

PD-270

M.Sc. Zoology (2nd Semester)

Examination, June 2021

Paper-I

General & comparative Endocrinology of Vertebrates

Time : Three Hours]

[Maximum Marks : 80

[Minimum Pass Marks :

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

1. Answer the following Multiple choice question 1x10=10
- i- Who gave the word endocrinology in the year of 1907.
a- Sterling b- Baylis c- Pende d- A.A. Berthold
- ii- Which scientist or philosopher denied that disease could be caused by the intervention of "Deities & Demons" -
a- Assisotle b- Hippocrates c- John Hunter d- A.A. Berthold
- iii- Who First used the word Hormone (1905) -
a- Baylis & Sterling b- A.A. Berthold c- Adisson d- John Hunter
- iv- Which compound that selectively destroys the B-cells of the pancreatic islets and reduced the insulin secretion-
a- Neutral Red b- Alloxan c- Thiourecil d- Cyproteron Acetate
- v- Which one is the anti-androgynous substance or compound bond to target organ and block the action of Testosterone & Androgens.
a- Cyproteron Acetate b- Thourea c- Alloxan d- Nitrofurans
- vi- How many amino acid residue are found in thyroid relapsing hormone and melanocyte inhibitory releasing hormone
a- 2 b- 3 c- 4 d- 4
- vii- Pre-prostructure of insulin contain 109 amino acid residue, 1 insulin contain 51 anion acid residue. Messenger RNA of insulin contain how many amino acid residue.
a- 20 b- 21 c- 22 d- 23
- viii- Which hormone are necessary for the "Male Brain Sex"
a- Testosterone b- Estrogens c- Di-hydroxy testosterone d- Progesterone
- ix- Hypothyroidism caused in infancy-
a- Exothermic Goiter b- Myxoedema c- Cretism d- Myxoedema
- x- Estrogens belong to estrane group contain how many carbon atom
a- 17 b- 18 c- 19 d- 21

2- Answer the following short answer the questions-

2x5=10

- i- Write about the symptoms of acromegaly.
ii- How many hormone release from kidney, write their names.
iii- How to pre-pro structure of insulin convert in to insulin.
iv- Give the name of any four releasing stimuli those are responsible of hormone release.
v- Write about the disorder of 1925 Dihydroxy cholecalciferol.

Section-B

Answer the following long answer type question.

15X4=60

3- Describe "Chemical Ablation" in detail

Or

Describe the classification of endocrine glands and its hormones.

4- Describe the biosynthesis of catecholamine hormones and indoleamine hormones.

Or

Write about the cytosolic receptors and explain the role of Zn finger, Leucine zipper and Helix turn helix.

5- How to pituitary gland control by the Hypothalamus and write about the Hypothalamus hormones.

Or

Write about the synthesis of glucocorticoids hormones and explain the role of mitochondria and endoplasmic reticulum in the synthesis of glucocorticoids hormones.

6- Describe the role of hormone in feeding behavior.

Or

Explain the role of thyroid, parathyroid and kidney in calcium metabolism.