APRIL 2018 **1709415/PBYA21C**

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 1 = 10 marks)

Answer any TEN questions.

Each question carries 1 mark.

Define the following terms :

1. Entropy.
2. Hydroperoxidases.
3. Chemiosmotic theory.
4. Ionophores.
5. Hills reaction.
6. Photorespiration.
7. Energetics of pyruvate.
8. Anerobic and anaerobic reactions.
9. Glucuronidation reaction.
10. Xenobiotic enzymes.
11. ETC.
12. High energy compounds.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

13. Write short notes on (a) Free energy and (b) Enthalpy.

14. Write short notes on ATP-ADP cycle.

15. Write briefly on photorespiration.

16. Give a sketch on citric acid cycle.

17. Explain (a) Sulphation (b) Hydroxylation.

18. Define anaplerotic reaction with examples.

19. List out the factors that affecting the activities of xenobiotic enzymes.

SECTION C — (4 × 10 = 40 marks)

Answer any FOUR questions.

Each question carries 10 marks.

20. Explain on (a) Redox potential (b) High energy linkages.

21. Discuss on electron transport chain and various complexes of ETC.

22. Write in detail on cyclic and non-cyclic electron flow in photosynthesis.

23. Define (a) Glycerophosphate shuttle (b) Malate aspirate shuttle.

24. Write in detail about the mechanism of xenobiotics.

25. Explicate the various steps involved in glycolysis.

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