

2017

(January)

Full Marks : 40

Time : 2 hours

All Question carry equal marks.

*Answer any **four** questions from any one group as per your specialization.*

(Biochemistry and Biophysics)

1. What is Buffer ? Why do you need to maintain the pH of reactions to get an optimum yield. Describe Henderson – Haselbach equation. (14)

OR

Write short notes on the following : (7x2=14)

- (a) Entropy and Energy changes
- (b) What is Symport ? Write difference between active and passive transport.

2. What are enzymes ? Write the mechanism of enzyme action. (13)

OR

Write short notes on the following : (6½x2=13)

- (a) Secondary structure of protein
- (b) Unsaturated fatty acids.

3. Describe the Electron transport in Mitochondria. How does proton pump help generation ATP through ATP synthase ? (13)

OR

Write short notes on the following : (6½x2=13)

- (a) Hexose Monophosphate shunt
 - (b) Photophosphorylation.
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