

OCTOBER 2011

U/ID 14805/UCQD

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer All questions.

Each answer should not exceed 50 words.

1. Mitochondria
2. Define GFR.
3. ECF
4. Tidal volume
5. List out the methods of Co₂ transport.
6. Succus entericus
7. Functions of saliva
8. Isotonic exercise
9. Cyanosis
10. Functions of stomach.

PART B — (5 × 6 = 30 marks)

Answer ALL the questions.

Each answer should not exceed 250 words.

11. (a) Explain the transport mechanism across cell membrane.

Or

- (b) Explain the ionic basis of resting membrane potential.

12. (a) Explain the counter current mechanism.

Or

- (b) Explain the pathophysiology of edema.

13. (a) Describe oxygen dissociation curve.

Or

- (b) Classify hypoxia and explain hypoxic hypoxia.

14. (a) Explain the process of Deglutition.

Or

- (b) By means of flow diagram explain Defecation reflex.

15. (a) Explain the respiratory changes during severe exercise.

Or

- (b) Describe the different types of heat generated during muscle contraction.

PART C — (5 × 10 = 50 marks)

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 500 words.

16. (a) Describe various steps in Mitosis with suitable diagrams.

Or

- (b) Describe the physiology behind aging.

17. (a) With the help of diagram explain the innervation of urinary bladder.

Or

- (b) Explain the peculiarities of Renal blood flow.

18. (a) Explain how respiration is regulated.

Or

- (b) Describe the mechanics of respiration.

19. (a) Give the structure of gastric gland. What is the composition and function of gastric juice?

Or

- (b) Discuss the functions of liver.

20. (a) Explain the molecular basis of Muscle contraction.

Or

- (b) Explain various steps in neuromuscular transmission.
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