

Paper name - Metabolism

Section - I (Any 3 ^{Write} Answers)

- Q-1 (a) Write pathway of glycolysis. (7)
 (b) Explain fate of pyruvate. (7)
- Q-2 (a) Explain regulation of glycogen metabolism. (7)
 (b) Write pathway of glycogenolysis. (7)
- Q-3 (a) Give pathway of urea cycle. (7)
 (b) Give significance of N-waste products. (7)
- Q-4 (a) Explain oxidative ~~to~~ ^{De}amination. (7)
 (b) Discuss with example non-oxidative de-amination. (7)
- Q-5 (a) Write pathway of β -oxidation. (7)
 (b) Explain de-saturation and elongation of Fatty Acids. (7)
- Q-6 (a) Explain pathway of Fatty acid synthesis. (7)
 (b) TG & PL synthesis - write brief note (7)
- Q-7 (a) Write a note on PDH complex. (7)
 (b) Explain NAD^+ using steps of TCA cycle. (7)
- Q-8 (a) Explain glycerol-phosphate shuttle. (7)
 (b) Write Malate-Aspartate Shuttle. (7)

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(Answers any 8)

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- 1) Full form of : ATP, NAD
- 2) Who discover TCA cycle?
- 3) Write ATP production in Glycolysis (aerobic phase)
- 4) Name enzymes of PDH complex.
- 5) Name last enzyme of ETS.
- 6) Give full form of : ETC, FAD.
- 7) Name Inborn error of Carbohydrate metabolism.
- 8) Name Inborn error of Lipid metabolism.
- 9) Name Inborn error of protein metabolism.
- 10) Name first enzyme of TCA Cycle.
- 11) Write structure of glyceraldehyde-3-phosphate.
- 12) Give structure of Malate.
- 14) Name enzyme of TCA cycle uses GDP.
- 15) Aerobic respiration of glucose produces total how many ATPs?
- 16) Name 2 inhibitors of ETS

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