

**CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN  
NUVEM-GOA  
B.Sc. CBCS SEMESTER V EXAMINATION, January 2021**

**Subject Code: ZOC 105**

**Subject name: Endocrinology**

**Total Marks: 80    Duration: 2 hrs**

**Total No. of Pages: 2**

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*Instructions: 1. All questions are compulsory.*

*2. Figures to the right indicate marks allotted to the question.*

*3. Illustrate your answers wherever necessary.*

**Q.I. Answer ANY FOUR of the following: (4x4)**

1. Explain the role of Pancreas in regulation of Glucose homeostasis.
2. Summarise the types and functions of Hypothalamic releasing hormones.
3. Explain the concept of 'positive feedback mechanism'.
4. Present an illustrated account of the gross anatomy of Hypophysis.
5. Briefly describe the histology of Parathyroid.
6. Present a concise account of all 'precursor cells of mature spermatozoa'.

**Q.II. Answer ANY FOUR of the following: (4x4)**

1. Explain the role of Parathyroid gland in regulation of Calcium levels.
2. Explain the constitution of Hypothalamo-hypophysial portal system and comment on its significance.
3. Write a note on the different types of chemical messengers.
4. Write a note on Adrenal medullary hormones.
5. With reference to Pancreas, discuss IDDM.
6. List the biological effects of testicular androgens in man.

**Q.III. A) Explain long and short loop feedback regulation of hormonal secretion. (6)**

**OR**

**A) Classify hormones based on their mechanism of action. (6)**

B) Write a note on the Magnocellular and Parvocellular elements of Hypothalamic nuclei. (6)

Q.IV. A) Summarise the various approaches to classifying the pituitary cells. (6)

OR

A) Differentiate between the hypothalamic control over the adenohypophysis and the neurohypophysis. (6)

B) List the various cells types of adenohypophysial pars distalis highlighting the effect of their secretions. (6)

Q.V. A) Explain the biochemistry of Thyroid hormones. (6)

OR

A) Describe the functional anatomy and zones of the Adrenal glands and the hormones secreted from each zone. (6)

B) Briefly describe the histological structure of endocrine Pancreas. (6)

Q.VI. A) Describe the process of gametogenesis in the Ovary. (6)

OR

A) Describe the endometrial and ovarian events that occur throughout the menstrual cycle and correlate them with the changes in blood levels of ovarian hormones. (6)

B) Summarize the endocrine control of testicular function. (6)