

2025

5th Semester Examination (CCFUP : NEP)

ZOOLOGY

Paper : MJ 10-T (Single Core Major)

[Histology and Endocrinology]



Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *five* questions : 2×5=10

1. What is polycystic ovarian syndrome (PCOS)?
2. What is a neurohemal organ? Give an example.
3. Mention two differences between cartilage and bone.
4. What is fixation? State its chemical basis.
5. What is feedback regulation? Name its two types.
6. (a) Define epithelial tissue.
(b) Mention one function of simple squamous epithelium. 1+1

P.T.O.

(2)

✓ 7. Differentiate between endocrine and paracrine signaling.

8. What is GPCR?

Group - B

Answer any *four* questions : $5 \times 4 = 20$

9. (a) State the important characteristics of dye.

(b) What is an additive fixative? How does it differ from a non-additive fixative? $2 + (1\frac{1}{2} + 1\frac{1}{2})$

10. Write the important cell types present in the gastric glands and comment on their functions. Mention the location and function of Crypts of Lieberkühn. $3 + 2$

11. List the various zones of the adrenal cortex, their respective hormones, and their functions. What is fight or flight response? $4 + 1$

12. Describe the structure and functions of connective tissue. Mention its classification. $3 + 2$

✓ 13. Explain ossification of bone. Differentiate between intramembranous and endochondral ossification. $3 + 2$

14. (a) Describe the structure of hypothalamus.

(b) Explain regulation of neuroendocrine glands.

$3 + 2$



M

(3)

Group - C

Answer any *one* question : $10 \times 1 = 10$

15. Describe the histological structure and functions of epithelial tissue. Describe muscular tissue with classification and functions. Add a note on nervous tissue. $4 + 3 + 3$

✓ 16. (a) Describe structure and name the hormones of endocrine pancreas.

(b) Discuss disorders related to pancreatic and thyroid dysfunction (Diabetes mellitus & Hypothyroidism). $(3 + 2) + (2\frac{1}{2} + 2\frac{1}{2})$

