucagon} & \text{Hyperglycaemia} & \text{Hypoglycaemia} \end{matrix}$
- B.  $\begin{matrix} A & B & C & D & E \\ \beta & \alpha & \text{Cortisol} & \text{Hypoglycaemia} & \text{Hyperglycaemia} \end{matrix}$
- C.  $\begin{matrix} A & B & C & D & E \\ \beta & \alpha & \text{Cortisol} & \text{Hyperglycaemia} & \text{Hypoglycaemia} \end{matrix}$
- D.  $\begin{matrix} A & B & C & D & E \\ \beta & \alpha & \text{Glucagon} & \text{Hypoglycaemia} & \text{Hyperglycaemia} \end{matrix}$

Answer: D



Watch Video Solution

**67.** Which one of the following is not the function of insulin?

- A. Increases the permeability of cell membrane to glucose
- B. Increases the oxidation of glucose in the cells
- C. Initiates the conversion of glycogen to glucose
- D. Initiates the formation of hepatic glycogen from excess of glucose

**Answer: C**



Watch Video Solution

**68.** Select the mismatched pair from the following.

- A. Insulin-Gluconeogenesis
- B. Glucagon-Glycogenolysis
- C. Oxytocin-Contraction of uterine muscles

D. Prolactin-Milk production in mammary glands.

**Answer: A**



**Watch Video Solution**

**69.** Which of the following is not a characteristic of insulin?

- A. It stimulates the process of gluconeogenesis.
- B. It binds to glycoprotein receptors on cell membrane.
- C. Its deficiency leads to diabetes mellitus.
- D. Its oversecretion leads to insulin shock.

**Answer: A**



**Watch Video Solution**

70. A patient of diabetes mellitus excretes glucose in urine even when he is kept on a carbohydrate free diet. It is because

- A. fats are catabolised in adipose tissues to form glucose
- B. amino acids are catabolised in kidney to form glucose
- C. amino acids are discharged in blood stream from liver
- D. glycogen from muscles is released in blood stream.

**Answer: A**



**Watch Video Solution**

71. Given below are your statements (A-D) each with one or two blanks.

Select the option which correctly fills the blanks in any two statements.

- (A) Thymus secretes (i) which help in differentiating of ii
- (B) The adrenal medulla secretes i which stimulates the breakdown of ii to increased the blood glucose concentration during emergency situations.
- (C) The Leydig's cells or i present in the intertubular spaces in testis,



produce a group of hormones called ii

(D) Thyroid gland secretes i and triiodothyronine which contain ii

A. i melatonin, ii T-lymphocytes

i adrenaline, ii fat

B. i catecholamine, ii glycogen

i interstitial cells, ii LH

C. i catecholamine, ii glycogen

i thyroxine, ii iodine

D. i parathyroid hormone, ii calcium

i thymosin, ii B-lymphocytes

**Answer: C**



**Watch Video Solution**

**72.** Which one of the following statements is incorrect?

- A. Glucagon is secreted by pancreas.
- B. Androgens are produced by ovary.
- C. Thyrogens is secreted by thyroid.
- D. Oxytocin is secreted by pituitary.

**Answer: B**



**Watch Video Solution**

**73.** Read the given statements that define functions of a particular hormone.

- (i) Regulates the development, maturation and functions of epididymis, vas deferens, seminal vesicle, prostate gland, urethra, etc.
- (ii) Stimulates muscular growth of facial and axillary hair, aggressiveness, low pitch of voice, etc.
- (iii) Stimulates spermatogenesis.
- (iv) Act on CNS and sexual behaviour (Libido).
- (v) Produce anabolic (synthetic) effect on protein and carbohydrate

metablosim.

(vi) The Leydig's cells/interstitial cells (present in interbular space). Secrete this hormone under the influence of LH.

Which of the following hormones is referred here?

- A. FSH
- B. Progestrone
- C. Androgen
- D. Melatonin

**Answer: C**



**Watch Video Solution**

**74.** Match Column I with column II and select the correct option from the codes given below.

Column I	Column II
Testis	(i) Pigmentation
Ovaries	(ii) Atrophies in adult
Thymus	(iii) Estrogen
Melanin	(iv) Testosterone

A. iii,iv,i,ii

B. ii,iii,iv,i

C. iv,iii,ii,i

D. i,iv,ii,iii

**Answer: C**



**Watch Video Solution**

**75.** Given below is an incomplete table about certain hormones, their source glands and one major effect of each on the body in humans.

Identify the correct option for the three blanks A, B and C.

GLAND	SECRETION	EFFECT ON BODY
A	Oestrogen	Maintenance of secondary sexual characters
Alpha cells of Islets of Langerhans	B	Raises blood sugar level
Anterior pituitary	C	Over secretion leads to gigantism

- A. *A*      *B*      *C*  
Placenta   Glucagon   Calcitonin
- B. *A*      *B*      *C*  
Ovary   Glucagon   Growth hormone
- C. *A*      *B*      *C*  
Placenta   Insulin   Vasopressin
- D. *A*      *B*      *C*  
Ovary   Insulin   Calcitonin

**Answer: B**



**Watch Video Solution**

76. Match column I with column II and select the correct option from the given codes.

{:("column I","Column II"),("Hypothalamus",(i)"Relaxin"),("Anterior Pituitary",  
(ii)"Progesterone"),("Testis",(iii)"FSH & LH"),("Ovary",(iv)"Androgen"),(  
(v)"Gonadotropin releasing hormone"):]}

A. v,iii,iv,ii

B. v,iii,ii,iv

C. i,ii,iv,iii

D. iii,v,iv,ii

**Answer: A**



**Watch Video Solution**

77. Which one of the following pairs is incorrectly matched?

A. Glucagon-Beta cells(source)

- B. Somatostatin-Delta cells (Source)
- C. Corpus luteum-Relaxis (secretion)
- D. Corpus luteum-Relaxin (secretion)

**Answer: A**



**Watch Video Solution**

**78.** Which of the following hormones is necessary for the development of secondary sexual characters in human beings?

- A. Estrogen
- B. FSH
- C. Testosterone
- D. Both a and c

**Answer: D**



**Watch Video Solution**

79. Match the source gland with its respective hormone and function and select the correct option

A. 

B. 

C. 

D. 

**Answer: B**



[View Text Solution](#)

80. Match column I with Column II and select the correct option from the given codes.



Column I	Column II
Oxytocin	(i) Stimulates ovulation
Prolactin	(ii) Implantation and maintenance of pregnancy
Lutealising	(iii) Milk production in mammary glands
Progesterone	(iv) Uterine contraction during labour (v) Reabsorption of water by nephrons

A. v,iv,i,ii

B. iv,i,ii,iii

C. iv,iii,i,ii

D. v,iii,ii,i

**Answer: C**



**Watch Video Solution**

**81.** Low level of progesterone and estrogen in blood stimulate

A. FSH-RH production

B. LH production

C. GH production

D. all of these

**Answer: A**



**Watch Video Solution**

**82.** Match column I with column II and select the correct option from the codes given below

Column I      Column II

ANF            (i) Regulates blood calcium levels

MSH           (ii) Decreases blood pressure

GIP            (iii) Pigmentation

CT             (iv) Inhibits gastric secretion

A. iv,i,ii,iii

B. ii,i,iv,iii

C. iv,i,iii,ii

D. ii,iii,iv,i

**Answer: D**



**Watch Video Solution**

83. Which part of body secretes the hormone secretin?

- A. Stomach
- B. Oesophagus
- C. Ileum
- D. Duodenum

**Answer: D**



**Watch Video Solution**

84. Select the correctly matched pair.

- |                       |   |   |
|-----------------------|---|---|
| Pineal gland          | — | Does not influence menstrual cycle      |
| Corpus luteum         | — | secretes oxytocin                       |
| A. Interstitial cells | — | Erythropoietic                          |
| Cholecystokinin       | — | Stimulates pancreatic enzyme secretions |
- B.

C.

D.

**Answer: D**



**Watch Video Solution**

**85.** Read the given paragraph and select the option that correctly fills the blanks in it. Hormones produce their effect on target tissue by binding to specific A called hormone receptors located in the target tissues only water soluble hormones usually need B receptor that generate C messenger for regulating through cell membrane and bind to E receptors, mostly nuclear receptors. The hormone receptor complex enter the nucleus and moslty regulate gene expression or chromosome function by interaction of hormone receptor complex with the genone.

A. *A* *B* *C* *D* *E*  
proteins membrane-bound second lipid Intracellular

B. *A* *B* *C* *D* *E*  
lipids membrane-bound second water intracellular

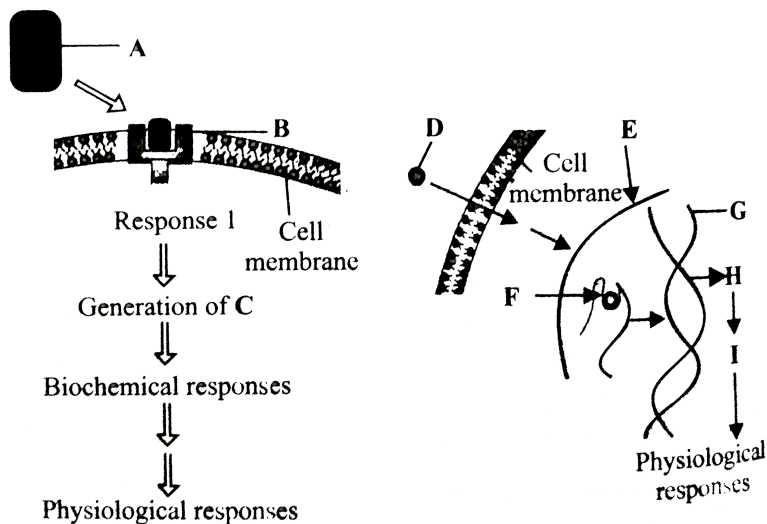
C. *A* *B* *C* *D* *E*  
proteins intracellular second lipid extracellular

D.      *A*                      *B*                      *C*                      *D*                      *E*  
          proteins    membrane    primary    lipid    intracellular

**Answer: A**

 **Watch Video Solution**

**86.** The given diagram represents the mechanism of action for two categories of hormones. Which of the following option correctly identifies the labels A to I?



A. A-Steroid hormone, B-Receptor, C-Secondary messenger, D-Non-steroid hormone, E-Nucleus F-Hormone-receptor complex, G-

OGenome,H-mRNA I-protein

B. A-Non-steroid hormon,B-Receptor,C-secondary messenger, D-steroid hormone,E-Nucleus, F-Hormone-receptor complex,G-genome, H-mRNA, I-protein

C. A-Steroid hormone, B-Receptor,C-Primary messenger D-Non-steroid hormone, E-Nucleus, F-Hormone-receptor complex, G-Genome, H-mRNA-Iprotein.

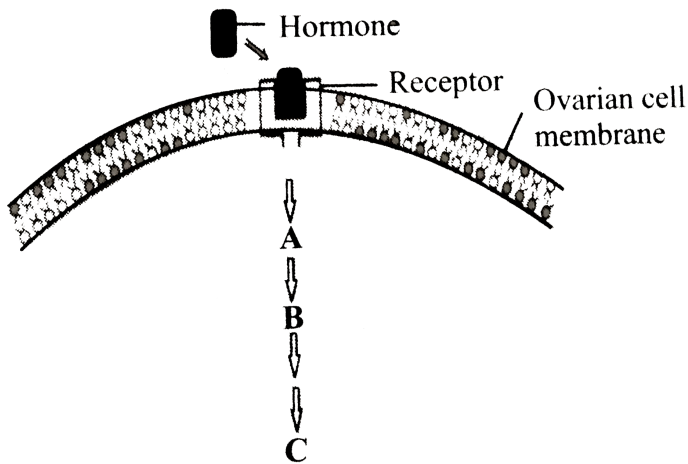
D. A-steroid hormone, B-Enzyme,C-Secondary messenger, D-Non-steroid hormone,E-Nucleus, F-Hormone-receptor complex, G-Genome, H-mRNA,I-protein

**Answer: B**



**Watch Video Solution**

**87.** Refer to the given diagrammatic representation of the mechanism of action of a protein hormone.



In which of the following options correct labelling of A,B and C is given?

A.

*A*

*B*

*C*

Generation of second messenger    Physiological    Biochemical responses

B.

*A*

*B*

*C*

Activation of genes    Biochemical responses    Generation of second messenger

C.

*A*

*B*

*C*

Generation of second messenger    Biochemical responses    Physiological responses

D.

*A*

*B*

*C*

Biochemical    Activation of genes    Physiological responses

**Answer: C**



**Watch Video Solution**

**88.** What is the correct to say about the hormone action in humans?

- A. Glucagon is secreted by  $\beta$  – cells of islets of Langerhans and stimulated glycogenolysis.
- B. Secretion of thymosin is stimulated with aging.
- C. In females, FSH first binds with specific receptors on ovarian cell membrane.
- D. FSH stimulates the secretion of androgens.

**Answer: C**



**Watch Video Solution**

**89.** According to the accepted concept of hormone action, if receptor molecules are removed from target organs, then the target organ will

- A. continue to respond to the hormone without any difference



- B. not respond to the hormone
- C. continue to respond to the hormone but will require
- D. higher concentration

**Answer: B**



**Watch Video Solution**

**90.** Which one of the following is proteinaceous in chemical nature?

- A. Thyroxine
- B. FSH
- C. Progesterone
- D. Oxytocin is secreted by pituitary.

**Answer: B**



**Watch Video Solution**

**91.** Insulin is a/an

- A. polysaccharide
- B. protein
- C. amino acid derivative
- D. lipid.

**Answer: B**



**Watch Video Solution**

**92.** Insulin receptors are

- A. extrinsic proteins
- B. intrinsic proteins
- C. G-proteins
- D. trimeric proteins.

**Answer: A**



**Watch Video Solution**

**93.** All hypophysiotropic hormones are peptides except

- A. corticotropin releasing hormone
- B. growth hormone inhibitory hormone
- C. somatostatin
- D. prolactin release inhibiting hormone.

**Answer: D**



**Watch Video Solution**

**94.** Which of the following hormones is a steroid?

- A. Epinephrine

B. Throxine

C. Estrogen

D. Gonadotropin

**Answer: C**



**Watch Video Solution**

**95.** Hormones of which of the following endocrine glands lacks peptides, amines and sulphur?

A. Thyroid and adrenal gland

B. Anterior pituitary

C. Testes

D. Poserior pituitary and pancreas

**Answer: C**



**Watch Video Solution**

96. Which of the following hormones is not a polypeptide?

A. LH

B. FSH

C. Insulin

D. Thyroxine

**Answer: D**



**Watch Video Solution**

97. The given table enlists various hormones and their chemical nature.

Select the option which completes the table



- |    |          |         |               |             |
|----|----------|---------|---------------|-------------|
|    | (i)      | (ii)    | (iii)         | (iv)        |
| A. | Cortisol | Steroid | Polypeptide   | Estradiol   |
| B. | Oxytocin | Protein | Iodothyronine | Epinephrine |

- C. (i) Cortisol (ii) Protein (iii) Amine (iv) Estradiol
- D. (i) Oxytocin (ii) Steroid (iii) Iodothyronine (iv) Epinephrine

**Answer: D**



**View Text Solution**

**98.** Which one of the following hormones never reaches to cytoplasm?

- A. Estrogen
- B. FSH
- C. Progesterone
- D. testosterone.

**Answer: B**



**Watch Video Solution**

99. The signal transduction of steroid hormone across cell is thorough

- A. binding of hormone to the cytoplasmic receptor and the complex binds to hormone response element on DNA within promoter DNA
- B. binding of hormone to the transmembrane receptor which initiates the production of second messenger that activates enzymes which further activates transcription factors
- C. binding of hormone to the transmembrane receptor which diffuses inside the cell cytoplasm and then activates the enzyme necessary for the activation of transcription factors.
- D. binding of hormone to the cytoplasmic receptor that initiates the production of second messenger which activates enzymes that further activates transcription factors.

**Answer: A**



**Watch Video Solution**

**100.** Estrogen and testosterone are steroid hormones, and most likely bind to

- A. membrane ion channel
- B. enzyme-linked membrane receptors
- C. G-protein coupled membrane receptors
- D. cytoplasmic receptors.

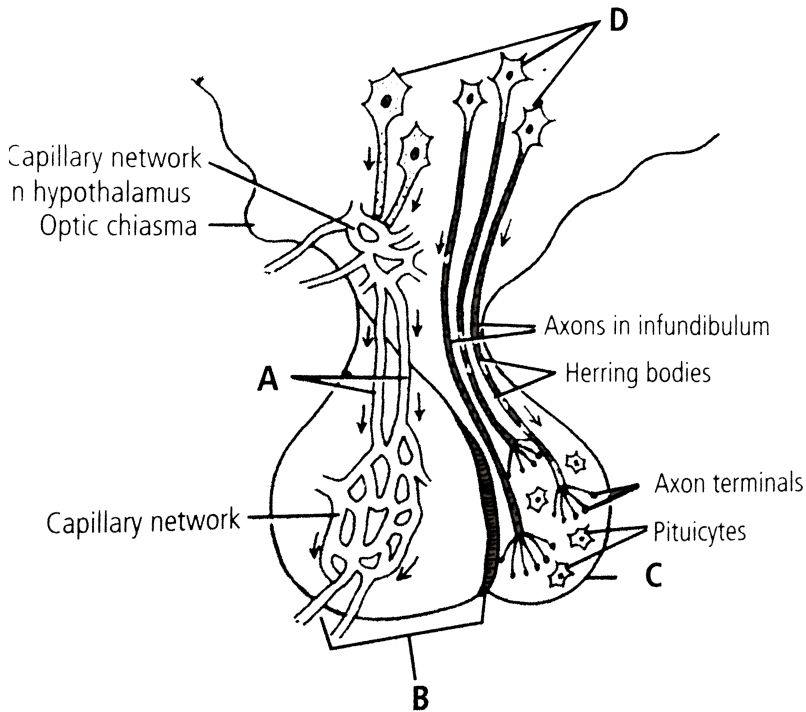
**Answer: D**



**Watch Video Solution**

**101.** Refer to the given figure of pituitary gland and select the correct option for the question that follows.





What will be the effect if part C is been removed?

- A. Oxytocin and ADH will not be synthesised.
- B. Oxytocin and ADH will be synthesised but could not be stored.
- C. only synthesis of oxytocin will occurs
- D. Only synthesis of ADH will occurs.

**Answer: B**



**Watch Video Solution**

102. The given figure shows\_\_\_\_\_

Metabolic fuels



Liver



Adipose cell



Muscle

- A. the major target sites and the metabolic actions of the anabolic hormone secreted by the beta cells of heterocrine gland
- B. the major target sites and the metabolic action of the hormone secreted by alpha cells of pancreas
- C. the major target sites and the functions of the hormone secreted by the anterior pituitary gland.
- D. the major target sites and the metabolic actions of the hormone secreted by the parafollicular C cells

**Answer: A**



**Watch Video Solution**

**103.** A scientist was studying the production of a protein that was released by an animal cell into a culture medium, she found that the protein only appeared in the culture medium after she added a few drops of a hormone to the cell. Before adding the hormone, she labelled the protein inside the cell with a fluorescent dye and looked at the cell under the light microscope. The dye was seen in flattened sheets and tube-like structures throughout the cell, and in stacks of flattened sac-like structures. After adding the hormone, the dye was also seen as small dots clustered against the cell membrane. Which statement most likely explains these observations?

- A. The hormone stimulates protein synthesis in the cell vacuole, the protein is then passed to the Golgi apparatus, and eventually passes through the cell membrane by passive diffusion.
- B. The hormone triggers the synthesis of the protein in the endoplasmic reticulum and it is then secreted outside of the cell via channel proteins in the cell membrane

C. The protein is made in the endoplasmic reticulum, is passed to the Golgi apparatus and is secreted through hormone-stimulated exocytosis.

D. The protein is made in the Golgi apparatus, is passed to the endoplasmic reticulum and is secreted through hormone-stimulated pinocytosis.

**Answer: C**



**Watch Video Solution**

**104.** Pancreas has two types of cells namely islets of Langerhans and acinar cells. In the early years of research on diabetes, extract of this gland was tested on diabetic patients. Results are tabulated below. (i)

Extract of pancreas -

(ii) Islet cell extract +

(iii) Acinar cell extract -

The correct interpretation is that

- A. anti-diabetic factor in extract 'C' was inactivated by extract 'A'
- B. anti-diabetic factor present in 'A' was destroyed by 'B'
- C. both 'A' and 'C' destroyed the anti-diabetic factor present in 'B'
- D. anti diabetic factor present in 'B' was destroyed by

**Answer: D**



**Watch Video Solution**

**105.** The anterior pituitary gland facilitates growth of an individual by release of the human growth hormone (HGH) which in turn is regulated by two hormones namely growth hormone releasing hormone (GHRH) and growth hormone inhibiting hormone (GHIH). Imbalance of these hormones could result in gigantism, dwarfism or acromegaly. Interpret the data given below and select the appropriate statement.



A. 1 and 3 will lead to gigantism while 4 and 5 will show dwarfism.

B. 3 will show gigantism, 1 will show acromegaly and 4 and 5 will show dwarfism.

C. 2,3 and 4 will show normal growth.

D. 1 will show gigantism, 3 will show acromegaly and 5 will show dwarfism.

**Answer: D**



**View Text Solution**

**106.** Select the right match of endocrine gland and their hormones among the options given below

- |                    |                         |
|--------------------|-------------------------|
| A. Pineal          | (i) Epinephrine         |
| B. Thyroid         | (ii) Melatonin          |
| C. Ovary           | (iii) Estrogen          |
| D. Adrenal medulla | (iv) Tetraiodothyronine |

A. iv,ii,iii,i

B. ii,iv,i,iii

C. iv,ii,I,iii

D. ii,iv,iii,i

**Answer: D**



**Watch Video Solution**

**107.** Which of the following hormones is not secreted by anterior pituitary?

A. Growth hormone

B. Follicle stimulating hormone

C. Oxytocin

D. Adrenocorticotrophic hormone

**Answer: C**



**Watch Video Solution**

**108.** Mary is about to face an interview. But during the first five minutes before the interview she experiences sweating. Which hormone is responsible for her restlessness?

- A. Estrogen and progesterone
- B. Oxytocin and vasopressin
- C. Adrenaline and noradrenaline
- D. Insulin and glucagon

**Answer: C**



**Watch Video Solution**

**109.** The steroid responsible for balance of water and electrolytes in our body is

- A. Insulin-Gluconeogenesis
- B. melatonin



C. testosterone

D. Aldosterone.

**Answer: D**



**Watch Video Solution**

**110.** Thymosin is responsible for balance of water and electrolytes in out body is

A. raising the blood sugar level

B. raising the blood calcium level

C. differentiation of T-lymphocytes

D. decrease in blood RBC.

**Answer: C**



**Watch Video Solution**

111. In the mechanism of action of a protein hormone, one of the second messengers is

A. cyclic AMP

B. insulin

C.  $T_3$

D. gastrin.

**Answer: A**



**Watch Video Solution**

112. Leydig cells produce a group of hormones called

A. androgens

B. estrogens

C. aldosterone

D. gonadotropins.

**Answer: A**



**Watch Video Solution**

**113.** Corpus luteum secretes a hormone called

- A. prolactin
- B. progesterone
- C. aldosterone
- D. testosterone.

**Answer: B**



**Watch Video Solution**

**114.** Cortisol is secreted from

- A. Pancreas

B. thyroid

C. adrenal

D. thymus.

**Answer: C**



**Watch Video Solution**

**115.** A hormone responsible for normal sleep wake cycle is

A. epinephrine

B. gastrin

C. melatonin.

D. insulin.

**Answer: C**



**Watch Video Solution**

**116.** Hormones are called chemical signals that stimulate specific target tissues. Which is the correct location of these receptors in case of protein hormones?

- A. Extracellular matrix
- B. Blood
- C. Plasma membrane
- D. Nucleus

**Answer: C**



**Watch Video Solution**

**117.** Choose the correct option among the following.



- A. ii, i, iii, iv
- B. iv, i, iii, ii

C. I,ii,iii,iv

D. I,iv,ii,iii

**Answer: B**



**View Text Solution**

**118.** Which of the following does not play any role in calcium balance in the human body?

A. Vitamin D

B. Parathyroid hormone

C. Thyrocalcitonin

D. Thymosin

**Answer: D**



**Watch Video Solution**

**119.** All the following tissues in mammals except one consists of a central 'medullary' region surrounded by a cortical region. Mark the wrong entry:

1. Ovary
2. Adrenal
3. Liver
4. Kidney

- A. Ovary
- B. Adrenal cortex
- C. Liver
- D. Kidney

**Answer: C**



**Watch Video Solution**

**120.** Which of the following conditions is not linked to deficiency of thyroid hormone?

A. Cretinism

B. Goitre

C. Myxodema

D. Exophthalmia

**Answer: D**



**Watch Video Solution**

**121.** Assertion: Neurohypophysis is under the direct regulation of the hypothalamus.

Reason: Neurohypophysis stores and releases two hormones called oxytocin and vasopressin which are actually synthesised by the hypothalamus.



**Watch Video Solution**



**122.** Assertion: Oxytocin is called 'milk-ejection hormone'

Reason: Oxytocin acts on the smooth muscles of uterus and stimulates its contraction. \



[Watch Video Solution](#)

**123.** Assertion: Melatonin influences the menstrual cycle, Pigmentation and defense capability.

Reason: Melatonin plays an important role in the regulation of diurnal rhythm of our body.



[Watch Video Solution](#)

**124.** Assertion: Thyroid hormones promote physical growth and development of mental faculties.

Reason: Hypothyroidism in adults causes retarded sexual development.



[Watch Video Solution](#)

**125.** Assertion: PTH is a hypercalcemic hormone.

Reason: Thymus degenerates in old individuals.

- A. Assertion and reason are both true
- B. Assertion and reason are both false
- C. assertion is true but the reason is false
- D. assertion is false but the reason is true

**Answer: A**



**Watch Video Solution**

**126.** Assertion: Immune response of old persons become weak.

Reason: Thymus degenerates in old individuals.



**Watch Video Solution**

**127.** Assertion: Adrenal cortex is not vital for survival and may be removed without subsequently leading to death.

Reason: Adrenal cortex secretes a number of steroid hormones which have only cumulative effects on the hormones of other glands.



[Watch Video Solution](#)

**128.** Assertion: Adrenal medullary hormones help in combating the stress condition.

Reason: Both adrenaline and noradrenaline act on same organs and produce similar effects.



[Watch Video Solution](#)

**129.** Assertion: Cortisol produces anti-inflammatory reactions and suppresses the immune response.

Reason: Cortisol stimulates gluconeogenesis, lipogenesis and proteogenesis.



[Watch Video Solution](#)

**130.** Assertion: Insulin stimulates glycogenolysis and gluconeogenesis and gluconeogenesis resulting in hyperglycemia.

Reason: Prolonged hyperglycemia leads to complex disorder called diabetes insipidus.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion
- B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion
- C. (c) If Assertion is true but Reason is false
- D. (d) If Assertion is false but Reason is true

**Answer: D**



[Watch Video Solution](#)

**131.** Assertion: Insulin is an anabolic hormone.

Reason: A fall in blood amino acids also increases insulin secretion.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion
- B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion
- C. (c) If Assertion is true but Reason is false
- D. (d) If Assertion is false but Reason is true

**Answer: C**



**Watch Video Solution**

**132.** Assertion: Androgens stimulate muscular growth.

Reason: Androgens produce anabolic effects on protein and carbohydrate metabolism.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion
- B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion
- C. (c) If Assertion is true but Reason is false
- D. (d) If Assertion is false but Reason is true

**Answer: A**



**Watch Video Solution**

**133.** Assertion: The estrogen level falls after menopause.

Reason: The estrogen is synthesised and secreted mainly by uterine lining.

- A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion

B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion

C. (c) If Assertion is true but Reason is false

D. (d) If Assertion is false but Reason is true

**Answer: C**



**Watch Video Solution**

**134.** Assertion: Renal cells are involved in stimulating the formation of RBCs.

Reason: The juxtaglomerular cells of kidney produce erythropoietin.

A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion

B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion

C. (c) If Assertion is true but Reason is false

D.

**Answer: A**



**Watch Video Solution**

**135.** Assertion: Insulin forms hormone receptor complex which regulate gene expression.

Reason: Insulin is a peptide hormone which can easily pass cell membrane to interact with hormone-receptor complex.

A. (a) Both, Assertion and Reason, are true and Reason is the correct explanation of Assertion

B. (b) Both, Assertion and Reason, are true but Reason is not the correct explanation of Assertion

C. (c) If Assertion is true but Reason is false

D. (d) If Assertion is false but Reason is true



Answer: C



Watch Video Solution