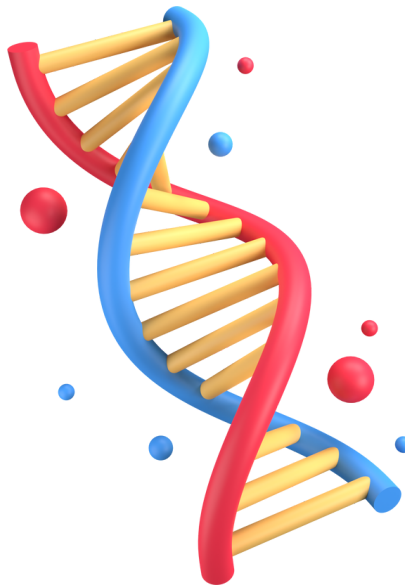


# ZOOLOGY

ENTHUSIAST | LEADER | ACHIEVER



## EXERCISE

Chemical co-ordination and integration  
(Endocrine System)

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ENGLISH MEDIUM

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**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) (2) and (3) both  
**CC0001**
2. Integrative system in the body are :-  
 (1) Endocrine system  
 (2) Nervous system  
 (3) Blood vascular system  
 (4) Both endocrine and nervous system  
**CC0002**
3. Endocrine glands can be defined as those glands which pour their secretion :-  
 (1) Directly into Body-Fluid  
 (2) Into blood or ducts  
 (3) When they are cut  
 (4) into particular organ  
**CC0003**
4. The receptor for protein hormones are present on  
 (1) Nucleus  
 (2) Endoplasmic reticulum  
 (3) Cytoplasm  
 (4) Cell-surface  
**CC0004**
5. 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  
**CC0005**
6. Hormones are :-  
 (1) Produced in low amount  
 (2) Easily diffusible  
 (3) Non - antigenic  
 (4) All  
**CC0006**

7. Property of hormone is :-  
 (1) Always proteinaceous  
 (2) Intracellular messenger.  
 (3) Non-Nutritive  
 (4) Antigenic  
**CC0408**
8. 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  
**CC0009**
9. "Secondary messenger" is :-  
 (1) Cyclic A.M.P. (2) ATP  
 (3) ADP (4) DNA  
**CC0010**
10. Hormones are chemically :-  
 (1) Amino acid (2) Protein  
 (3) Steroid (4) All  
**CC0011**
11. Which of following is unorganised endocrine gland :  
 (1) Pituitary (2) Gonad  
 (3) Kidney (4) Thymus  
**CC0409**
12. Which of the following is not a steroid hormone?  
 (1) Androgen (2) Aldosterone  
 (3) Estrogen (4) Insulin  
**CC0013**
13. Which of the following is not an endocrine gland?  
 (1) Pancreas (2) Adrenal gland  
 (3) Thyroid gland (4) Salivary gland  
**CC0014**
14. Which of the following hormones is not proteinaceous in nature ?  
 (1) TSH (2) Aldosterone  
 (3) LH (4) FSH  
**CC0015**

15. Which of the hormone is polypeptide ?  
 (1) Aldosterone (2) Cortisol  
 (3) Insulin (4) Thyroxine

**CC0016**

16. 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.

**CC0017**

17. Galactopoiesis is the function of which of the following hormone ?  
 (1) Oxytocin (2) F.S.H  
 (3) T.S.H (4) Prolactin

**CC0410**

18. Which of the following is secondary messenger :  
 (1) ATP (2) Cyclic AMP  
 (3) GTP (4) ATP and AMP

**CC0019**

19. 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.

**CC0020**

20. Prostaglandins are –  
 (1) Amino acid (2) Steroid  
 (3) Fatty acid (4) Carbohydrate

**CC0021**

## PITUITARY GLAND AND HYPOTHALAMUS

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

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

**CC0022**

22. Which of the following controls spermatogenesis :-

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

**CC0023**

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

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

**CC0024**

24. The hyposecretion of pituitary hormone cause :-

- (1) Cretinism  
 (2) Diabetes insipidus  
 (3) Goitre  
 (4) Diabetes melitus

**CC0025**

25. Neurohypophysis releases :-

- (1) Vasopressin  
 (2) Oxytocin  
 (3) Oxytocin & prolactin  
 (4) Vasopressin & oxytocin

**CC0026**

26. 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

**CC0027**

27. Growth hormone is produced in :-

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

**CC0029**

- |   |   |
|---|---|
| <p><b>28.</b> Gonadotrophic hormone is produced by :-<br/>           (1) Interstitial cells of testis<br/>           (2) Adrenal cortex<br/>           (3) Adenohypophysis<br/>           (4) Posterior part of thyroid</p> <p style="text-align: right;"><b>CC0030</b></p>                           | <p><b>35.</b> "Sella turcica" is a :-<br/>           (1) Depression in skull enclosing pituitary<br/>           (2) Cavity of skull enclosing ears<br/>           (3) Covering of testis<br/>           (4) Kind of endocrine gland</p> <p style="text-align: right;"><b>CC0037</b></p>   |
| <p><b>29.</b> The hormones FSH and LH are together called :-<br/>           (1) Emergency hormone<br/>           (2) Neuro hormone<br/>           (3) Gonadotrophic hormone<br/>           (4) Antistress hormone</p> <p style="text-align: right;"><b>CC0031</b></p>                                 | <p><b>36.</b> Vasopressin is responsible for :-<br/>           (1) Controlling Oogenesis<br/>           (2) Regulating blood pressure and act on the nephron tubules.<br/>           (3) Regulating formation of pigment.<br/>           (4) Controlling spermatogenesis.</p> <p style="text-align: right;"><b>CC0038</b></p>                                   |
| <p><b>30.</b> Gigantism and acromegaly are due to :-<br/>           (1) Hyperpituitrism      (2) Hypopituitrism<br/>           (3) Hypothyroidism      (4) Hyperthyroidism</p> <p style="text-align: right;"><b>CC0032</b></p>  | <p><b>37.</b> The main function of prolactin hormone is to :-<br/>           (1) Influence the activity of thyroid gland<br/>           (2) Control development of Graffian follicles<br/>           (3) Initiate and maintain secretion of milk by mammary gland<br/>           (4) Cause ejection of milk</p> <p style="text-align: right;"><b>CC0039</b></p> |
| <p><b>31.</b> If amount of ADH decrease in blood, micturition :-<br/>           (1) Remains unchanged<br/>           (2) Decreases<br/>           (3) Increases<br/>           (4) Does not occur</p> <p style="text-align: right;"><b>CC0033</b></p>   | <p><b>38.</b> The hormones of neurohypophysis are formed in:-<br/>           (1) Pars nervosa<br/>           (2) Pars distalis<br/>           (3) Hypothalamus<br/>           (4) Corpus callosum</p> <p style="text-align: right;"><b>CC0040</b></p>   |
| <p><b>32.</b> Urine concentration is controlled by :-<br/>           (1) Oxytocin                  (2) ADH<br/>           (3) MSH                      (4) ACTH</p> <p style="text-align: right;"><b>CC0034</b></p>   | <p><b>39.</b> I.C.S.H. in male acts on :-<br/>           (1) Cells of leydig              (2) Sertoli cells<br/>           (3) Spermatids                (4) Spermatogonia</p> <p style="text-align: right;"><b>CC0041</b></p>  |
| <p><b>33.</b> The follicle stimulating hormone is secreted from:-<br/>           (1) Posterior lobe of pituitary gland<br/>           (2) Reproductive gland<br/>           (3) Thyroid gland<br/>           (4) Anterior lobe of pituitary gland</p> <p style="text-align: right;"><b>CC0035</b></p> | <p><b>40.</b> Hypophysis cerebri is the other name of :-<br/>           (1) Adenohypophysis<br/>           (2) Islets of langerhans<br/>           (3) Neurohypophysis<br/>           (4) Pituitary</p> <p style="text-align: right;"><b>CC0042</b></p>   |
| <p><b>34.</b> Pituitary gland is under control of :-<br/>           (1) Hypothalamus              (2) Adrenal gland<br/>           (3) Pineal gland                (4) Thyroid gland</p> <p style="text-align: right;"><b>CC0036</b></p>  |   |

41. Which of the following hormone helps in facultative water reabsorption by nephrons :-  
(1) MSH (2) FSH (3) ADH (4) ACTH

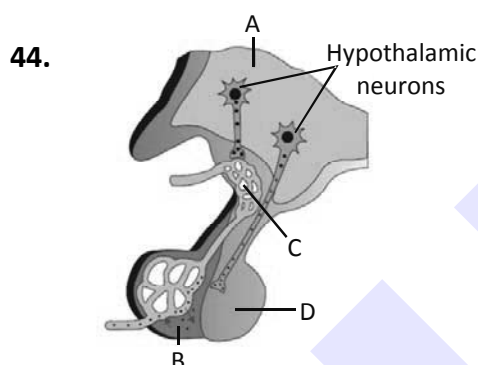
CC0043

42. Hormone of hypothalamus are called :-  
(1) Regulatory hormones  
(2) Growth hormones  
(3) Tropic hormones  
(4) (1) and (3)

CC0044

43. Diabetes insipidus disease is caused due to the deficiency of hormone produced by :-  
(1) Pituitary (2) Adrenal  
(3) Pancreas (4) Thyroid

CC0045



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                      |

CC0046

45. 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

CC0048

46. LTH is also known as :-  
(1) Lactogenic Hormone  
(2) Prolactin  
(3) Mammatropic Hormone  
(4) All

CC0049

47. Vasopressin is related with :-  
(1) Concentration of urine  
(2) Quick digestion  
(3) Dilution of urine  
(4) Slow heart beat

CC0050

48. Growth hormone of pituitary is more effective in:-  
(1) Presence of thyroxine  
(2) Absence of thyroxine  
(3) Absence of Insulin  
(4) Presence of adrenaline

CC0051

49. Gonadotropic hormone is :-  
(1) FSH (2) LH  
(3) LTH (4) FSH, LH

CC0052

50. 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

CC0053

- |  |   |
|--|---|
| <p><b>51.</b> Oxytocin is used in :-<br/>                     (1) Milk ejection<br/>                     (2) Parturition<br/>                     (3) Milk let down process<br/>                     (4) All of the above</p> <p style="text-align: right;"><b>CC0054</b></p>  | <p><b>58.</b> The synthesis of Vasopressin is done by :-<br/>                     (1) Hypothalamus      (2) Kidney<br/>                     (3) Anterior pituitary      (4) Post. pituitary</p> <p style="text-align: right;"><b>CC0061</b></p>   |
| <p><b>52.</b> Hyper secretion of STH leads to :-<br/>                     (1) Dwarfism &amp; Acromegaly<br/>                     (2) Goitre, Sterility<br/>                     (3) Cretinism, Myxoedema<br/>                     (4) Gigantism &amp; Acromegaly</p> <p style="text-align: right;"><b>CC0055</b></p> | <p><b>59.</b> Which one hormone of the pituitary of the human controls the protein metabolism and growth of skeleton ?<br/>                     (1) Iodo thyroxine<br/>                     (2) Leutotrophic hormone<br/>                     (3) Somatotrophic hormone<br/>                     (4) Oxytocin</p> <p style="text-align: right;"><b>CC0062</b></p> |
| <p><b>53.</b> Oxytocin mainly helps in :-<br/>                     (1) Milk production      (2) Child birth<br/>                     (3) Diuresis      (4) Gametogenesis</p> <p style="text-align: right;"><b>CC0056</b></p>   | <p><b>60.</b> Ovulation in mammals occurs mainly under the influence of :-<br/>                     (1) TSH and ACTH      (2) FSH and LH<br/>                     (3) TSH and STH      (4) MTH and ACTH</p> <p style="text-align: right;"><b>CC0063</b></p>   |
| <p><b>54.</b> Which hormone is concerned with the concentration of urine ?<br/>                     (1) Oxytocin      (2) Vasopressin<br/>                     (3) Prolactin      (4) Cortisol</p> <p style="text-align: right;"><b>CC0057</b></p>   | <p><b>61.</b> Secretion of estrogen is controlled by :-<br/>                     (1) HCG      (2) Progesterone<br/>                     (3) LH      (4) F.S.H.</p> <p style="text-align: right;"><b>CC0064</b></p>  |
| <p><b>55.</b> Acromegaly is caused by :-<br/>                     (1) Excess of S.T.H.<br/>                     (2) Excess of Thyroxine<br/>                     (3) Deficiency of Thyroxine<br/>                     (4) Excess of Adrenaline</p> <p style="text-align: right;"><b>CC0058</b></p>                   | <p><b>62.</b> Immediate cause of induction of ovulation in human female is plasma surge of :-<br/>                     (1) Progesterone      (2) LH<br/>                     (3) FSH      (4) Estradiol</p> <p style="text-align: right;"><b>CC0065</b></p>   |
| <p><b>56.</b> Oxytocin is released from :-<br/>                     (1) Adenohypophysis (Anterior lobe)<br/>                     (2) Adenohypophysis (Posterior lobe)<br/>                     (3) Hypothalamus<br/>                     (4) Neurohypophysis</p> <p style="text-align: right;"><b>CC0059</b></p>     | <p><b>63.</b> Stimulation of uterine contraction during child birth is brought about by :-<br/>                     (1) Adrenaline      (2) Progesterone<br/>                     (3) Oxytocin      (4) Prolactin</p> <p style="text-align: right;"><b>CC0066</b></p>   |
| <p><b>57.</b> FSH is :-<br/>                     (1) Glycoprotein      (2) Lipoprotein<br/>                     (3) Glycolipid      (4) Phospholipid</p> <p style="text-align: right;"><b>CC0060</b></p>   | <p><b>64.</b> Which gland secretion is under nervous control ?<br/>                     (1) Adrenal cortex<br/>                     (2) Anterior pituitary<br/>                     (3) Posterior pituitary<br/>                     (4) Pineal body</p> <p style="text-align: right;"><b>CC0067</b></p>  |

65. 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

CC0068

66. 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

CC0069

67. The hormones that initiate ejection of milk, stimulate 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

CC0070

68. 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

CC0071

69. Which of the following is gonadotrophic hormone?

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

CC0073

70. 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

CC0074

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

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

CC0075

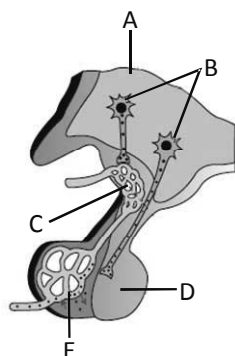
72. An adenohypophysis hormone which is regulated by feedback mechanism is –

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

CC0077



- 73.** 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

**CC0078**

- 74.** Vasopressin influences :

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

**CC0080**

- 75.** 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

**CC0081**

- 76.** Hormone prolactin is secreted by :  
(1) Posterior pituitary (2) Thyroid  
(3) Anterior pituitary (4) Hypothalamus

**CC0082**

- 77.** Spermatogenesis is influenced by:  
(1) Progesterone (2) FSH  
(3) STH (4) LTH

**CC0083**

- 78.** Which of the following hormones helps in the contraction of uterus during child birth:  
(1) ADH (2) Androgen  
(3) Oxytocin (4) Glucocorticoid

**CC0084**

- 79.** Which of the following hormones stimulates the secretion of milk from female ?  
(1) LH (2) Prolactin  
(3) Oxytocin (4) Progesterone

**CC0085**

- 80.** The formation of egg and sperm is affected by :  
(1) LH (2) MSH (3) TSH (4) FSH

**CC0086**

- 81.** Mammalian prolactin is secreted by –  
(1) Adenohypophysis  
(2) Neurohypophysis  
(3) Adrenal cortex  
(4) Adrenal medulla

**CC0087**

- 82.** Hypersecretion of growth hormone in the period of growth lead to :  
(1) Acromegaly  
(2) Cushing syndrome  
(3) Midgets  
(4) Gigantism

**CC0088**



83. 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.

CC0089

84. In absence of ADH, the disease caused is –
- (1) Diabetes mellitus
  - (2) Diabetes insipidus
  - (3) Oligouria
  - (4) Acromegaly

CC0090

85. Thyrotropin - releasing factor (TRF) is produced by:
- (1) Cerebrum
  - (2) Optic lobe
  - (3) Cerebellum
  - (4) Hypothalamus.

CC0091

86. Gonadotropic hormones are :
- (1) Estrogen and progesterone
  - (2) Luteinizing hormone and follicle stimulating hormone
  - (3) Testosterone and Androsterone
  - (4) Prolactin and Luteotropin

CC0092

87. Which hormone is responsible for milk ejection after the birth of the baby ?
- (1) Oxytocin
  - (2) Progesterone
  - (3) Prolactin
  - (4) Estrogen

CC0093

#### THYROID, PARATHYROID AND ADRENAL GLANDS

88. Largest endocrine gland is –
- (1) Adrenal gland
  - (2) Thyroid gland
  - (3) Thymus
  - (4) Kidney

CC0094

89. How many statements are correct regarding parathyroid gland ?

- (a) Four parathyroid gland present on front side of thyroid gland
- (b) It secretes parathormone which is steroidal in nature
- (c) It increase blood  $\text{Ca}^{++}$  level
- (d) It act on bone and stimulate bone resorption

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

CC0095

90. The basal metabolic rate (BMR) in body cells is regulated by :-

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

CC0096

91. The hormones responsible for regulation of calcium and phosphorous metabolism is secreted by :-

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

CC0097

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

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

CC0098

93. Hypothyroidism in adults causes :-

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

CC0099

94. Parathormone regulates :-

- (1) Blood calcium level
- (2) Calcium and phosphate level
- (3) Body temperature
- (4) Basal metabolic rate

CC0100

- 95.** Which gland stores hormone in intercellular space before its secretion into blood ?  
 (1) Pancreas (2) Thyroid  
 (3) Testis (4) Ovary  
**CC0101**
- 96.** Goiter is caused by the abnormal functioning of :-  
 (1) Pancreas (2) Adrenals  
 (3) Pituitary (4) Thyroid  
**CC0102**
- 97.** Parathormone deficiency in man causes :-  
 (1) Hyper calcemia (2) Hypocalcaemia  
 (3) Goitre (4) All  
**CC0103**
- 98.** Cretinism is due to abnormal secretion of :-  
 (1) ACTH  
 (2) Thyroxine  
 (3) Calcitonin  
 (4) Parathormone  
**CC0104**
- 99.** Philips collip discovered which of the following hormones ?  
 (1) Parathyroid hormone  
 (2) Thyroxine  
 (3) A.D.H.  
 (4) Oxytocin  
**CC0105**
- 100.** Exophthalmic goitre is caused due to hypersecretion of :-  
 (1) Adrenal (2) Thyroid  
 (3) Parathyroid (4) Thymus  
**CC0106**
- 101.** The main function of thyroid gland is to control :-  
 (1) Growth  
 (2) Reproduction  
 (3) Secondary sexual characters  
 (4) Basal metabolic rate  
**CC0107**
- 102.** 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  
**CC0108**
- 103.** The vitamin which works along with para thyroid hormone is :-  
 (1) Vitamin C (2) Calciferol  
 (3) Tocopherol (4) Vitamin - B<sub>12</sub>  
**CC0109**
- 104.** Storage gland is :-  
 (1) Pancreas (2) Testis  
 (3) Thyroid (4) Adrenal  
**CC0110**
- 105.** Removal of Parathyroids in human beings result in  
 (1) Tetany  
 (2) Simmond's disease  
 (3) Myxoedema  
 (4) Addison's disease  
**CC0112**
- 106.** 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  
**CC0113**
- 107.** One of the following is correct statement :-  
 (1) T<sub>4</sub> is more active than T<sub>3</sub>  
 (2) T<sub>3</sub> is more active than T<sub>4</sub>  
 (3) T<sub>3</sub> and T<sub>4</sub> are the same  
 (4) T<sub>4</sub> is hormone but T<sub>3</sub> is not  
**CC0114**

- 108.** Hormone that decrease calcium level in blood :-  
 (1) Thyroxine (2) Parathormone  
 (3) Thyrocalcitonin (4) Cortisol  
**CC0115**
- 109.** BMR is increased due to :-  
 (1) ADH  
 (2) Adrenaline  
 (3) Parasympathetic nervous system  
 (4) Thyroxine  
**CC0116**
- 110.** Goitre is a pathological condition associated with:-  
 (1) Glucagon (2) Thyroxine  
 (3) Progesterone (4) Testosterone  
**CC0117**
- 111.** Effects of thyroxine on metabolic rate is:-  
 (1) Decreases (2) No effect  
 (3) Increases (4) Uncertain  
**CC0118**
- 112.** Deficiency of which of the following may cause bone deformation :-  
 (1) Oxytocin (2) Vitamin D  
 (3) STH (4) Thyroxine  
**CC0119**
- 113.** 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  
**CC0120**
- 114.** Parathormone deficiency leads to :-  
 (1) Decrease of  $\text{Ca}^{+2}$  level in blood  
 (2) Increase of  $\text{Ca}^{+2}$  level in blood  
 (3) Osteoporosis  
 (4) Hypercalemia  
**CC0121**
- 115.** Parathormone controls :-  
 (1) Fatty acid metabolism  
 (2) Sodium and potassium metabolism  
 (3) Calcium and phosphate metabolism  
 (4) Protein metabolism  
**CC0122**
- 116.** 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.  
**CC0123**
- 117.** Undersecretion of adrenal cortex causes :-  
 (1) Sterility  
 (2) Addison's disease  
 (3) Cretinism  
 (4) Dwarfism  
**CC0124**
- 118.** Epinephrine is :-  
 (1) Secreted from pancreas and decreases heart beat  
 (2) Secreted from adrenal medulla and increases heart beat  
 (3) Secreted from adrenal medulla and decreases heart beat  
 (4) Secreted from pancreas and increases heart beat  
**CC0125**
- 119.** Hyposecretion of aldosterone causes :-  
 (1) Gull's disease  
 (2) Grave's disease  
 (3) Cushing's disease  
 (4) Addison's disease  
**CC0126**

- 120.** Hormones produced by adrenal cortex and gonads (sex hormone) are chemically :-  
 (1) Proteinaceous  
 (2) Steroids  
 (3) Glycoprotein  
 (4) Phenolic compound  
**CC0127**
- 121.** 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  
**CC0128**
- 122.** The function of norepinephrine is :-  
 (1) Almost similar to epinephrine  
 (2) Similar to ADH  
 (3) Opposite to epinephrine  
 (4) Opposite to ADH  
**CC0129**
- 123.** Epinephrine and norepinephrine together known as :-  
 (1) Steroid (2) Protein  
 (3) Catecholamine (4) Glycoprotein  
**CC0130**
- 124.** 3F gland is :-  
 (1) Adrenal (2) Thyroid  
 (3) Gonadal (4) Pancreas  
**CC0131**
- 125.** Retention of sodium in body depends up on hormone from :-  
 (1) Adrenal cortex  
 (2) Adrenal medulla  
 (3) Parathyroid  
 (4) Thyroid  
**CC0132**
- 126.** Adrenal cortex also controls the carbohydrate metabolism through :-  
 (1) Adrenaline  
 (2) Noradrenaline  
 (3) Glucocorticoids  
 (4) Mineralo Corticoids  
**CC0133**
- 127.** "4s gland" is :-  
 (1) Pancreas (2) Liver  
 (3) Thyroid (4) Adrenal  
**CC0134**
- 128.** Adrenal gland is :-  
 (1) Ectodermal in origin  
 (2) Mesodermal in origin  
 (3) Endodermal in origin  
 (4) Ecto - mesodermal in origin  
**CC0135**
- 129.** Adrenaline increases :-  
 (1) Heart beat (2) Blood pressure  
 (3) Both (4) Salivation  
**CC0136**
- 130.** Which hormone control activity of zona glomerulosa of adrenal gland ?  
 (1) Renin (2) Thyroxine  
 (3) ADH (4) FSH  
**CC0137**
- 131.** All of the following are functions of adrenaline except:-  
 (1) Increases blood supply in skeletal muscle  
 (2) Hyperglycaemia  
 (3) Micturition  
 (4) Tachycardia  
**CC0139**
- 132.** 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  
**CC0140**

- 133.** Norepinephrine hormone is secreted from :-  
 (1) Zona glomerulosa  
 (2) Zona fasciculata  
 (3) Zona reticularis  
 (4) Medulla of adrenal  
**CC0141**
- 134.** Which gland is concerned with salt equilibrium in body :-  
 (1) Anterior pituitary  
 (2) Pancreas  
 (3) Adrenal  
 (4) Thyroid  
**CC0142**
- 135.** Norepinephrine leads to increase in :-  
 (1) Blood pressure  
 (2) Urine production  
 (3) Cellular respiration  
 (4) Release of epinephrine  
**CC0143**
- 136.** Largest amount of iodine is found in :-  
 (1) Adrenals (2) Liver  
 (3) Thyroid (4) Testes  
**CC0145**
- 137.** Which gland prepares you for flight, fear and fight during adverse conditions :-  
 (1) Thyroid (2) Parathyroid  
 (3) Pituitary (4) Adrenals  
**CC0146**
- 138.** Blood pressure is controlled by :-  
 (1) Adrenal gland  
 (2) Thyroid gland  
 (3) Pituitary gland  
 (4) Pancreas  
**CC0147**
- 139.** Life saving hormone are secreted by :-  
 (1) Pituitary (2) Pineal  
 (3) Adrenals (4) Thyroid  
**CC0148**
- 140.** Which is largest endocrine gland :-  
 (1) Thyroid (2) Liver  
 (3) Pituitary (4) Thymus  
**CC0149**
- 141.** Temperature of body is controlled by which endocrine gland:-  
 (1) Pituitary (2) Thyroid  
 (3) Adrenal (4) Pancreas  
**CC0150**
- 142.** During emergency which of the following hormone is secreted ?  
 (1) Aldosterone (2) Thyroxine  
 (3) Adrenaline (4) Calcitonin  
**CC0151**
- 143.** Corticosteroids are secreted by :  
 (1) Adrenal gland (2) Pineal gland  
 (3) Pituitary gland (4) Thyroid gland  
**CC0152**
- 144.** Aldosterone is secreted by :  
 (1) Zona glomerulosa  
 (2) Zona fasciculata  
 (3) Zona reticularis  
 (4) Zona pellucida  
**CC0154**
- 145.** Which gland stores hormone before its secretion and then release it ?  
 (1) Thyroid (2) Pancreas  
 (3) Pineal (4) Pituitary  
**CC0155**
- 146.** Which of the following disease is not related to thyroid gland ?  
 (1) Goitre (2) Cretinism  
 (3) Myxoedema (4) Acromegaly  
**CC0156**
- 147.** 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  
**CC0157**

- 148.** Hypothyroidism causes in adult :  
 (1) Obesity (2) Diabetes  
 (3) Cretinism (4) Myxoedema  
**CC0158**
- 149.** The hormone that controls the level of calcium and phosphorus in the blood is secreted by :  
 (1) Thyroid (2) Parathyroid  
 (3) Pituitary (4) Thymus  
**CC0159**
- 150.** 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  
**CC0160**
- 151.** Muscular tetany can be caused by deficiency of –  
 (1) Oxytocin  
 (2) STH  
 (3) ADH  
 (4) Parathyroid hormone  
**CC0161**
- 152.** 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  
**CC0163**
- 153.** Para-thyroid hormone is a :  
 (1) Peptide (2) Carbohydrate  
 (3) Lipid (4) Steroid  
**CC0165**
- 154.** Increase glucose level in human is called :  
 (1) Hypoglycemia (2) Hyperglycaemia  
 (3) Hyposuria (4) Hypersuria  
**CC0166**
- 155.** Parathormone is secreted during :  
 (1) Increased blood calcium level  
 (2) Decreased blood calcium level  
 (3) Increased blood sugar level  
 (4) Decreased blood sugar level  
**CC0167**
- 156.** Chronic disturbance in hormone secretion of thyroid gland causes :  
 (1) Goitre (2) Diabetes  
 (3) Addison's disease (4) Colour blindness  
**CC0168**
- 157.** ACTH is secreted by:  
 (1) Thyroid gland  
 (2) Thymus gland  
 (3) Pituitary gland  
 (4) Islets of Langerhans  
**CC0169**
- 158.** Fight and flight hormone is :  
 (1) Adrenaline (2) Thyroxine  
 (3) ADH (4) Oxytocin  
**CC0170**
- 159.** The emergency hormone is :  
 (1) Thyroxine (2) Adrenaline  
 (3) Insulin (4) Progesterone  
**CC0172**
- 160.** In man removal of Parathyroid gland leads to:  
 (1) Acromegaly  
 (2) Tetany  
 (3) Polyuria  
 (4) Diabetes insipidus  
**CC0173**
- 161.** 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  
**CC0174**

- 162.** Which disease is caused by under secretion of adrenal cortex ?  
 (1) Cretinism  
 (2) Dwarfism  
 (3) Sterility  
 (4) Addison's disease  
**CC0176**
- 163.** Role of thymus in *Homo sapiens* is chiefly concerned with :-  
 (1) Reproduction  
 (2) Immunology  
 (3) Calcium balance  
 (4) Blood coagulation  
**CC0179**
- 164.** Melatonin is a hormone produced by :-  
 (1) Adrenal gland (2) Pituitary gland  
 (3) Pineal gland (4) Thymus gland  
**CC0180**
- 165.** Mammals born without a thymus gland fail to manufacture :-  
 (1) B - Lymphocytes (2) T - Lymphocytes  
 (3) Plasma cells (4) Basophils  
**CC0182**
- 166.** If thymectomy is done during adult hood then what possibility is there ?  
 (1) Immunosuppressant  
 (2) Die immediately  
 (3) No adverse reaction  
 (4) Myasthenia gravis  
**CC0183**
- 167.** Thymosin stimulates :-  
 (1) Milk secretion (2) Erythrocytes  
 (3) T-lymphocytes (4) Melanocytes  
**CC0184**
- 168.** Glucagon is secreted by :-  
 (1) Leydig cells  
 (2) Islets of Langerhans  
 (3) Corpus luteum  
 (4) Glisson's capsule  
**CC0185**
- 169.** A hormone with seat of activity in liver-changing glucose into glycogen is produced by :-  
 (1) Pituitary (2) Thymus  
 (3) Parathyroid (4) Pancreas  
**CC0186**
- 170.** Which gland is both exocrine as well as endocrine ?  
 (1) Pituitary (2) Mammary gland  
 (3) Thyroid (4) Pancreas  
**CC0187**
- 171.** Oversecretion of glucagon can cause :-  
 (1) Tetany  
 (2) Diabetes insipidus  
 (3) Acromegaly  
 (4) Hyperglycemia  
**CC0188**
- 172.** Insulin by chemical nature is :-  
 (1) Carbohydrate (2) Protein  
 (3) Steroid (4) Lipid  
**CC0190**
- 173.** 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  
**CC0191**



- 174.** 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  
**CC0192**
- 175.** Which hormone has anti insulin effect :-  
 (1) Cortisol  
 (2) Oxytocin  
 (3) Aldosterone  
 (4) Glucagon  
**CC0193**
- 176.** In old age, immune system becomes weak due to gradual degeneration of :-  
 (1) Pineal gland  
 (2) Parathyroid gland  
 (3) Thymus gland  
 (4) Adrenal gland  
**CC0194**
- 177.** Diabetic coma is due to hyposecretion of insulin in which :-  
 (1) Glucose level increased in blood  
 (2) Keto acidosis take place  
 (3) Dehydration process start  
 (4) All the above  
**CC0195**
- 178.** One molecule of insulin contains :-  
 (1) 30 Amino acid (2) 41 amino acid  
 (3) 51 amino acid (4) 70 amino acid  
**CC0196**
- 179.** The diabetes mellitus is caused by :-  
 (1) Hyper secretion of Insulin  
 (2) Hyposecretion of Insulin  
 (3) Hyposecretion of ADH  
 (4) Hyper secretion of ADH  
**CC0197**
- 180.** In diabetes mellitus disease, the urine contains :-  
 (1) Salt (2) Fat  
 (3) Protein (4) Sugar  
**CC0199**
- 181.** 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  
**CC0200**
- 182.** Which gland decreases in size with increasing age?  
 (1) Thyroid (2) Adrenal  
 (3) Thymus (4) Pituitary  
**CC0202**
- 183.** Insulin is secreted by :  
 (1)  $\alpha$ -cell of islets of Langerhans  
 (2)  $\delta$ -cell of islets of Langerhans  
 (3)  $\beta$ -cell of islets of Langerhans  
 (4) Pancreatic acinar cell  
**CC0203**
- 184.** Which one of the following endocrine gland functions to regulate biological clock ?  
 (1) Adrenal gland  
 (2) Thyroid gland  
 (3) Pineal gland  
 (4) Thymus gland  
**CC0204**
- 185.** Mammalian thymus is mainly concerned with :  
 (1) Regulation of body temperature  
 (2) Regulation of body growth  
 (3) Immunological functions  
 (4) Secretion of thyrotropin  
**CC0205**

**186.** The islets of Langerhans are found in :

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

CC0206

**187.** Melatonin is secreted by :

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

CC0208

**188.** Insulin is related with :

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

CC0209

**189.** 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

CC0210

**190.** Which gland degenerate in adult ?

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

CC0211

**191.** Ketone bodies are formed in :

- |            |            |
|------------|------------|
| (1) Liver  | (2) Spleen |
| (3) Kidney | (4) Heart  |

CC0212

**192.** 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

CC0213

**193.** 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

CC0214

**194.** 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

CC0217

**195.** T-cells mature in :

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

CC0218

#### GONADS AND OTHER NON-ORGANISED GLANDS

**196.** Estrogen is secreted by :-

- |             |               |
|-------------|---------------|
| (1) Liver   | (2) Spleen    |
| (3) Ovaries | (4) Pituitary |

CC0219

**197.** Androgens are secreted by :-

- |               |             |
|---------------|-------------|
| (1) Pituitary | (2) Testes  |
| (3) Ovaries   | (4) Thyroid |

CC0220

- 198.** Leydig cells are meant for :-  
 (1) Formation of sperm  
 (2) To produce progesterone  
 (3) To produce testosterone  
 (4) Nutrition of sperm  
**CC0221**
- 199.** Progesterone hormone is secreted from :-  
 (1) Placenta  
 (2) Corpus luteum  
 (3) Both 1 and 2  
 (4) Graafian follicle  
**CC0223**
- 200.** The "erythropoietin" hormone regulates :-  
 (1) Blood pressure  
 (2) Water level of blood  
 (3) Glucose level of blood  
 (4) Rate of formation of red blood cells  
**CC0224**
- 201.** Estrogen is secreted by :-  
 (1) Corpus albicans  
 (2) Corpus Callosum  
 (3) Corpus Luteum  
 (4) Cells of Graffian follicle  
**CC0228**
- 202.** The "Estrogen" secretion is controlled by :-  
 (1) FSH (2) LH  
 (3) Progesterone (4) GH  
**CC0229**
- 203.** Which of the following hormone is not secreted by gastro-intestinal tract ?  
 (1) Gastrin  
 (2) Secretin  
 (3) Cholecystokinin  
 (4) Erythropoietin  
**CC0230**
- 204.** Which one is a female sex hormone ?  
 (1) Estrogen (2) Progesterone  
 (3) Estradiol (4) All of these  
**CC0231**
- 205.** 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  
**CC0232**
- 206.** Feminizing hormone is :-  
 (1) Glucagon (2) Gastrin  
 (3) Oestrogen (4) Androgens  
**CC0233**
- 207.** Which temporary endocrine gland forms in ovary after ovulation :-  
 (1) Corpus callosum (2) Corpus albicans  
 (3) Corpus luteum (4) Corpus striata  
**CC0236**
- 208.** Secretin stimulates the activity of :-  
 (1) Salivary glands (2) Gastric gland  
 (3) Pancreas (4) Gall-bladder  
**CC0237**
- 209.** Which hormone stimulates contraction of gall bladder :-  
 (1) CCK-PZ (2) ACTH (3) LTH (4) FSH  
**CC0238**
- 210.** After ovulation, the ruptured follicle is converted to a structure called (A) which secretes mainly (B). (A) and (B) are respectively.  
 (1) Corpus albicans, estrogen  
 (2) Corpus Luteum, GnRH  
 (3) Corpus Luteum, Estrogen  
 (4) Corpus Luteum, Progesterone  
**CC0411**
- 211.** Hormone which is responsible for maintenance of pregnancy is :  
 (1) Estrogen (2) Aldosterone  
 (3) Progesterone (4) Testosterone  
**CC0244**

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

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

CC0245

**213.** Progesterone is secreted from :

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

CC0246

## EXERCISE-I (Conceptual Questions)

## ANSWER KEY

|      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Que. | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  |
| Ans. | 4   | 4   | 1   | 4   | 1   | 4   | 3   | 4   | 1   | 4   | 3   | 4   | 4   | 2   | 3   |
| Que. | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  |
| Ans. | 3   | 4   | 2   | 4   | 3   | 3   | 1   | 2   | 2   | 4   | 1   | 3   | 3   | 3   | 1   |
| Que. | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  |
| Ans. | 3   | 2   | 4   | 1   | 1   | 2   | 3   | 3   | 1   | 4   | 3   | 4   | 1   | 4   | 1   |
| Que. | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 58  | 59  | 60  |
| Ans. | 4   | 1   | 1   | 4   | 1   | 4   | 4   | 2   | 2   | 1   | 4   | 1   | 1   | 3   | 2   |
| Que. | 61  | 62  | 63  | 64  | 65  | 66  | 67  | 68  | 69  | 70  | 71  | 72  | 73  | 74  | 75  |
| Ans. | 4   | 2   | 3   | 3   | 3   | 4   | 2   | 1   | 4   | 2   | 4   | 2   | 3   | 3   | 1   |
| Que. | 76  | 77  | 78  | 79  | 80  | 81  | 82  | 83  | 84  | 85  | 86  | 87  | 88  | 89  | 90  |
| Ans. | 3   | 2   | 3   | 2   | 4   | 1   | 4   | 2   | 2   | 4   | 2   | 1   | 2   | 2   | 2   |
| Que. | 91  | 92  | 93  | 94  | 95  | 96  | 97  | 98  | 99  | 100 | 101 | 102 | 103 | 104 | 105 |
| Ans. | 4   | 3   | 2   | 2   | 2   | 4   | 2   | 2   | 1   | 2   | 4   | 4   | 2   | 3   | 1   |
| Que. | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| Ans. | 4   | 2   | 3   | 4   | 2   | 3   | 2   | 1   | 1   | 3   | 2   | 2   | 2   | 4   | 2   |
| Que. | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 |
| Ans. | 1   | 1   | 3   | 1   | 1   | 3   | 4   | 4   | 3   | 1   | 3   | 1   | 4   | 3   | 1   |
| Que. | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| Ans. | 3   | 4   | 1   | 3   | 1   | 2   | 3   | 1   | 1   | 1   | 4   | 1   | 4   | 2   | 4   |
| Que. | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 |
| Ans. | 4   | 4   | 1   | 2   | 2   | 1   | 3   | 1   | 2   | 2   | 3   | 4   | 2   | 3   | 2   |
| Que. | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| Ans. | 3   | 3   | 2   | 4   | 4   | 4   | 2   | 2   | 3   | 4   | 3   | 4   | 3   | 2   | 4   |
| Que. | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 |
| Ans. | 2   | 3   | 3   | 3   | 3   | 1   | 1   | 1   | 1   | 2   | 1   | 2   | 1   | 3   | 3   |
| Que. | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| Ans. | 3   | 2   | 3   | 3   | 4   | 4   | 1   | 4   | 4   | 3   | 3   | 3   | 3   | 1   | 4   |
| Que. | 211 | 212 | 213 |     |     |     |     |     |     |     |     |     |     |     |     |
| Ans. | 3   | 2   | 4   |     |     |     |     |     |     |     |     |     |     |     |     |

**EXERCISE-II (Previous Year Questions)**

**AIPMT/NEET**

**AIPMT 2006**

1. Which hormone causes dilation of blood vessels, increased oxygen consumption and glucogenesis?  
 (1) Adrenalin (2) Glucagon  
 (3) ACTH (4) Insulin

**CC0247**

2. Sertoli cells are regulated by the pituitary hormone known as –  
 (1) Prolactin (2) LH  
 (3) FSH (4) GH

**CC0248**

3. A steroid hormone which regulates glucose metabolism is –  
 (1) 11-deoxycorticosterone  
 (2) Cortisone  
 (3) Cortisol  
 (4) Corticosterone

**CC0249**

4. Which one of the following is not a second messenger in hormone action ?  
 (1) Sodium (2) cAMP  
 (3) cGMP (4) Calcium

**CC0250**

**AIPMT 2009**

5. A health disorder that results from the deficiency of thyroxine in adults and characterised by –  
 1. A low metabolic rate  
 2. Increase in body weight and  
 3. Tendency to retain water in tissue is  
 (1) Simple goitre (2) Myxoedema  
 (3) Cretinism (4) Hypothyroidism

**CC0255**

**AIPMT-Pre 2010**

6. Toxic agents present in food which interfere with thyroxine synthesis lead to the development of :  
 (1) Simple goitre (2) Thyrotoxicosis  
 (3) Toxic goitre (4) Cretinism

**CC0256**

7. 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

**CC0257**

8. Which one of the following pairs is incorrectly matched ?  
 (1) Corpus luteum – Relaxin (secretion)  
 (2) Insulin – Diabetes mellitus (disease)  
 (3) Glucagon – Beta cells (Source)  
 (4) Somatostatin – Delta cells (source)

**CC0258**

**AIPMT-Mains 2010**

9. Which one of the following is now being commercially produced by biotechnological procedures ?  
 (1) Morphine (2) Quinine  
 (3) Insulin (4) Nicotine

**CC0259**

10. 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                            |

CC0260

11. Signals from fully developed foetus and placenta ultimately lead to parturition which requires the release of :
- (1) Oxytocin from maternal pituitary
  - (2) Oxytocin from foetal pituitary
  - (3) Relaxin from placenta
  - (4) Estrogen from placenta

CC0261

## AIPMT-Pre 2012

12. 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

CC0262

## NEET-UG 2013

13. 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

CC0263

14. 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.

CC0264

## AIPMT 2014

15. Which of the following causes an increase in sodium reabsorption in the distal convoluted tubule ?
- (1) Increase in aldosterone levels
  - (2) Increase in antidiuretic hormone levels
  - (3) Decrease in aldosterone levels
  - (4) Decrease in antidiuretic hormone levels

CC0267

**16.** 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.

**CC0268**

**17.** 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.

**CC0269**

**Re-AIPMT 2015**

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

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

**CC0272**

**19.** 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

**CC0273**

**NEET-I 2016**

**20.** 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

**CC0277**

**NEET-II 2016**

**21.** 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

**CC0278**

**22.** 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

**CC0279**

**23.** 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  $\text{Ca}^{++}$  and  $\text{Na}^{+}$ .

**CC0280**

**24.** 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

**CC0281**



## NEET(UG) 2017

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

CC0283

26. 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.

CC0284

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

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

CC0285

## NEET(UG) 2018

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

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

CC0289

29. 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

CC0290

## NEET(UG) 2019

30. 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.

CC0396

31. Match the following hormones with the respective disease :

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

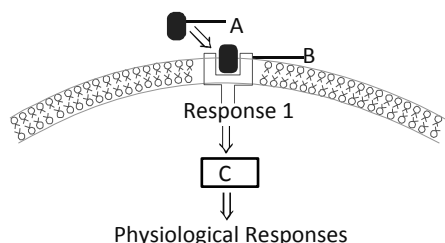
Select the **correct** option.

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

CC0397

NEET(UG) 2019 (Odisha)

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



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

CC0398

33. 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

CC0399

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

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

CC0400

35. 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

CC0401

NEET(UG) 2020

36. 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.

CC0402

37. 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

CC0403

38. 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)  |

CC0404

## NEET(UG) 2020 (Covid-19)

39. 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) |                          |

CC0405

40. 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

CC0406

## NEET(UG) 2021

41. 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

CC0407

## NEET(UG) 2021 (Paper-2)

42. Which of the following acts as physiological barrier?

- (1) Natural killer cells  
 (2) Interferons  
 (3) Tears from eyes  
 (4) Mucus coating of the epithelial lining of urogenital tracts

CC0412

## NEET(UG) 2022

43. Match List -I with List -II.

| List-I<br>(Biological Molecules) | List-II<br>(Biological functions) |
|----------------------------------|-----------------------------------|
| (a) Glycogen                     | (i) Hormone                       |
| (b) Globulin                     | (ii) Biocatalyst                  |
| (c) Steroids                     | (iii) Antibody                    |
| (d) Thrombin                     | (iv) Storage product              |

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

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

CC0413

44. Which of the following are not the effects of Parathyroid hormone ?

- (a) Stimulates the process of bone resorption  
 (b) Decreases  $\text{Ca}^{2+}$  level in blood  
 (c) Reabsorption of  $\text{Ca}^{2+}$  by renal tubules  
 (d) Decreases the absorption of  $\text{Ca}^{2+}$  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

CC0414

**NEET(UG) 2022 (OVERSEAS)**

**45.** Normal sleep-wake cycle in a human body is maintained by the secretion of :

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

**CC0415**

**46.** Which one of the following hormones reduce the blood pressure?

- (1) Atrial Natriuretic factor
- (2) Aldosterone
- (3) Angiotensin-II
- (4) Antidiuretic hormone

**CC0416**

**Re-NEET(UG) 2022**

**47.** Given below are two statements : one is labelled as **Assertion (A)** and the other is labelled as **Reason (R)**.

**Assertion (A) :**

FSH which interacts with membrane bound receptors does not enter the target cell.

**Reason (R) :**

Binding of FSH to its receptors generates second messenger (cyclic AMP) for its biochemical and physiological responses.

In the light of the above statements, choose **the most appropriate answer** from the options given below ;

- (1) Both **(A)** and **(R)** are correct and **(R)** is the correct explanation of **(A)**
- (2) Both **(A)** and **(R)** are correct but **(R)** is not the correct explanation of **(A)**
- (3) **(A)** is correct but **(R)** is not correct
- (4) **(A)** is not correct but **(R)** is correct

**CC0417**

**EXERCISE-II (Previous Year Questions)**

**ANSWER KEY**

|      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Que. | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| Ans. | 1  | 3  | 3  | 1  | 2  | 1  | 1  | 3  | 3  | 1  | 1  | 2  | 2  | 4  | 1  |
| Que. | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| Ans. | 2  | 3  | 3  | 2  | 4  | 4  | 3  | 1  | 4  | 2  | 1  | 1  | 1  | 3  | 2  |
| Que. | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| Ans. | 3  | 2  | 3  | 2  | 2  | 2  | 4  | 4  | 2  | 2  | 4  | 3  | 3  | 1  | 2  |
| Que. | 46 | 47 |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Ans. | 1  | 2  |    |    |    |    |    |    |    |    |    |    |    |    |    |

## EXERCISE-III

## Master Your Understanding

## EXERCISE-III(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.

CC0298

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.

CC0299

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

CC0300

4. Pineal gland is not related with :-

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

CC0301

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

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

CC0302

6. Find out correctly matched :-

- (A) Thymus – AMI  
 (B) PTH –  $\text{Ca}^{+2}$  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

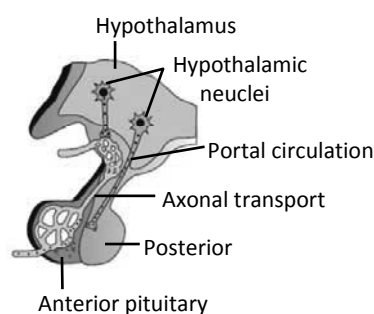
CC0303

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.

CC0304

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

CC0305

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 |

CC0306

10. Hyperglycemic and hypoglycemic hormones are :-

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

CC0307

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

CC0308

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

CC0309

### EXERCISE-III(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

CC0310

14. Which one of the following decreases blood pressure ?

- (1) Insulin (2) ANF
- (3) ADH (4) Aldosterone

CC0311

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

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

CC0312

16. Diabetic patients are successfully treated with:-

- (1) GH therapy
- (2) More amount of thyroxine
- (3) Insulin therapy
- (4) (2) & (3) both

CC0313

17. 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

CC0314

- 18.** Parathormone causes :-  
 (1) Hypercalcemia  
 (2) Hyperglycemia  
 (3) Hyperkalemia  
 (4) Hypocalcemia and hypoglycemia both  
**CC0315**
- 19.** In mammals the female secondary sexual characters are developed mainly by the hormone?  
 (1) HCG (2) Progesterone  
 (3) Estrogens (4) All of these  
**CC0316**
- 20.** Which of the following is an accumulation and release centre of Neurohormones?  
 (1) Anterior Pituitary lobe  
 (2) Neurohypophysis  
 (3) Pars intermedia  
 (4) Hypothalamus  
**CC0317**
- 21.** BMR and Temperature of body is controlled by which endocrine gland?  
 (1) Adrenal cortex (2) Thymus  
 (3) Thyroid (4) Pituitary  
**CC0318**
- 22.** Reabsorption of  $\text{Na}^+$  along with excretion of  $\text{K}^+$  is controlled by which one of the following hormones?  
 (1) Prostaglandins (2) Aldosterone  
 (3) Estrogen (4) Cortisol  
**CC0319**
- 23.** Location and secretion of Leydig cells are?  
 (1) Pancreas - Glucagon  
 (2) Ovary - Estrogen  
 (3) Ovary - Progesterone  
 (4) Testis - Testosterone  
**CC0320**
- 24.** Urinary excretion of  $\text{Na}^+$  is regulated by-  
 (1) Anterior Pituitary (2) Adrenal cortex  
 (3) Neurohypophysis (4) Pars intermedia  
**CC0321**
- 25.** Thyrocalcitonin is secreted during –  
 (1) Increased blood calcium level  
 (2) Decreased blood calcium level  
 (3) Both (1) and (2)  
 (4) Increased blood sugar level.  
**CC0322**
- 26.** Which of the following hormones increase alertness, piloerection and sweating ?  
 (1) TCT (2) Catecholamines  
 (3) Cortisol (4) Thymosins  
**CC0323**

## EXERCISE-III

## ANSWER KEY

| Que. | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Ans. | 3  | 1  | 2  | 4  | 4  | 2  | 2  | 4  | 4  | 3  | 2  | 2  | 4  | 2  | 4  |
| Que. | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |    |    |    |    |
| Ans. | 3  | 2  | 1  | 3  | 2  | 3  | 2  | 4  | 2  | 1  | 2  |    |    |    |    |