Roll No. .....

E–324

M. Sc. (First Semester)
EXAMINATION, Dec.-Jan., 2020-21

ZOOLOGY

Paper Third

(General and Comparative Endocrinology of Vertebrates)

Time : Three Hours] [*Maximum Marks : 80*

Note : Attempt all Sections as directed.

Section—A 1 each

(Objective/Multiple Choice Questions)

Note : Attempt all questions.

Choose the correct answer :

1. The term 'Hormone' was coined by :

   (a) E. H. Starling

   (b) Antoni van Leuvenhoek

   (c) Pasteur

   (d) E. D. Odum

2. First discovered hormone was :

   (a) Insulin

   (b) Thyroxine

   (c) Secretin

   (d) Pheromones

3. Which of the following acts as 'Internal chemical co-ordination' ?

   (a) Water

   (b) Mineral

   (c) Glucose

   (d) Hormone

4. Hormones are :

   (a) Phenolic

   (b) Steroid

   (c) Proteinous

   (d) All of the above

5. Master Endocrine gland of vertebrates is :

   (a) Ovam

   (b) Hypophysis

   (c) Thyroid

   (d) Testis

6. T_3 is :

   (a) Thyroxin

   (b) Thyrotropin

   (c) Triidothyronine

   (d) None of the above

7. Steroid hormones are synthesized within elements of the :

   (a) Smooth endoplasmic reticulum

   (b) Golgi body

   (c) Mitochondria

   (d) All of the above

8. Insulin is secreted by :

   (a) α cells

   (b) β cells and pancreas

   (c) Spleen

   (d) Thymus

9. Renin is secreted by :

   (a) Liver

   (b) Spleen

   (c) Juxta-glomerular

   (d) Stomach

10. Volume and concentration of urine is regulated by ?

    (a) MSH

    (b) ADH

    (c) ACTH

    (d) FSH

11. Which hormone is known as fight or flight hormone :

    (a) Thyroxine

    (b) Oxytocin

    (c) Adrenaline

    (d) Insulin

12. Analgesic effect is due to :

    (a) Endorphin

    (b) Thyroxine

    (c) Parathormone

    (d) None of the above

13. Pregnancy test is confirmed in urine by the presence of :

    (a) Insulin

    (b) Thymosin

    (c) Cholesetrol

    (d) Chronic Gonadotropin Hormone

14. Calcium and phosphorous metabolism are regulated by :

    (a) Thyroid

    (b) Para-thyroid

    (c) Pineal body

    (d) Thymus

15. Immuno-suppressive hormone is :

    (a) Cortisol

    (b) PTH

    (c) CGH

    (d) None of the above

16. Impairment in the synthesis of dopamine by the brain is major causative factor for disorder :

    (a) Parkinson's

    (b) Addison

    (c) Goiter

    (d) All of the above

17. Acromegaly is caused by :

    (a) Hypersecretion of FSH

    (b) Hypersecretion of ACTH

    (c) Hypersecretion of GH

    (d) Hypersecretion of LH

18. The number of hormones secreted from Anterior Pituitary is :

    (a) 06

    (b) 10

    (c) 20

    (d) 25

19. Insulin, Prolactin are the :

    (a) Growth hormone

    (b) Sex hormone

    (c) Both (a) and (b)

    (d) None of the above

20. Bones and other organs not grow with normal body proportion is known as :

    (a) Dwarfism

    (b) Pituitary muaaedema

    (c) Gignatism

    (d) None of the above

Section—B 2 each

(Very Short Answer Type Questions)

Note : Attempt all questions.

1. Define hormones.

2. What is hypothalamus ?
3. Name of T_3, T_4 and TSH.
4. What is cortisol ?
5. Functions of Endorphins.
6. Disorder due to thyroid hormone.
7. Name of any *three* growth hormone.
8. Name of any three hormones responsible of fat metabolism.

Section—C 3 each

(Short Answer Type Questions)

Note : Attempt all questions.

1. Role of steroid hormones.
2. Juxta-glomerular apparatus.
3. Role of progesterone.
4. Structure of thyroid gland (only diagram).
5. Disorder due to Adrenal hormones.
6. Synthesis of gastrointestinal hormones.
7. Describe any *two* hormones involved in calcium metabolism.
8. Role of Endoplasmic in synthesis steroid hormones.

Section—D 5 each

(Long Answer Type Questions)

Note : Attempt all questions.

1. Define the scope of endocrinology in detail.

Or

Comparative morphology of pituitary gland.

2. Write an essay on ‘Concentration and transport of hormone in the blood’.

Or

Describe general mechanism of hormone action.

3. Write about the disorder of pituitary gland in detail.

Or

Describe hormones of heart in detail.

4. Role of hormone in growth and development (any *four*).

Or

Describe the role of hormone in carbohydrate metabolism.