

Mid semester autumn 2018

LS 4102

Total marks: 20

Tutor: Arnab Gupta

Date: 18<sup>th</sup> Sept 2018

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1. Using an illustration, describe the steps in activation of trypsinogen to trypsin. Which endocrine gland secretes trypsin? (4+1)
2. *When someone hiding in a corner of a dark room yells "Boo!" at you or when you come upon a large growling dog along a wooded pathway*, which endocrine secretion kicks-in? Explain its mechanism of response. Using bullet points mention 4 changes that occurs in your body in response to the above threats. (1+2+2)
3. True or False/answer in 1 sentence (1+1+1+2)
  - a. Transducin is the GPCR linked to vision \_\_\_\_T/F\_\_\_\_
  - b. Posterior pituitary develops from Neural outgrowth from the Hypothalamus \_\_\_\_T/F\_\_\_\_
  - c. What are chylomicrons?
  - d. Based on evolution name the present-day ear ossicles that developed from primitive: Quadrate and Hyomandibular.
4. You have recently discovered an olfactory receptor. Design an algorithm/flowchart to identify its specific ligand. (5)

*Arnab Gupta*  
18/9/18