

Exercise - I (Conceptual Questions)

Build Up Your Understanding

INTRODUCTION AND MECHANISM OF HORMONE ACTION

1. A hormone is :-
 (1) An enzyme
 (2) Chemical messenger
 (3) Primary messenger
 (4) Both (2) and (3)
BCI001
2. Endocrine glands can be defined as those glands which pour their secretion :-
 (1) Directly into blood
 (2) Into blood or ducts
 (3) When they are cut
 (4) into particular organ
BCI003
3. The receptor for protein hormones are present on :-
 (1) Nucleus
 (2) Endoplasmic reticulum
 (3) Cytoplasm
 (4) Cell-surface
BCI004
4. Hormones are :-
 (1) Internal secretion mostly discharged in the blood by endocrine glands
 (2) Secretion of exocrine glands
 (3) Chemical substances secreted into the gut
 (4) Inorganic catalysts
BCI005
5. Hormones are :-
 (1) Produced in low amount
 (2) Easily diffusible
 (3) Non - antigenic
 (4) All
BCI006

6. Statement not correct for hormones is that, these:-
 (1) Are not all protein
 (2) Are secreted in small amount
 (3) Affect metabolism
 (4) Acts as catalyst
BCI008
7. "Secondary messenger" is :-
 (1) Cyclic AMP (2) ATP
 (3) ADP (4) DNA
BCI009
8. Hormones are chemically :-
 (1) Amino acid (2) Protein
 (3) Steroid (4) All
BCI010
9. First discovered hormone :-
 (1) Thyroxine (2) Adrenaline
 (3) Secretin (4) Insulin
BCI011
10. Which of the following is not a steroid hormone?
 (1) Androgen (2) Aldosterone
 (3) Estrogen (4) Relaxin
BCI012
11. Which of the following is not an endocrine gland?
 (1) Pancreas (2) Adrenal gland
 (3) Thyroid gland (4) Salivary gland
BCI013
12. Which of the following hormones is not proteinaceous in nature ?
 (1) TSH (2) Aldosterone
 (3) LH (4) FSH
BCI014

13. Which of the hormone is polypeptide ?

- (1) LH (2) FSH
(3) Insulin (4) Thyroxine

BCI015

14. Steroid hormones transmit their information by :

- (1) Stimulating the receptors present on cell membrane.
(2) Entering into the cell and modifying cellular contents.
(3) Entering into the cell and modifying nuclear organisation.
(4) The help of an intracellular second messenger.

BCI016

15. Which is not a peptide hormone-

- (1) Insulin (2) Cortisol
(3) Glucagon (4) All of these

BCI018

16. If receptor molecule is removed from target organ for hormone action, the target organ will :

- (1) Continue to respond but require higher concentration of hormone.
(2) Continue to respond but in opposite way.
(3) Continue to respond without any difference.
(4) Not respond to hormone.

BCI019

17. Prostaglandins are –

- (1) Amino acid (2) Steroid
(3) Fatty acid (4) Carbohydrate

BCI020

PITUITARY GLAND AND HYPOTHALAMUS

18. Pituitary gland does not control the secretory activity of :-

- (1) Thyroid (2) Adrenal cortex
(3) Adrenal medulla (4) Testes

BCI021

19. Which of the following controls spermatogenesis :-

- (1) FSH (2) LTH
(3) LH (4) Vasopressin

BCI022

20. Which is called "Master gland" of the body :-

- (1) Thyroid (2) Pituitary
(3) Thymus (4) Adrenal

BCI023

21. Hormone secreted by pituitary gland are chemically –

- (1) All protein
(2) All steroid
(3) Complex compounds of proteins and carbohydrates
(4) Some steroid and some protein

BCI026

22. Gonadotrophic hormone is produced by :-

- (1) Interstitial cells of testis
(2) Adrenal cortex
(3) Adenohypophysis
(4) Posterior part of thyroid

BCI028

23. The hormones FSH and LH are together called:

- (1) Emergency hormone
(2) Neuro hormone
(3) Gonadotrophic hormone
(4) Antistress hormone

BCI029

24. Gigantism and acromegaly are due to :-
 (1) Hyperpituitarism (2) Hypopituitarism
 (3) Hypothyroidism (4) Hyperthyroidism

BCI030

25. If amount of ADH decrease in blood, micturition :-

- (1) Remains unchanged
 (2) Decreases
 (3) Increases
 (4) Does not occur

BCI031

26. The follicle stimulating hormone is secreted from:-

- (1) Posterior lobe of pituitary gland
 (2) Reproductive gland
 (3) Thyroid gland
 (4) Anterior lobe of pituitary gland

BCI033

27. Pituitary gland is under control of :-

- (1) Hypothalamus (2) Adrenal gland
 (3) Pineal gland (4) Thyroid gland

BCI034

28. Vasopressin is responsible for :-

- (1) Controlling Oogenesis
 (2) Regulating blood pressure and act on the nephron tubules.
 (3) Regulating formation of pigment.
 (4) Controlling spermatogenesis.

BCI036

29. The main function of prolactin hormone is to:

- (1) Influence the activity of thyroid gland
 (2) Control development of Graffian follicles
 (3) Initiate and maintain secretion of milk by mammary gland
 (4) Cause ejection of milk

BCI037

30. I.C.S.H. in male acts on :-

- (1) Cells of leydig (2) Sertoli cells
 (3) Spermatids (4) Spermatogonia

BCI039

31. Hypophysis cerebri is the other name of :-

- (1) Adenohypophysis
 (2) Islets of langerhans
 (3) Neurohypophysis
 (4) Pituitary

BCI040

32. Which of the following hormone helps in facultative water reabsorption by nephrons :-

- (1) MSH (2) FSH
 (3) ADH (4) ACTH

BCI041

33. Hormone of hypothalamus are called :-

- (1) Regulatory hormones
 (2) Growth hormones
 (3) Tropic hormones
 (4) Both (1) and (3)

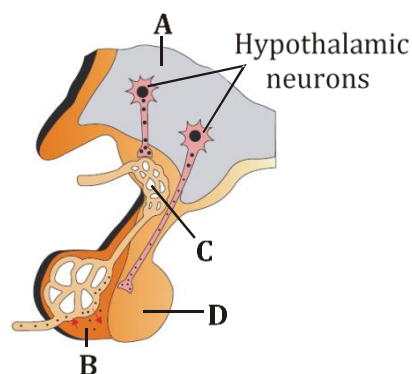
BCI042

34. Diabetes insipidus disease is caused due to the deficiency of hormone produced by :-

- (1) Pituitary (2) Adrenal
 (3) Pancreas (4) Thyroid

BCI043

- 35.



Which of the following option in given table is correct identification of the structures labelled as A,B,C and D and their corresponding function in the above figure:-

(1)	(A)	Hypothalamus	Produces Prolactin hormone
(2)	(B)	Posterior pituitary	Release & FSH and LH
(3)	(C)	Portal circulation	Supply blood from hypothalamus to posterior pituitary
(4)	(D)	Posterior pituitary	Release oxytocin and vasopressin

BCI044

36. MSH produced by the pars intermedia of pituitary causes in lower vertebrates :-

- (1) Darkening of skin
- (2) Light colouration of skin
- (3) Both
- (4) Body growth

BCI045

37. LTH is also known as :-

- (1) Lactogenic Hormone
- (2) Prolactin
- (3) Mammatropic Hormone
- (4) All

BCI046

38. Growth hormone of pituitary is more effective in:-

- (1) Presence of thyroxine
- (2) Absence of thyroxine
- (3) Absence of Insulin
- (4) Presence of adrenaline

BCI048

39. Gonadotropic hormone are :-

- (1) FSH
- (2) LH
- (3) LTH
- (4) FSH, LH

BCI049

40. MSH is secreted in man by which part of pituitary?

- (1) Anterior Pituitary
- (2) Middle lobe of pituitary
- (3) Posterior lobe of pituitary
- (4) Infundibulum

BCI050

41. Oxytocin is used in :-

- (1) Milk ejection
- (2) Parturition
- (3) Milk let down process
- (4) All of the above

BCI051

42. Hyper secretion of STH leads to :-

- (1) Dwarfism & Acromegaly
- (2) Goitre, Sterility
- (3) Cretinism, Myxoedema
- (4) Gigantism & Acromegaly

BCI052

43. Oxytocin mainly helps in :-

- (1) Milk production
- (2) Child birth
- (3) Diuresis
- (4) Gametogenesis

BCI053

44. Which hormone is concerned with the concentration of urine ?

- (1) Oxytocin
- (2) Vasopressin
- (3) Prolactin
- (4) Cortisol

BCI054

45. Acromegaly is caused by :-

- (1) Excess of S.T.H.
- (2) Excess of Thyroxine
- (3) Deficiency of Thyroxine
- (4) Excess of Adrenaline

BCI055

46. Oxytocin is released from :-

- (1) Adenohypophysis (Anterior lobe)
- (2) Adenohypophysis (Posterior lobe)
- (3) Hypothalamus
- (4) Neurohypophysis

BCI056

47. FSH is :-

- (1) Glycoprotein
- (2) Metalloprotein
- (3) Glycolipid
- (4) Phospholipid

BCI057

48. Which one hormone of the pituitary of the human controls the protein metabolism and growth of skeleton ?

(1) Iodo thyroxine
(2) Leutotrophic hormone
(3) Somatotrophic hormone
(4) Oxytocin

BCI059

49. Ovulation in mammals occurs mainly under the influence of :-

(1) TSH and ACTH (2) FSH and LH
(3) TSH and STH (4) MTH and ACTH

BCI060

50. Secretion of estrogen is controlled by :-

(1) HCG (2) Progesterone
(3) LH (4) F.S.H.

BCI061

51. Immediate cause of induction of ovulation in human female is plasma surge of :-

(1) Progesterone (2) LH
(3) FSH (4) Estradiol

BCI062

52. Stimulation of uterine contraction during child birth is brought about by :-

(1) Adrenaline (2) Progesterone
(3) Oxytocin (4) Prolactin

BCI063

53. Which gland secretion is under nervous control ?

(1) Adrenal cortex (2) Anterior pituitary
(3) Posterior pituitary (4) Pineal body

BCI064

54. Which of the following is correct ?

(A) Pars distalis produces GH, PRL, TSH, ACTH, LH, FSH
(B) Pars intermedia secretes only one hormone called melatonin

(C) Posterior lobe of pituitary is also called as neurohypophysis or pars nervosa

(D) Posterior pituitary, stores and releases two hormones called oxytocin and vasopressin

(1) A, B & C (2) B, C & D
(3) A, C & D (4) B and C

BCI065

55. ADH responsible for reabsorption of water and reduction of urine secretion is synthesized by :

(1) Posterior pituitary gland
(2) Juxtaglomerular apparatus
(3) Anterior pituitary gland
(4) Hypothalamus

BCI066

56. The hormones that initiate ejection of milk, stimulates milk production and growth of ovarian follicles are respectively known as :

(1) PRL, OT and LH
(2) OT, PRL and FSH
(3) LH, PRL and FSH
(4) PRH, OT and LH

BCI067

57. Match the hormone in column I with their function in column II :

Column I		Column II	
a	FSH	i	Prepare endometrium for implantation
b	LH	ii	Develop female secondary sexual characters
C	Progesterone	iii	Contraction of uterine wall
D	Estrogen	iv	Development of corpus luteum
		v	Maturation of Graafian follicle

(1) a-v, b-iv, c-i, d-ii
(2) a-iii, b-iv, c-i, d-ii
(3) a-iv, b-iii, c-ii, d-i
(4) a-i, b-ii, c-iii, d-iv

BCI068

58. Which of the following is gonadotrophic hormone?

- (1) Collip's hormone
- (2) Prolactin
- (3) Oxytocin
- (4) Luteinizing hormone

BCI069

59. FSH is produced by :

- (1) Adrenal cortex
- (2) Anterior lobe of pituitary gland
- (3) Middle lobe of pituitary gland
- (4) Posterior lobe of pituitary gland

BCI070

60. Hormone that promotes cell division, protein synthesis and bone growth is –

- (1) ACTH (2) ADH (3) PTH (4) GH

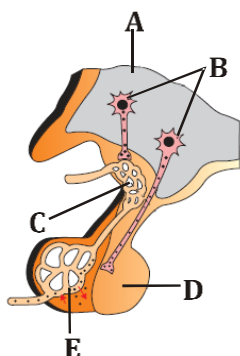
BCI071

61. An adenohypophysis hormone which is regulated by feedback mechanism is –

- (1) Oxytocin (2) TSH
- (3) Vasopressin (4) Cortisone

BCI072

62. On the basis of below diagram choose the correct option which match the physiological function of hormones :-



- (1) A–Only releases, D–Release and synthesis, E–Only synthesis
- (2) A–Only release, D–Only synthesis, E–Synthesis and release

(3) A–Synthesis and release, D–Only releases, E–Synthesis and releasing

(4) A–Synthesis and release, D–Only synthesis, E–Only release

BCI073

63. Vasopressin influences :

- (1) Electrolyte efflux
- (2) Nerve excitability
- (3) Water reabsorption
- (4) All of these

BCI074

64. If ADH level of blood is less :

- (1) Volume of urine increases
- (2) Volume of urine decreases
- (3) Volume of urine is normal
- (4) Volume of urine is unaffected

BCI075

65. Which of the following hormones helps in the contraction of uterus during child birth:

- (1) ADH (2) Androgen
- (3) Oxytocin (4) Glucocorticoid

BCI078

66. Which of the following hormones stimulates the secretion of milk from female ?

- (1) LH (2) Prolactin
- (3) Oxytocin (4) Progesterone

BCI079

67. The formation of egg and sperm is affected by:

- (1) LH (2) MSH (3) TSH (4) FSH

BCI080

68. Mammalian prolactin is secreted by –

- (1) Adenohypophysis
- (2) Neurohypophysis
- (3) Adrenal cortex
- (4) Adrenal medulla

BCI081

69. Hypersecretion of growth hormone in the period of growth lead to :

- (1) Acromegaly (2) Cushing syndrome
(3) Midgets (4) Gigantism

BCI082

70. Acromegaly is a disease caused by :

- (1) Over secretion of growth hormone in childhood
(2) Over secretion of growth hormone in adulthood
(3) Under secretion of growth hormone in adulthood
(4) Deficiency of calcium and phosphorous in the diet.

BCI083

71. In absence of ADH, the disease caused is –

- (1) Diabetes mellitus (2) Diabetes insipidus
(3) Oligouria (4) Acromegaly

BCI084

72. Gonadotropic hormones are :

- (1) Estrogen and progesterone
(2) Luteinizing hormone and follicle stimulating hormone
(3) Testosterone and Androsterone
(4) Prolactin and Luteotropin

BCI086

73. Which hormone is responsible for milk ejection after the birth of the baby ?

- (1) Oxytocin (2) Progesterone
(3) Prolactin (4) Estrogen

BCI087

THYROID, PARATHYROID AND ADRENAL GLANDS

74. How many statements are correct regarding parathyroid gland ?

- (a) Four parathyroid gland present on front side of thyroid gland
(b) It secretes parathromone which is steroidal in nature

(c) It increase blood Ca^{++} level

(d) It acts on bone and stimulate bone resorption

- (1) One (2) Two
(3) Three (4) Four

BCI089

75. Injection of which of the following increases metabolic rate ?

- (1) STH (2) Insulin
(3) Thyroxine (4) Testosterone

BCI092

76. Hypothyroidism in adults causes :-

- (1) Addison's disease
(2) Myxoedema
(3) Sterility
(4) Cretinism

BCI093

77. Parathormone deficiency in man causes :-

- (1) Hyper calcemia (2) Hypocalcaemia
(3) Goitre (4) All

BCI097

78. Cretinism is due to abnormal secretion of :-

- (1) ACTH (2) Thyroxine
(3) Calcitonin (4) Parathormone

BCI098

79. Exophthalmic goitre is caused due to hypersecretion of :-

- (1) Adrenal (2) Thyroid
(3) Parathyroid (4) Thymus

BCI100

80. The main function of thyroid gland is to control :-

- (1) Growth
(2) Reproduction
(3) Secondary sexual characters
(4) Basal metabolic rate

BCI101

- | | |
|---|--|
| <p>81. The two lobes of thyroid gland are joined by a horizontal connection called :-
 (1) Inter thyroidal connective
 (2) Inter thyroidal commissure
 (3) Intermediary lobe
 (4) Isthmus
 BCI102</p> <p>82. Hyper secretion of Parathyroid hormone result in
 (1) Stronger bones due to increased incorporation of calcium in them.
 (2) Deposition of calcium in various skeletal structure
 (3) No effect on the constitution of bones
 (4) Weaker bones due to increased removal of calcium from them
 BCI106</p> <p>83. Hormone that decrease calcium level in blood:
 (1) Thyroxine (2) Parathormone
 (3) Thyrocalcitonin (4) Cortisol
 BCI108</p> <p>84. BMR is increased due to :-
 (1) ADH
 (2) Adrenaline
 (3) Parasympathetic nervous system
 (4) Thyroxine
 BCI109</p> <p>85. Goitre is a pathological condition associated with:
 (1) Glucagon (2) Thyroxine
 (3) Progesterone (4) Testosterone
 BCI110</p> <p>86. Effects of thyroxine on metabolic rate is:-
 (1) Decreases (2) No effect
 (3) Increases (4) Uncertain
 BCI111</p> | <p>87. Deficiency of which of the following may cause bone deformation :-
 (1) Oxytocin (2) Vitamin D
 (3) STH (4) Thyroxine
 BCI112</p> <p>88. Function of thyrocalcitonin :-
 (1) To reduce the calcium level in blood
 (2) To increase the calcium level in blood
 (3) Oppose the action of thyroxine
 (4) Maturation of gonads
 BCI113</p> <p>89. Parathormone deficiency leads to :-
 (1) Decrease of Ca^{+2} level in blood
 (2) Increase of Ca^{+2} level in blood
 (3) Osteoporosis
 (4) Hypercalcemia
 BCI114</p> <p>90. Parathyroid hormone –
 (1) is produced by the thyroid gland
 (2) is released when blood calcium levels fall
 (3) stimulates osteoblasts to lay down new bone
 (4) stimulates calcitonin release.
 BCI116</p> <p>91. Hyposecretion of aldosterone causes :-
 (1) Gull's disease (2) Grave's disease
 (3) Cushing's disease (4) Addison's disease
 BCI119</p> <p>92. A tumour in the adrenal zona glomerulosa can cause hyper secretion of hormones produced in that region. Which of the following might you expect to find in a patient with such a tumour ?
 (1) Increased blood sodium levels
 (2) Increased blood glucose levels
 (3) Decreased blood calcium levels
 (4) Increased dehydration
 BCI121</p> |
|---|--|

- 93.** Epinephrine and norepinephrine together known as :-
 (1) Steroid (2) Protein
 (3) Catecholamines (4) Glycoprotein
BCI123
- 94.** Retention of sodium in body depends up on hormone from :-
 (1) Adrenal cortex (2) Adrenal medulla
 (3) Parathyroid (4) Thyroid
BCI125
- 95.** Adrenal cortex also controls the carbohydrate metabolism through :-
 (1) Adrenaline
 (2) Noradrenaline
 (3) Glucocorticoids
 (4) Mineralocorticoids
BCI126
- 96.** "4s gland" is :-
 (1) Pancreas (2) Liver
 (3) Thyroid (4) Adrenal
BCI127
- 97.** Adrenaline increases :-
 (1) Heart beat (2) Blood pressure
 (3) Both (4) Salivation
BCI129
- 98.** Which hormone controls activity of zona glomerulosa of adrenal gland ?
 (1) Renin (2) Thyroxine
 (3) ADH (4) FSH
BCI130
- 99.** All of the following are functions of adrenaline except:-
 (1) Increases blood supply in skeletal muscle
 (2) Hyperglycaemia
 (3) Uterine relaxation
 (4) Tachycardia
BCI131
- 100.** When the primary sexual organ does not develop, puberty may appear due to :-
 (1) Stimulation of adrenal cortex
 (2) Stimulation of adrenal medulla
 (3) Excessive secretion from gonads
 (4) Reduced secretion from gonads
BCI132
- 101.** Norepinephrine hormone is secreted from :-
 (1) Zona glomerulosa
 (2) Zona fasciculata
 (3) Zona reticularis
 (4) Medulla of adrenal
BCI133
- 102.** Which gland is concerned with salt equilibrium in body :-
 (1) Anterior pituitary (2) Pancreas
 (3) Adrenal (4) Thyroid
BCI134
- 103.** Norepinephrine leads to increase in :-
 (1) Blood pressure
 (2) Urine production
 (3) Cellular respiration
 (4) Release of epinephrine
BCI135
- 104.** Largest amount of iodine is found in :-
 (1) Adrenals (2) Liver
 (3) Thyroid (4) Testes
BCI136
- 105.** Which gland prepares you for flight, fear and fight during adverse conditions :-
 (1) Thyroid (2) Parathyroid
 (3) Pituitary (4) Adrenal
BCI137
- 106.** Blood pressure is controlled by :-
 (1) Adrenal gland (2) Thyroid gland
 (3) Pituitary gland (4) Pancreas
BCI138

107. Life saving hormone are secreted by :-

- | | |
|---------------|-------------|
| (1) Pituitary | (2) Pineal |
| (3) Adrenal | (4) Thyroid |

BCI139

108. Hypocalcemia causes -

- | | |
|---------------|------------------|
| (1) Tetany | (2) Osteoporosis |
| (3) Myxoedema | (4) Cretinism |

BCI140

109. Temperature of body is controlled by which endocrine gland:-

- | | |
|---------------|--------------|
| (1) Pituitary | (2) Thyroid |
| (3) Adrenal | (4) Pancreas |

BCI141

110. During emergency which of the following hormone is secreted ?

- | | |
|-----------------|----------------|
| (1) Aldosterone | (2) Thyroxine |
| (3) Adrenaline | (4) Calcitonin |

BCI142

111. Corticosteroids are secreted by :

- | | |
|---------------------|-------------------|
| (1) Adrenal gland | (2) Pineal gland |
| (3) Pituitary gland | (4) Thyroid gland |

BCI143

112. Aldosterone is secreted by :

- | | |
|----------------------|----------------------|
| (1) Zona glomerulosa | (2) Zona fasciculata |
| (3) Zona reticularis | (4) Zona pellucida |

BCI144

113. Which gland stores hormone before its secretion and then release it ?

- | | |
|-------------|---------------|
| (1) Thyroid | (2) Pancreas |
| (3) Pineal | (4) Pituitary |

BCI145

114. Which of the following disease is not related to thyroid gland ?

- | | |
|---------------|----------------|
| (1) Goitre | (2) Cretinism |
| (3) Myxoedema | (4) Acromegaly |

BCI146

115. Grave's disease is due to :

- | |
|--|
| (1) Hyperactivity of thyroid gland |
| (2) Hypoactivity of adrenal cortex |
| (3) Hyperactivity of adrenal medulla |
| (4) Hypoactivity of islets of Langerhans |

BCI147

116. Hypothyroidism causes in adult :

- | | |
|---------------|---------------|
| (1) Obesity | (2) Diabetes |
| (3) Cretinism | (4) Myxoedema |

BCI148

117. The hormone that controls the level of calcium and phosphorus in the blood is secreted by :

- | | |
|---------------|-----------------|
| (1) Thyroid | (2) Parathyroid |
| (3) Pituitary | (4) Thymus |

BCI149

118. Obesity of face, hyperglycemia and virilism in females is characteristic of –

- | |
|------------------------|
| (1) Grave's disease |
| (2) Addison's disease |
| (3) Conn's disease |
| (4) Cushing's syndrome |

BCI150

119. Muscular tetany can be caused by deficiency of:

- | | |
|--------------|-------------------------|
| (1) Oxytocin | (2) STH |
| (3) ADH | (4) Parathyroid hormone |

BCI151

120. Addison's disease is caused due to :

- | |
|---|
| (1) hypersecretion of adrenal cortical hormones |
| (2) hypersecretion of growth hormone |
| (3) hypersecretion of thymus |
| (4) none of the above |

BCI152

- 121.** Para-thyroid hormone is a :
 (1) Peptide (2) Carbohydrate
 (3) Lipid (4) Steroid
BCI153
- 122.** Parathormone is secreted during :
 (1) Increased blood calcium level
 (2) Decreased blood calcium level
 (3) Increased blood sugar level
 (4) Decreased blood sugar level
BCI155
- 123.** Chronic disturbance in hormone secretion of thyroid gland causes :
 (1) Goitre (2) Diabetes
 (3) Addison's disease (4) Colour blindness
BCI156
- 124.** In man removal of Parathyroid gland leads to:
 (1) Acromegaly (2) Tetany
 (3) Polyuria (4) Diabetes insipidus
BCI160
- 125.** Parathormone induces :
 (1) Increase in blood sugar level
 (2) Decrease in serum calcium level
 (3) Increase in serum calcium level
 (4) Decrease in blood sugar level
BCI161
- 126.** Which disease is caused by under secretion of adrenal cortex ?
 (1) Cretinism (2) Dwarfism
 (3) Sterility (4) Addison's disease
BCI162
- 127.** Mammals born without a thymus gland fail to manufacture :-
 (1) B - Lymphocytes (2) T - Lymphocytes
 (3) Plasma cells (4) Basophils
BCI165
- 128.** If thymectomy is done during adult hood then what possibility is there ?
 (1) Immunosuppressant
 (2) Die immediately
 (3) No adverse reaction
 (4) Myasthenia gravis
BCI166
- 129.** Thymosin stimulates :-
 (1) Milk secretion (2) Erythrocytes
 (3) T-lymphocytes (4) Melanocytes
BCI167
- 130.** Glucagon is secreted by :-
 (1) Leydig cells
 (2) Islets of Langerhans
 (3) Corpus luteum
 (4) Glisson's capsule
BCI168
- 131.** Oversecretion of glucagon can cause :-
 (1) Tetany (2) Diabetes insipidus
 (3) Acromegaly (4) Glycosuria
BCI171
- 132.** Which of the following is not function of insulin ?
 (1) Increase glycogenesis
 (2) Increase glycogenolysis
 (3) Increase up take of amino acid by liver and muscle
 (4) Promote oxidation of glucose
BCI173
- 133.** Injection of Insulin to human leads to increased :-
 (1) Glucose level of blood
 (2) Glucose level of urine
 (3) Glucose level of cells
 (4) Calcium level of blood
BCI174

134. In old age, immune system becomes weak due to gradual degeneration of :-

- (1) Pineal gland (2) Parathyroid gland
(3) Thymus gland (4) Adrenal gland

BCI176

135. T-cells mature in :

- (1) Peyer's patch (2) Lymph node
(3) Thymus (4) Brusa of Fabricius

BCI178

136. The diabetes mellitus is caused by :-

- (1) Hyper secretion of Insulin
(2) Hyposecretion of Insulin
(3) Hyposecretion of ADH
(4) Hyper secretion of ADH

BCI179

137. In diabetes mellitus disease, the urine contains :-

- (1) Salt (2) Fat
(3) Protein (4) Sugar

BCI180

138. A patient of diabetes mellitus drink more water and he eliminates extra amount of which substance from blood :-

- (1) Protein (2) Sugar
(3) Fat (4) Hormone

BCI181

139. Which gland decreases in size with increasing age?

- (1) Thyroid (2) Adrenal
(3) Thymus (4) Pituitary

BCI182

140. Insulin is secreted by :

- (1) α -cell of islets of Langerhans
(2) δ -cell of islets of Langerhans
(3) β -cell of islets of Langerhans
(4) Pancreatic acinar cell

BCI183

141. Which one of the following endocrine gland functions as a biological clock and neurosecretory transducer ?

- (1) Adrenal gland (2) Thyroid gland
(3) Pineal gland (4) Thymus gland

BCI184

142. Mammalian thymus is mainly concerned with:

- (1) Regulation of body temperature
(2) Regulation of body growth
(3) Immunological functions
(4) Secretion of thyrotropin

BCI185

143. The islets of Langerhans are found in :

- (1) Pancreas (2) Stomach
(3) Liver (4) Alimentary canal

BCI186

144. Melatonin is secreted by :

- (1) Pineal gland (2) Parathyroid gland
(3) Pituitary gland (4) Thyroid gland

BCI187

145. Insulin is related with :

- (1) Diabetes (2) Migrain
(3) Jaundice (4) All of the above

BCI188

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

- (1) Fats are catabolised to form glucose
(2) Amino acids are catabolised in liver
(3) Amino acids are discharged in blood stream from liver
(4) Glycogen from muscles are discharged in blood stream from liver

BCI189

147. The modern idea about ageing is that our body slowly loses the power of defence against the invasion of germs and pathogens. This process starts by the disappearance of which organ ?

- (1) Spleen
- (2) Thymus gland
- (3) Pituitary gland
- (4) Parathyroid gland

BCI192

148. Which of the following hormones secreted by pancreas ?

- (1) Insulin and glucagon
- (2) Epinephrine and nor-epinephrine
- (3) Thyroxin and melanin
- (4) Prolactin and oxytocin

BCI193

149. The function of glucagon hormone is :

- (1) To increase glycogenesis
- (2) To decrease blood sugar level
- (3) To release glucose from liver cells and glycogenolysis promotion
- (4) To increase the absorption of glucose and fatty acids through cell

BCI194

GONADS AND OTHER NON-ORGANISED GLANDS

150. Leydig cells are meant for :-

- (1) Formation of sperm
- (2) To produce progesterone
- (3) To produce testosterone
- (4) Nutrition of sperm

BCI197

151. The "Estrogen" secretion is controlled by :-

- (1) FSH
- (2) LH
- (3) Progesterone
- (4) GH

BCI201

152. Which of the following hormone is not secreted by gastro-intestinal tract ?

- (1) Gastrin
- (2) Secretin
- (3) Cholecystokinin
- (4) Erythropoietin

BCI202

153. Which one is a female sex hormone ?

- (1) Estrogen
- (2) Progesterone
- (3) Estradiol
- (4) All of these

BCI203

154. Atrial wall of the heart muscle secretes a peptide hormone to reduce the blood pressure is:

- (1) Cholecystokinin
- (2) Erythropoietin
- (3) Atrial natriuretic factor
- (4) Epinephrine

BCI204

155. Which temporary endocrine gland forms in ovary after ovulation :-

- (1) Corpus callosum
- (2) Corpus albicans
- (3) Corpus luteum
- (4) Corpus striata

BCI206

156. Secretin stimulates the activity of :-

- (1) Salivary glands
- (2) Gastric gland
- (3) Pancreas
- (4) Gall-bladder

BCI207

157. Placenta produces which hormone

- (1) GH
- (2) Gastrin
- (3) ACTH
- (4) Progesterone

BCI209

158. Hormone which is responsible for maintenance of pregnancy is :

- (1) Estrogen
- (2) Aldosterone
- (3) Progesterone
- (4) Testosterone

BCI210

159. Which of the following steroid sex hormone influence secondary sex organs?

- (1) Progesterone
- (2) Oestrogen
- (3) LH
- (4) LTH

BCI211

160. Progesterone is secreted from :

- (1) Testes
- (2) Adrenal gland
- (3) Pituitary gland
- (4) corpus luteum

BCI212

EXERCISE-I (Conceptual Questions)

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	4	1	4	1	4	4	1	4	3	4	4	2	3	3	2
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	4	3	3	1	2	1	3	3	1	3	4	1	2	3	1
Question	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Answer	4	3	4	1	4	1	4	1	4	1	4	4	2	2	1
Question	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Answer	4	1	3	2	4	2	3	3	3	4	2	1	4	2	4
Question	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Answer	2	3	3	1	3	2	4	1	4	2	2	2	1	2	3
Question	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Answer	2	2	2	2	4	4	4	3	4	2	3	2	1	1	2
Question	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Answer	4	1	3	1	3	4	3	1	3	1	4	3	1	3	4
Question	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Answer	1	3	1	2	3	1	1	1	4	1	4	2	4	4	4
Question	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
Answer	1	2	1	2	3	4	2	3	3	2	4	2	3	3	3
Question	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
Answer	2	4	2	3	3	3	3	1	1	1	1	2	1	3	3
Question	151	152	153	154	155	156	157	158	159	160					
Answer	1	4	4	3	3	3	4	3	2	4					

Exercise - II (Previous Year Questions)

AIPMT/NEET

AIPMT 2014

1. Identify the hormone with its **correct** matching of source and function :

- (1) Oxytocin - posterior pituitary, growth and maintenance of mammary glands.
- (2) Melatonin - pineal gland, regulates the normal rhythm of sleepwake cycle.
- (3) Progesterone - corpus-luteum, stimulation of growth and activities of female secondary sex organs.
- (4) Atrial natriuretic factor - ventricular wall increases the blood pressure.

BCI228

2. Fight-or-flight reactions cause activation of

- (1) the parathyroid glands, leading to increased metabolic rate.
- (2) the kidney, leading to suppression of renin-angiotensin-aldosterone pathway.
- (3) the adrenal medulla, leading to increased secretion of epinephrine and norepinephrine.
- (4) the pancreas leading to a reduction in the blood sugar levels.

BCI229

Re-AIPMT 2015

3. Which one of the following hormones is **not** involved in sugar metabolism ?

- (1) Glucagon
- (2) Cortisone
- (3) Aldosterone
- (4) Insulin

BCI230

4. Which one of the following hormones though synthesised elsewhere, is stored and released by the master gland ?

- (1) Melanocyte stimulating hormone
- (2) Antidiuretic hormone
- (3) Luteinizing hormone
- (4) Prolactin

BCI231

NEET-I 2016

5. Which of the following pairs of hormones are **not** antagonistic (having opposite effects) to each other?

- (1) Parathormone – Calcitonin
- (2) Insulin – Glucagon
- (3) Aldosterone – Atrial Natriuretic Factor
- (4) Relaxin – Inhibin

BCI232

NEET-II 2016

6. Graves' disease is caused due to :-

- (1) Hyposecretion of adrenal gland
- (2) Hypersecretion of adrenal gland
- (3) Hyposecretion of thyroid gland
- (4) Hypersecretion of thyroid gland

BCI233

7. Name a peptide hormone which acts mainly on hepatocytes, adipocytes and enhances cellular glucose uptake and utilization.

- (1) Secretin
- (2) Gastrin
- (3) Insulin
- (4) Glucagon

BCI234

8. Osteoporosis, an age-related disease of skeletal system, may occur due to :-
- (1) Decreased level of estrogen
 - (2) Accumulation of uric acid leading to inflammation of joints.
 - (3) Immune disorder affecting neuro-muscular junction leading to fatigue.
 - (4) High concentration of Ca^{++} and Na^+ .

BCI235

9. The posterior pituitary gland is **not** a 'true' endocrine gland because :-
- (1) It is under the regulation of hypothalamus
 - (2) It secretes enzymes
 - (3) It is provided with a duct
 - (4) It only stores and releases hormones

BCI236

NEET(UG) 2017

10. A temporary endocrine gland in the human body is :-
- (1) Corpus cardiacum
 - (2) corpus luteum
 - (3) Corpus allatum
 - (4) Pineal gland

BCI237

11. GnRH, a hypothalamic hormone, needed in reproduction, acts on:
- (1) anterior pituitary gland and stimulates secretion of LH and FSH.
 - (2) posterior pituitary gland and stimulates secretion of oxytocin and FSH.
 - (3) posterior pituitary gland and stimulates secretion of LH and relaxin.
 - (4) anterior pituitary gland and stimulates secretion of LH and oxytocin.

BCI238

12. Hypersecretion of Growth Hormone in adults does not cause further increase in height, because:

- (1) Epiphyseal plates close after adolescence.
- (2) Bones lose their sensitivity to Growth Hormone in adults.
- (3) Muscle fibres do not grow in size after birth.
- (4) Growth Hormone becomes inactive in adults.

BCI239

NEET(UG) 2018

13. Which of the following is an amino acid derived hormone ?

- (1) Epinephrine
- (2) Ecdysone
- (3) Estradiol
- (4) Estrinol

BCI240

14. Which of the following hormones can play a significant role in osteoporosis ?

- (1) Aldosterone and Prolactin
- (2) Progesterone and Aldosterone
- (3) Estrogen and Parathyroid hormone
- (4) Parathyroid hormone and Prolactin

BCI241

NEET(UG) 2019

15. How does steroid hormone influence the cellular activities?

- (1) Changing the permeability of the cell membrane.
- (2) Binding to DNA and forming a gene-hormone complex.
- (3) Activating cyclic AMP located on the cell membrane.
- (4) Using aquaporin channels as second messenger.

BCI242

16. Match the following hormones with the respective disease :-

- | | |
|--------------------|-------------------------|
| (a) Insulin | (i) Addison's disease |
| (b) Thyroxine | (ii) Diabetes insipidus |
| (c) Corticoids | (iii) Arcomegaly |
| (d) Growth Hormone | (iv) Goitre |
| | (v) Diabetes mellitus |

Select the **correct** option.

- | (a) | (b) | (c) | (d) |
|----------|------|-------|-------|
| (1) (v) | (i) | (ii) | (iii) |
| (2) (ii) | (iv) | (iii) | (i) |
| (3) (v) | (iv) | (i) | (iii) |
| (4) (ii) | (iv) | (i) | (iii) |

BCI243

NEET (UG) 2019 (Odisha)

17. Which of the following hormones is responsible for both the milk ejection reflex and the foetal ejection reflex ?

- | | |
|--------------|---------------|
| (1) Estrogen | (2) Prolactin |
| (3) Oxytocin | (4) Relaxin |

BCI244

18. Which of the following conditions will stimulate parathyroid gland to release parathyroid hormone?

- (1) Fall in active Vitamin D levels
- (2) Fall in blood Ca^{+2} levels
- (3) Fall in bone Ca^{+2} levels
- (4) Rise in blood Ca^{+2} levels

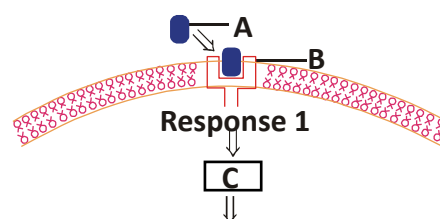
BCI245

19. Artificial light, extended work-time and reduced sleep-time disrupt the activity of

- (1) Thymus gland
- (2) Pineal gland
- (3) Adrenal gland
- (4) Posterior pituitary gland

BCI246

20. Identify A, B and C in the diagrammatic representation of the mechanism of hormone action.



Physiological Responses

Select the correct option from the following

- (1) A-Steroid Hormone; B-Hormone-receptor Complex, C-Protein
- (2) A-Protein Hormone, B-Receptor; C-Cyclic AMP
- (3) A-Steroid Hormone; B-Receptor, C - Second Messenger
- (4) A-Protein Hormone; B-Cyclic AMP, C-Hormone-receptor Complex

BCI247

NEET (UG) 2020

21. Select the correct statement.

- (1) Insulin is associated with hyperglycemia
- (2) Glucocorticoids stimulate gluconeogenesis
- (3) Glucagon is associated with hypoglycemia.
- (4) Insulin acts on pancreatic cells and adipocytes.

BCI248

22. Presence of which of the following conditions in urine are indicative of Diabetes Mellitus ?

- (1) Renal calculi and Hyperglycaemia
- (2) Uremia and Ketonuria
- (3) Uremia and Renal Calculi
- (4) Ketonuria and Glycosuria

BCI249

23. Match the following columns and select the correct option :

Column-I	Column-II
(a) Pituitary gland	(i) Grave's disease
(b) Thyroid gland	(ii) Diabetes mellitus
(c) Adrenal gland	(iii) Diabetes insipidus
(d) Pancreas	(iv) Addison's disease

(a)	(b)	(c)	(d)
(1) (ii)	(i)	(iv)	(iii)
(2) (iv)	(iii)	(i)	(ii)
(3) (iii)	(ii)	(i)	(iv)
(4) (iii)	(i)	(iv)	(ii)

BCI250

NEET (UG) 2020 (Covid-19)

24. Match the following columns and select the correct option :-

Column-I	Column-II
(a) Pituitary hormone	(i) Steroid
(b) Epinephrine	(ii) Neuropeptides
(c) Endorphins	(iii) Peptides, proteins
(d) Cortisol	(iv) Biogenic amines

- (1) (a)-(iv), (b)-(i), (c)-(ii), (d)-(iii)
 (2) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)
 (3) (a)-(iv), (b)-(iii), (c)-(i), (d)-(ii)
 (4) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)

BCI251

25. Hormones stored and released from neurohypophysis are :-

- (1) Thyroid stimulating hormone and Oxytocin
 (2) Oxytocin and Vasopressin
 (3) Follicle stimulating hormone and Leutinizing hormone
 (4) Prolactin and Vasopressin

BCI252

NEET (UG) 2021

26. Erythropoietin hormone which stimulates R.B.C. formation is produced by :-
 (1) Alpha cells of pancreas.
 (2) The cells of rostral adenohypophysis.
 (3) The cells of bone marrow.
 (4) Juxtaglomerular cells of the kidney.

BCI253

NEET (UG) 2022

27. Which of the following are not the effects of Parathyroid hormone ?
 (a) Stimulates the process of bone resorption
 (b) Decreases Ca^{2+} level in blood
 (c) Reabsorption of Ca^{2+} by renal tubules
 (d) Decreases the absorption of Ca^{2+} from digested food
 (e) Increases metabolism of carbohydrates
 Choose the **most appropriate** answer from the options given below:
 (1) (b), (d) and (e) only
 (2) (a) and (e) only
 (3) (b) and (c) only
 (4) (a) and (c) only

BCI280

NEET (UG) 2023

28. Match List I with List II.

List I	List II
(A) CCK	(I) Kidney
(B) GIP	(II) Heart
(C) ANF	(III) Gastric gland
(D) ADH	(IV) Pancreas

Choose the **correct** answer from the options given below :-

- (1) A-III, B-II, C-IV, D-I
 (2) A-II, B-IV, C-I, D-III
 (3) A-IV, B-II, C-III, D-I
 (4) A-IV, B-III, C-II, D-I

BCI281

29. Which of the following are NOT under the control of thyroid hormone?

- (A) Maintenance of water and electrolyte balance
- (B) Regulation of basal metabolic rate
- (C) Normal rhythm of sleep-wake cycle
- (D) Development of immune system
- (E) Support the process of R.B.Cs formation

Choose the **correct** answer from the options given below:

- (1) B and C only (2) C and D only
- (3) D and E only (4) A and D only

BCI282

NEET (UG) Manipur 2023

30. Which of the following statements are **correct** with respect to the hormone and its function ?

- (A) Thyrocalcitonin (TCT) regulates the blood calcium level.
- (B) In males, FSH and androgens regulate spermatogenesis.
- (C) Hyperthyroidism can lead to goitre.
- (D) Glucocorticoids are secreted in Adrenal Medulla.
- (E) Parathyroid hormone is regulated by circulating levels of sodium ions.

Choose the **most appropriate** answer from the options given below :-

- (1) (C) and (E) only
- (2) (A) and (B) only
- (3) (B) and (C) only
- (4) (A) and (D) only

BCI283

NEET (UG) 2024

31. Match List-I with List-II.

List-I		List-II	
A.	Exophthalmic goitre	I.	Excess secretion of cortisol, moon face & hyperglycemia.
B.	Acromegaly	II.	Hypo-secretion of thyroid hormone and stunted growth.
C.	Cushing's syndrome	III.	Hyper secretion of thyroid hormone & protruding eye balls.
D.	Cretinism	IV.	Excessive secretion of growth hormone.

Choose the correct answer from the options given below :-

- (1) A-I, B-III, C-II, D-IV
- (2) A-IV, B-II, C-I, D-III
- (3) A-III, B-IV, C-II, D-I
- (4) A-III, B-IV, C-I, D-II

BCI284

RE-NEET (UG) 2024

32. Match List-I with List-II.

List-I		List-II	
A.	Epinephrine	I.	Hyperglycemia
B.	Thyroxine	II.	Smooth muscle contraction
C.	Oxytocin	III.	Basal metabolic rate
D.	Glucagon	IV.	Emergency hormone

Choose the **correct** answer from the options given below :-

- (1) A-II, B-I, C-IV, D-III
- (2) A-III, B-II, C-I, D-IV
- (3) A-IV, B-III, C-II, D-I
- (4) A-I, B-IV, C-III, D-II

BCI285

33. Diuresis is prevented by :-

- (1) Renin from JG cells via switching off the osmoreceptors
- (2) ANF from atria of the heart
- (3) Aldosterone from adrenal medulla
- (4) Vasopressin from Neurohypophysis

BCI286

34. Identify the wrong statements :-

- (A) Erythropoietin is produced by juxtaglomerular cells of the kidney
- (B) Leydig cells produce Androgens
- (C) Atrial Natriuretic factor, a peptide hormone is secreted by the seminiferous tubules of the testes.
- (D) Cholecystokinin is produced by gastro-intestinal tract

(E) Gastrin acts on intestinal wall and helps in the production of pepsinogen

Choose the **most appropriate** answer from the options given below :-

- (1) D and E only
- (2) A and B only
- (3) C and E only
- (4) A and C only

BCI287

Exercise - II (Previous Year Questions)

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	2	3	3	2	4	4	3	1	4	2	1	1	1	3	2
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	3	3	2	2	2	2	4	4	2	2	4	1	4	2	2
Question	31	32	33	34											
Answer	4	3	4	3											

Exercise - III

Master Your Understanding

(A) NCERT BASED QUESTIONS

1. Steroid hormones –
 (1) Have only cell surface receptors
 (2) Are lipophobic
 (3) Have receptors within the nucleus
 (4) Are produced by only adrenal cortex.

BCI254

2. Both adrenaline and cortisol are secreted in response to stress. Which of the following statements is also true for both of these hormones?

- (1) They act to increase blood glucose
 (2) They are secreted by the adrenal cortex
 (3) Their secretion is stimulated by adrenocorticotropin
 (4) They are secreted into the blood within seconds of the onset of stress.

BCI255

3. Which one is incorrect for hypothalamus ?

- (1) Basal part of diencephalon
 (2) Regulate narrow spectrum of body functions
 (3) Neural control of posterior pituitary
 (4) Release somatostatin for GH Inhibition

BCI256

4. Pineal gland is not related with :-

- (1) Body temperature
 (2) Defence capability
 (3) Metabolism
 (4) Kidney functions

BCI257

5. Vigorous contraction of uterus muscles is stimulated by:-

- (1) ADH (2) MSH
 (3) GH (4) Oxytocin

BCI258

6. Find out correctly matched :-
 (A) Thymus – AMI
 (B) PTH – Ca^{+2} absorption
 (C) Adrenal – glucocorticoids
 (D) Thyroid – Anti-inflammatory response
 (1) A, B, D (2) A, B, C
 (3) B, C, D (4) A, C, D

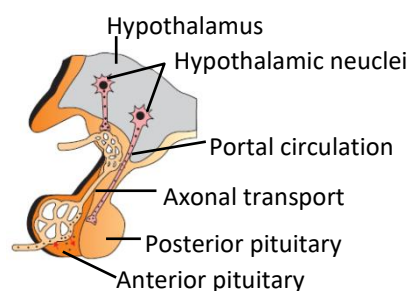
BCI259

7. Which one is incorrect statement ?

- (1) Hypothalamus regulate a wide spectrum of body functions.
 (2) Pituitary, pineal, testes, heart and kidney are organised endocrine gland of body.
 (3) Hormones are non-nutrient chemicals and intercellular messenger.
 (4) LH helps in maintenance of corpus luteum after ovulation.

BCI260

8. Find out incorrect labelling in following diagram



- (1) Axonal transport and Anterior pituitary
 (2) Portal circulation and Posterior pituitary
 (3) Anterior pituitary and Posterior pituitary
 (4) Portal circulation and Axonal transport

BCI261

9. Find out incorrect match of hormone with respective function :-

	Hormone	Function
(1)	Melatonin	Sleep wake cycle and body temperature
(2)	FSH	Growth of ovarian follicles and stimulate gonadal activity.
(3)	Adrenaline	Increase concentration of glucose in blood.
(4)	Progesterone	Stimulate growth and activities of female secondary sex organs

BCI262

10. Hyperglycemic and hypoglycemic hormones are

- (1) Insulin and glucagon
- (2) Adrenalin and glucagon
- (3) Adrenalin and Insulin
- (4) Glucagon and growth hormone

BCI263

11. Group of hormones which is related with cytoplasmic bounded receptors ?

- (1) Hypothalamic hormones and epinephrine
- (2) Thyroid hormone and estradiol
- (3) Insulin and glucagon
- (4) GH and MSH

BCI264

12. Two hormones(a)..... and(b)..... synthesize in hypothalamus and transported in pituitary gland through(c)..... and(d)..... respectively.

- (1) a = oxytocin $\Rightarrow$ c = portal circulation
b = ADH $\Rightarrow$ d = direct release
- (2) a = ADH $\Rightarrow$ c = axonal transport
b = TSHRF $\Rightarrow$ d = portal circulation

- (3) a = ACTH $\Rightarrow$ c = axonal transport
b = MSH $\Rightarrow$ d = portal circulation
- (4) a = TSHRF $\Rightarrow$ c = axonal transport
b = ADH $\Rightarrow$ d = portal circulation

BCI265

(B) ANALYTICAL QUESTIONS

13. Which one is correctly matched ?

- (a) Pineal gland – Metabolism, Mental retardation
- (b) Thymus – Myasthenia gravis
- (c) Thyroid – Anti inflammatory reaction
- (d) Pancreas – Prolonged hyperglycemia

- (1) a, c (2) b, c (3) c, d (4) b, d

BCI266

14. After ovulation, ruptured follicle secrete hormone that helps in :-

- (1) Libido
- (2) Growth of facial hair
- (3) High pitch voice
- (4) Pregnancy support

BCI268

15. Diabetic patients are successfully treated with:-

- (1) GH therapy
- (2) More amount of thyroxine
- (3) Insulin therapy
- (4) Both (2) and (3)

BCI269

16. Find out suitable match for the following hormones and related organ :-

- (1) ANF – Heart, Calcitonin – parathyroid
- (2) Renin – Kidney, Relaxin – Placenta
- (3) Calcitonin – Kidney, HCG $\rightarrow$ Ovary
- (4) Oestrogen – Testes, Progesterone $\rightarrow$ Graafian follicle

BCI270

- 17.** Parathormone causes :-
 (1) Hypercalcemia
 (2) Hyperglycemia
 (3) Hyperkalemia
 (4) Hypocalcemia and hypoglycemia both
BCI271
- 18.** In mammals the female secondary sexual characters are developed mainly by the hormone?
 (1) HCG (2) Progesterone
 (3) Estrogens (4) All of these
BCI272
- 19.** Which of the following is an accumulation and release centre of Neurohormones?
 (1) Anterior Pituitary lobe
 (2) Neurohypophysis
 (3) Pars intermedia
 (4) Hypothalamus
BCI273
- 20.** BMR and Temperature of body is controlled by which endocrine gland?
 (1) Adrenal cortex (2) Thymus
 (3) Thyroid (4) Pituitary
BCI274
- 21.** Reabsorption of Na^+ along with excretion of K^+ is controlled by which one of the following hormones?
 (1) Prostaglandins (2) Aldosterone
 (3) Estrogen (4) Cortisol
BCI275
- 22.** Location and secretion of Leydig cells are?
 (1) Pancreas – Glucagon
 (2) Ovary – Estrogen
 (3) Ovary – Progesterone
 (4) Testis – Testosterone
BCI276
- 23.** Urinary excretion of Na^+ is regulated by–
 (1) Anterior Pituitary
 (2) Adrenal cortex
 (3) Neurohypophysis
 (4) Pars intermedia
BCI277
- 24.** Thyrocalcitonin is secreted during –
 (1) Increased blood calcium level
 (2) Decreased blood calcium level
 (3) Both (1) and (2)
 (4) Increased blood sugar level.
BCI278
- 25.** Which of the following hormones increase alertness, piloerection and sweating ?
 (1) TCT (2) Catecholamines
 (3) Cortisol (4) Thymosins
BCI279
- 26.** Which hormone causes dilation of blood vessels, increased oxygen consumption and glucogenesis?
 (1) Adrenalin (2) Glucagon
 (3) ACTH (4) Insulin
BCI213
- 27.** A steroid hormone which regulates glucose metabolism is –
 (1) 11-deoxycorticosterone
 (2) Cortisone
 (3) Cortisol
 (4) Corticosterone
BCI215
- 28.** Injury to adrenal cortex is not likely to affect the secretion of which one of the following
 (1) Adrenaline
 (2) Cortisol
 (3) Aldosterone
 (4) Both Androstenedione and Dehydroepiandrosterone
BCI219

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

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

BCI222

30. Which one of the following pairs of hormones are the examples of those that can easily pass through the cell membrane of the target cell and bind to a receptor inside it (mostly in the nucleus) :-
- (1) Somatostatin, oxytocin
 - (2) Cortisol, testosterone
 - (3) Insulin, glucagon
 - (4) Thyroxin, Insulin

BCI224

31. A pregnant female delivers a baby who suffers from stunted growth, mental retardation, low intelligence quotient and abnormal skin.

This is the result of :

- (1) Over secretion of pars distalis
- (2) Deficiency of iodine in diet
- (3) Low secretion of growth hormone
- (4) Cancer of the thyroid gland

BCI225

32. Which of the following statements is **correct** in relation to the endocrine system?

- (1) Releasing and inhibitory hormones are produced by the pituitary gland.
- (2) Adenohypophysis is under direct neural regulation of the hypothalamus.
- (3) Organs in the body like gastrointestinal tract, heart, kidney and liver do not produce any hormones.
- (4) Non-nutrient chemicals produced by the body in trace amount that act as intercellular messenger are known as hormones.

BCI226

Exercise - III

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	3	1	2	4	4	2	2	4	4	3	2	2	4	4	3
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	2	1	3	2	3	2	4	2	1	2	1	3	1	1	2
Question	31	32													
Answer	2	4													