

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – JAN-2019

Time: Three Hours**Max. Marks: 70 Marks**

APPLIED BIOCHEMISTRY (Revised Scheme 3)

Q.P. CODE: 2609

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)**2 x 10 = 20 Marks**

1. Describe the reactions involved in the uronic acid pathway and add a note on significance of the pathway.
2. List out the sources of various atoms in purine ring. Describe the reactions involved in the formation of a purine nucleotides.
3. Describe the steps involved in transcription process.

SHORT ESSAYS (Answer any Six)**6 x 5 = 30 Marks**

4. What are allosteric enzyme modulators? Explain with the help of examples.
5. Describe the effect of temperature and pH on enzyme activity.
6. Write notes on the components of Electron transport chain.
7. Describe the malate shuttle and add a note on its significance.
8. Outline and explain the reactions of HMP Shunt pathway.
9. What are the steps involved in the removal of amino group from amino acids.
10. Describe the β -oxidation reactions of Fatty acids.
11. What do you mean by oxidative phosphorylation? Explain it in brief.

SHORT ANSWERS**10 x 2 = 20 Marks**

12. What are competitive enzyme inhibitors? Give an example.
13. Define holoenzyme and give one example.
14. What are anaplerotic reactions? Explain with example.
15. Name two coenzymes of niacin and write the structure of any one.
16. Define inulin clearance and give its normal value.
17. Write the chemical structure of Phosphatidyl choline and mention its role.
18. List out the enzymes of pyruvate dehydrogenase complex.
19. What are unsaturated fatty acids? Describe their role.
20. Role of tetrahydro folate in pyrimidine biosynthesis
21. What do you mean by gluconeogenesis? Give one example.
