

UG 5th Semester Examination 2021**ZOOLOGY (Honours)****Paper: DC-11****(Histology and Endocrinology)****(CBCS)**

Full Marks: 25

Time: Two Hours

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

1. Answer any *eight* questions: $\frac{1}{2} \times 8 = 4$
- Parathormone increases the blood calcium level. (True or False)
 - Which hormone accelerates the conversion of glycogen to glucose?
 - The most common cell in connective tissue proper is known as _____ (Fill in the blank)
 - Name the contractile element found in skeletal muscle.
 - _____ hormone is responsible for “fight-or-flight” response. (Fill in the blank)
 - Mention the source of inhibin.
 - What is the cause of Cushing disease?
 - State the name of hormone secreted from Zona reticularis.
 - Thymus gland is responsible for the body's circadian rhythm. (True or False)
 - _____ hormone receptor is present on the surface of plasma membrane. (Protein/Steroid)
 - Give an example of tyrosine containing hormone.
 - Write the full form of DHEA.
2. Answer any *two* questions: $2\frac{1}{2} \times 2 = 5$
- How are cardiac muscle cells similar to and different from skeletal muscle cells?
 - How the oestrous cycle differs from menstrual cycle?
 - State the role of Sertoli cells and Leydig cells in spermatogenesis.
 - Name one enzyme and one radioisotope used in RIA and ELISA. Name a disease caused due to hyperthyroidism. $(2 + \frac{1}{2} = 2\frac{1}{2})$
3. Answer any *four* questions: $4 \times 4 = 16$
- What do you know about hypothalamo-hypophysial gonadal axis?
 - Write the location of Kupffer cell? State the difference between hepatitis B and hepatitis C. $1 + 3 = 4$
 - Classify hormone on the basis of chemical structures.
 - Write the name and endocrine function of different cell types present in pars distalis.
 - With proper diagram describe the histological features of a typical thyroid follicle. State the role of TSH in thyroid hormone synthesis. $3 + 1 = 4$
 - Mention the steps of estradiol biosynthesis with special reference to the enzymes involved in it.
 - Describe the structure of sarcomere. State the function of oxytocin. $3 + 1 = 4$