



**School:** School of Science  
**Program/s:** MSc LS  
**Year:1st Semester:** 1<sup>st</sup>  
**Examination:** End Semester Examination  
**Examination year:** Dec 2022

**Course Code:** LS106      **Course Name:** Physiology and Endocrinology

**Date:** 6/12/2022

**Total Marks:** 40

**Time:** 8:30 Am to 10:30 Am

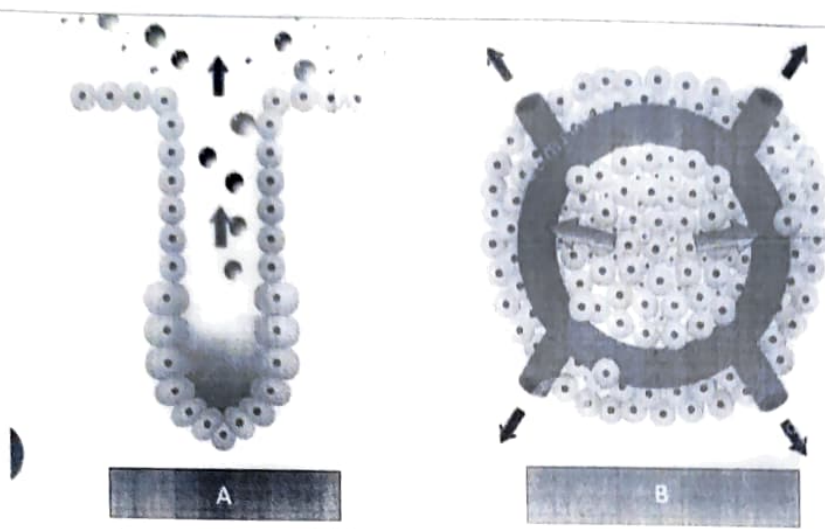
**Total**

**Pages:2**

**Instructions:**

- All questions are compulsory
- Draw neat labelled diagram wherever required
- \* COs=Course Outcome mapping. # BTL=Bloom's Taxonomy Level mapping

Q. No.	Details	Marks	COs*	BTL#
Q.1	<p><b>Do as Directed</b></p> <p>1) The term "brain of gut" is used to refer to the:____</p> <p>a. Autonomic ganglia  b. Enteric nervous system  c. Migratory motor complex  d. Interstitial cells of cajal</p> <p>2) The optimum pH for the activity of pepsin is ____</p> <p>a. Less than 1  b. Between 1.6 and 3.2  c. Between 3 and 5  d. Between 6 and 7</p> <p>3) A posterior pituitary hormone released during parturition is____</p> <p>a. Oxytocin   b.Vasopressin   c. ICSH   d.ACTH</p> <p>4) When food is mechanically broken down and mixed with gastric secretions, the resultant thick, liquid mixture is known as _____.</p> <p>5) Define glycosuria and polyuria.</p> <p>6) Which of the following is NOT a secretory cell in the alimentary canal?</p> <p>a. Mucous cells  b. Parietal cells  c. Kupffer cells  d. Chief cells</p> <p>7) Label A and B in the given diagram:</p>	8	CO1, CO2, CO3, CO4	BT1, BT2, BT3



8) \_\_\_\_\_ hormone is made kidney.

**Q.2 Answer the following questions in brief (2\*6= 12 M)**

12

- 1) Explain why removal of either the stomach or the terminal ileum leads to pernicious anemia
- 2) In RAS pathway, What organs produce which hormones or enzymes in BP regulation?
- 3) What are neurotransmitter?
- 4) Name any two Steroid hormones and state their role.
- 5) State the different layer inner to outermost found in the GI tract.
- 6) Give 4 functions carried out by liver.

CO1, BT1,  
CO2, BT2,  
CO3, BT3,  
CO4

**Q.3 Answer the following questions in detail (4\*5= 20 M) (any 4)**

20

- 1) Explain how the secretion of a hormone is controlled by negative feedback inhibition. Use the control of insulin secretion as an example.
- 2) Write a note on the secretion and regulation of HCl in stomach.
- 3) Mention any two hormone derived from amines and explain their function.
- 4) Draw a neat labelled diagram of pituitary gland and state the secretions made by the gland.
- 5) Explain the synthesis of T3 by thyroid gland cells in detail with help of a neat diagram.

CO2 BT3,  
BT4