

[Time: Three Hours]

[Marks:70]

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory.

- Q.1
- Draw the structure of D-xylose by Fischer projection Formula 01
 - Draw structure of D-Glucose by Haworth projection formula 01
 - draw struture of lecithin 01
 - Explain effect of P^H on enzyme activity 01
 - Give mechanism of HMG – CoA reductase 01
 - Explain enzyme induction & repression 01
 - Name active form of vit B₁ 02
 - Give Names & Draw structure of sulfur containing amino acidss with three letter code 02
 - What is allosteric inhibitions? 02
 - Define vitamin and classify it 02
 - Expplain metabolism with example 02
- Q.2
- Write a note on secondary structure of protien 03
 - Explain ATP as an energy carrier 03
 - Discuss competitive enzyme inibition 03
 - Discuss in detail about carboaydrate digestion 02
- Q.3
- Write a note on glycogen 03
 - Write a note on vit-A or vit-k 03
 - Write a note on folic acid 03
 - Explain Free energy & transformed free energy 02
- Q.4
- Classify amino acids based on functional groups with example (no structure required) 03
 - Write a note on triglycerides. 03
 - Discuss biochemical role of Vit-B₇ or Vit-B₅ 02
 - State laws of thermodynamics 02
 - Give role of kindney in degertion & absorption of food. 01
- Q.5
- Give detail classification of carbohydrate 03
 - Explain effect of substrate concentration on enzyme avtivity 03
 - Explain multiple cascade system for enzyme regulation 02
 - Dsicuss biochemical role of Ascorbic acid 02
 - Draw structure of arachidonic acid. 01
- Q.6
- Write a note on Vit-B₁ or Vit-B₂ 03
 - Write a note on post-translational modification 03
 - Give two examples of drugs that inhibits following enzymes with their clinical significance. 02
 - MAO
 - Thymidylate synthetase
 - Give short note on double Helix structure of DNA
 - Differential between fat & oil. 02