

B.Sc. 5th Semester (Honours) Examination, 2019-20

PHYSIOLOGY

Course ID : 52512

Course Code : SH/PHY/502/C-12 (T)

Course Title : Endocrinology

Time: 1 Hour 15 Minutes

Full Marks: 25

The figures in the margin indicate full marks.

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

1. Answer *any five* questions from the following: 1×5=5
- (a) Define second messenger. Give one example.
 - (b) What is ANF?
 - (c) What is Calcitriol?
 - (d) What are catecholamines? Why they are named so?
 - (e) What is pheochromocytoma?
 - (f) Write down the cause of osteomalacia.
 - (g) What is LATS?
 - (h) What is G-protein?
2. Answer *any two* questions from the following: 5×2=10
- (a) What is osteoporosis? Describe the role of PTH and thyrocalcitonin in regulation of blood calcium level. 1+2+2=5
 - (b) Describe the role of pancreatic hormones on blood glucose regulation. 5
 - (c) What is G.I. hormone? Discuss the physiological role of gastrin. 1+4=5
 - (d) Discuss the physiological basis of sleep-wakefulness cycle in chronobiology. 5
3. Answer *any one* question: 10×1=10
- (a) Discuss the role of osteoblast and osteoclast cells in bone formation. Differentiate between exogenous and endogenous bio-rhythms. What is infradian rhythm? Give one example. 2+2+3+2+1=10
 - (b) Describe the histological structure of adrenal cortex with suitable diagram. Mention the significance of hypo-thalamo-pituitary axis in man. 5+5=10
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