

U.G. 5th Semester Examination-2021**PHYSIOLOGY****[HONOURS]****Course Code : PHYSIOL-H-CC-T-12**

Full Marks : 40

Time : 2½ Hours

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

1. Answer any **five** questions: 2×5=10
- What is infradian rhythm?
 - Write the functions of CRH.
 - What is myxedema?
 - What is Simmond's disease?
 - Define gene oscillations.
 - Write the clinical significance of glycated haemoglobin.
 - Write the functions of PTH.
 - Write the importance of 1 alpha hydroxylase.
 - Write the functions of somatostatin.
 - Define osteopenia.

2. Answer any **two** questions : 5×2=10
- Highlight the chemistry and site of synthesis of Human Growth Hormone (HGH). 2+3=5
 - Discuss about the underlying cause and clinical characteristics of Acromegaly.
 - Discuss physiological functions of erythropoietin.
 - Write the therapeutic uses of human recombinant erythropoietin. 4+1=5
 - What are the physiological functions of aldosterone?
 - What is primary aldosteronism? 4+1=5
 - What is hypothalamo-hypophyseal portal system? Discuss about the antidiuretic actions of vasopressin. 2+3=5
3. Answer any **two** questions : 10×2=20
- Discuss about the metabolic and physiological functions of Thyroxine hormone.
 - How does hypothyroidism affects female fertility? 7+3=10

- b) i) What is diabetic nephropathy?
 - ii) Discuss role of insulin on carbohydrate and protein metabolism. $2+8=10$
- c) i) Discuss about the chemistry and various physiological functions of melatonin.
 - ii) What is Zeitgeber? $7+3=10$
- d) i) Discuss about +ve and -ve feedback of hypothalamo hypophyseal adrenal axis with proper diagram.
 - ii) How does stress affect metabolism? $7+3=10$
