

Total Pages-02

RNLKWC/B.Sc./CBCS/VIS/H/C13T/22

2022

**PHYSIOLOGY**

**[HONOURS]**

**(B.Sc. Sixth Semester End Examination-2022)**

**PAPER-C13T**

*Full Marks: 40*

*Time: 02 Hrs*

*The figures in the right hand margin indicate marks*

*Candidates are required to give their answers in their own words as far as practicable*

*Illustrate the answers wherever necessary*

**1. Answer any FIVE questions of the following: 5x2= 10**

- i) What is Jetlag?
- j) Why aldosterone is essential for life?
- k) What is hypophysial portal vessel?
- l) Define  $rT_3$ .
- m) What is Rathke's pouch?
- n) What is circadian and ultradian rhythm?
- o) Why heart is called an endocrine organ?.
- p) What is biological clock?

**2. Answer any FOUR questions of the following: 4x5 = 20**

- c) Mention the source and functions of gastrin. 1+4
- d) Write notes on – i) CCK-Pz ii) Melatonin  $2\frac{1}{2} \times 2$

(2)

- e) Mention the differences between dwarfism and cretinism. What is pan hypopituitarism? 4+1
- f) Discuss the metabolic functions of cortisol. What is Ketoacidosis? 4+1
- g) Discuss the role of insulin in the maintenance of blood sugar. Mention the features of NIDDM. 3+2
- h) Discuss the histological structure of adenohypophysis. What are the functions of oxytocin? 3+2

**3. Answer any ONE questions of the following: 1x10 = 10**

- a) Discuss the process of Thyroxin synthesis with special emphasis on the role of peroxidase. Mention the action of Thyroxin in foetal life. Why Thyroxin is called prohormone? 6+2+2
- b) Discuss the mechanism of action of G.H. What are the actions of ADH? What is hyperinsulinism? 4+5+1