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TEST ON G.I.T. & BIOENERGETICS - JAN 2020  
MBBS PART II - SEQs

Total marks: 50  
Time Allowed: 2 hours

Q No. 1.

- a. Write a note on the digestion of dietary carbohydrates. Mention the enzymes and sites involved. (5)
- b. Write a note on Glucose transporters. (4)

Q No. 2

- a. Describe the digestion of and absorption of fats. (5)
- b. What are endopeptidases and exopeptidases? Explain with examples. (3)

Q No. 3

- a. Enumerate pancreatic enzymes with their functions. (5)
- b. What is the pH and composition of bile? Discuss cholelithiasis. (3)

Q No. 4

- a. Draw Electron transport chain. Mention its various complexes with enzymes and coenzymes. (5)
- b. What are uncouplers of oxidative phosphorylation? Classify and explain the mechanism of these uncouplers. (4)

Q No. 5

- a. What is redox potential? How will you differentiate between negative and positive redox potential? Explain with example. Fluorine (+ve) Lithium (-ve) (4)
- b. What is substrate level phosphorylation? Give one example. (4)

Q No. 6

- a. Write down the Laws of thermodynamics. (4)
- b. How cyanide inhibits electron transport chain and what is its treatment? (4)

2,4-DNP is Sodium Nitrite & Sodium Thiosulphate,  
inhibitor  
uncoupler  
oxidant

ETC - cytochrome C is  
Complex IV  
Complex III  
mobile e<sup>-</sup>