

**Nanasaheb Y. N. Chavan ASC College, Chalisgaon**  
**Department of Botany**  
**SYBSc. Semester IV**  
**Class Test- 1**

**Botany Paper II: Plant metabolism**

**Date: 03/02/2023**

**Topics: Unit 1 and 2**

**Marks: 20**

- Q. 1 Answer any FOUR (04)**
- 1) What are major parts of metabolism?
  - 2) What is apoenzyme?
  - 3) Who coined the term enzymes?
  - 4) Define Anabolism
  - 5) What is chemical nature of enzymes?
- Q. 2 Answer any FOUR (08)**
- 1) Give any two examples of catabolism.
  - 2) What are Transferases? Give example.
  - 3) What is non-competitive inhibition?
  - 4) Formation of simple sugars from carbohydrates is an example of which type of process?
  - 5) What is prosthetic group?
- Q. 3 Answer any TWO (08)**
- 1) Explain plant cell as Organic laboratory
  - 2) Describe Lock and Key model of enzyme action.
  - 3) Give classification of enzymes.

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- Q. 1 Answer any FOUR (04)**
- a) Which process is endergonic?
  - b) What are holoenzymes?
  - c) Glycolysis is an example of which process?
  - d) Aconitase, Aldolase, Carboxylase are the examples of which class of enzymes
  - e) Who proposed Lock and Key model of enzyme action?
- Q. 2 Answer any FOUR (08)**
- a) Enlist properties of enzymes.
  - b) What are zymogens?
  - c) Explain enzyme sensitivity to Temperature.
  - d) What is allosteric site of enzyme?
  - e) What is metabolism?
- Q. 3 Answer any TWO (08)**
- a) Describe Induced Fit model of enzyme action.
  - b) Enlist various organelles and their function from plant cell.
  - c) Describe inhibition of enzyme action.

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**Internal Examination at S. Y. B. Sc. Semester IV**

**Paper II: Plant Metabolism**

**Marks: 20**

**Date: 06/02/2020**

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- Q. 1 Answer any **THREE** (06)
1. What is an anaerobic respiration?
  2. List external factors influencing photosynthesis
  3. What are transferases? Give example.
  4. What is metabolism?
- Q. 2 Answer any **TWO** (08)
1. Explain plant cell as organic laboratories.
  2. Describe induced fit theory of enzyme action.
  3. What is non cyclic Photophosphorylation?
  4. Describe Glycolysis.
- Q. 3 Answer any **ONE** (06)
1. Describe in brief the process of Calvin's cycle.
  2. What is respiration? Explain Kreb's cycle.

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