

Section A

- Write the answer of the following questions. [Each carries 1 Mark] [20]

1. Select the right match of endocrine gland and their hormones among the options given below :

Column-I	Column-II
(A) Pineal	(1) Epinephrine
(B) Thyroid	(2) Melatonin
(C) Ovary	(3) Estrogen
(D) Adrenal medulla	(4) Tetraiodothyronine

- (A) (A - 4), (B - 2), (C - 1), (D - 3) (B) (A - 2), (B - 4), (C - 1), (D - 3)
 (C) (A - 3), (B - 2), (C - 1), (D - 4) (D) (A - 2), (B - 4), (C - 3), (D - 1)
2. Which of the following hormones is not secreted by anterior pituitary ?
 (A) Growth hormone (B) Follicle stimulating hormone
 (C) Oxytocin (D) Adrenocorticotrophic hormone
3. Mary is about to face an interview. But during the first five minutes before the interview she experiences sweating, increased rate of heart beat, respiration etc. Which hormone is responsible for her restlessness ?
 (A) Estrogen and progesterone (B) Oxytocin and vasopressin
 (C) Adrenaline and noradrenaline (D) Insulin and glucagon
4. The steroid responsible for balance of water and electrolytes in our body is
 (A) Insulin (B) Melatonin (C) Testosterone (D) Aldosterone
5. Thymosin is responsible for
 (A) Raising the blood sugar level. (B) Raising the blood calcium level.
 (C) Differentiation of T-lymphocytes. (D) Decrease in blood RBC.

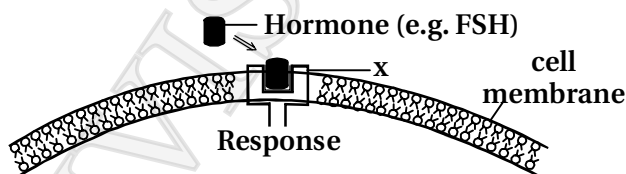
6. Match the following columns.

Column - I	Column - II
(a) Epinephrine	(1) Increase in muscle growth.
(b) Testosterone	(2) Decrease in blood pressure.
(c) Glucagon	(3) Breakdown in liver glycogen.
(d) Atrial natriuretic factor	(4) Increase heart beat.

- (A) (a - 2), (b - 1), (c - 3), (d - 4) (B) (a - 4), (b - 1), (c - 3), (d - 2)
 (C) (a - 1), (b - 2), (c - 3), (d - 4) (D) (a - 1), (b - 4), (c - 2), (d - 3)
7. Hormones are called chemical signals that stimulate specific target tissues. Which is the correct location of these receptors in of protein hormones ?
 (A) Extra cellular matrix (B) Blood (C) Plasma membrane (D) Nucleus
8. A hormone responsible for normal sleep-wake cycle is
 (A) Epinephrine (B) Gastrin (C) Melatonin (D) Insulin
9. Which of the following do not play any role in calcium balance in the human body ?
 (A) Vitamin D (B) Parathyroid hormone
 (C) Thyrocalcitonin (D) Thymosin

10. Which gland inactivated at old age ?
 (A) Adrenal (B) Pineal (C) Thymus (D) Pituitary
11. does not function as secondary messenger.
 (A) Na (B) C - AMP (C) C - GMP (D) Calcium
12. Which hormone regulates 24 hour cycle and controls sleep and wakefulness ?
 (A) Adrenalin (B) Melatonin (C) Calcitonin (D) Prolactin
13. Which pair is correct ?
 (A) Thyroxine – Tetanus (B) Insulin – Diabetes incipendus
 (C) Adrenaline – Tetany (D) Parathormone – Tetany
14. Which endocrine gland stores its secretions in intercellular space before releasing into blood ?
 (A) Adrenal (B) Pancreas (C) Testis (D) Thyroid
15. Which organ is stimulated by secreten ?
 (A) Lungs (B) Liver (C) Pancreas (D) Gastric glands
16. Anterior pituitary and hypothalamus is connected through
 (A) Hepatic portal vein (B) Renal portal vein
 (C) Hypothalamo hypophyseal axis (D) All of these
17. In female after ovulation which hormone is responsible for formation of corpusluteum
 (A) Somatotropic hormone (B) Luteinizing hormone
 (C) Melanocyte stimulating hormone (D) Follicle stimulating hormone

18. Identify the structure 'x'.
 (A) Nuclear receptor
 (B) Intracellular receptor
 (C) Hormone-receptor complex
 (D) Gap junction



19. Match the following hormones with the respective disease :

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

Select the correct option.

- (a) (b) (c) (d)
- (A) (ii) (iv) (i) (iii)
 (B) (v) (i) (ii) (iii)
 (C) (ii) (iv) (iii) (i)
 (D) (v) (iv) (i) (iii)
20. A : Hormone calcitonin has antagonistic effect to that of parathyroid hormone.
 R : Calcitonin decreases blood Ca^{++} level while PTH increases blood Ca^{++} level.
 (A) A and R both are correct and R is correct explanation of A.
 (B) A and R are correct but R is not correct explanation of A.
 (C) A is correct and R is false.
 (D) Both A and R are false.