

B.Sc. ZOOLOGY FIFTH SEMESTER SESSIONAL EXAMINATION, 2022

ENDOCRINOLOGY

PAPER CODE: ZOO-HE-5036

Marks=30

Time=1 hour

Q1. Answer the following:

1x5=5

- a) Which hormone is administered to a person suffering from marked fall in blood pressure? [Choose the correct option]
(i) Insulin
(ii) Adrenaline
(iii) Thyroxine
(iv) Vasopressin
- b) Posterior Pituitary does not synthesize its own hormones. [True/False]
- c) The hormone _____ maintains pregnancy. [Fill in the blank]
- d) Insulin : Glucagon :: Calcitonin : _____. [Analyze and fill in the blank]
- e) Read the following statements: (A) Dissociation of alpha subunit of trimeric G-protein. (B) Generation of cAMP as second messenger. (C) Binding of hormone to GPCR (D) Activation of Adenylyl cyclase by G-alpha subunit (E) Interaction of GPCR with trimeric G-protein. [Rearrange these steps in the correct sequence]

Q2. Answer the following (any five):

2x5=10

- a.) Define hormones. Give their classification.
b.) Differentiate between exocrine and endocrine gland.
c.) State the symptoms of Grave's disease.
d.) Differentiate between adenohypophysis and neurohypophysis.
e.) What are catecholamines? Name them.
f.) State two gonadotropins and mention their functions.

Q3. Write short notes on (any one):

5x1=5

- a.) Hormones of the anterior pituitary and their functions.
b.) Pancreatic hormones and their roles.
c.) Histology of the Adrenal gland

Q4. Answer the following (any one):

10x1=10

- a.) Discuss the mechanism of synthesis of thyroid hormones.
b.) Describe the molecular mechanism of non-steroidal hormone action.