

2012 Scheme

QP CODE: 217006

Reg. No:

Second Year B.Pharm Degree Supplementary Examinations September 2021 Applied Biochemistry & Molecular Biology

Time: 3 Hours

Total Marks: 100

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Write equations wherever necessary.*

Essay

(3x10=30)

1. Describe hexose monophosphate shunt pathway and add a note on its metabolic significance.
2. Describe the IUB classification of enzymes with suitable examples. Add a note on the effect of substrate concentration and pH on enzyme activity
3. Discuss the process of transcription in prokaryotes with emphasis on structure of RNA polymerase and steps involved in RNA synthesis

Short notes

(14x5=70)

4. Genetic engineering
5. Semiconservative replication of DNA
6. Glycolysis
7. Ketolysis
8. Diabetes mellitus
9. Components and reactions of electron transport chain
10. Atherosclerosis
11. Synthesis and significance of histamine
12. Synthesis of AMP from IMP
13. Types of mutation
14. Transamination
15. Phenylketonuria
16. Allosteric enzymes
17. Energetics in glucose metabolism
