

**CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN,
NUVEM-GOA
SEMESTER END EXAMINATION, JANUARY 2022**

Semester: V	Course name & Code: ZOC 105 Endocrinology		
Total marks: 80	Date:	Duration:	Total No of pages: 02

*Instructions: 1. All questions are compulsory.
2. Figures to the right indicate marks.
3. Draw neat labeled diagrams wherever necessary.*

Q1: Answer any FOUR of the following: **(4x4 = 16 marks)**

- i. Briefly explain endocrine basis of Glucose homeostasis.
- ii. Present a brief account of the magnocellular and parvocellular elements of the hypothalamus.
- iii. Summarize mechanism of action of protein hormone.
- iv. Write a short note on mechanism of steroidal action.
- v. With a neat labeled diagram, represent the gross anatomy and the divisions of the Hypophysis.
- vi. Submit a concise account of clinical presentations in 'pituitary gigantism'.

Q2: Answer any FOUR of the following: **(4x4 = 16 marks)**

- a. Describe the histological structure of thyroid gland.
- b. What is 'Parathyroid Tetany'?
- c. Briefly describe the histological structure of endocrine pancreas with a diagram.
- d. Write a short note on adrenal androgens.
- e. Write a short note on Chromaffin tissue of adrenal gland.
- f. Compare Sertoli cells with Leydig cells.

Q3. A) Summarize the hormones of Neurophysis and their effects on target organs. **(6 marks)**

OR

- A) Summarize the cell types and secretions of 'Adenohypophyseal Pars Distalis', commenting on any two schemes of classification. **(6 marks)**
- B) With reference to pancreas discuss IDDM and NIDDM. **(6 marks)**

Q4. A) Discuss the neuronal communication between hypothalamus & hypophysis and add a note on neurohypophyseal vasculature. (6 marks)

OR

A) Write notes on (6 marks)

- i) Thirst Center
- ii) Milk let-down reflex

B) Classify hormones based on their Chemical nature. (6 marks)

Q5. A) Explain 'long and short loop feedback' regulation of Hormonal secretion with suitable examples. (6 marks)

OR

A) Explain the endocrine basis of calcium homeostasis. (6 marks)

B) Discuss the factors affecting thyroid functions. (6 marks)

Q6. A) Describe the functional morphology of adrenal cortex. Add a note on Glucocorticoids. (6 marks)

OR

A) Discuss the functional morphology of adrenal medulla with a note on Catecholamines and their role in metabolism. (6 marks)

B) Summarize the endocrine role of follicular Thecal and Granulosa cells & summarize the biological effects of estrogens. (6 marks)

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