THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0122] JANUARY 2022 Sub. Code: 2018 (MARCH 2021 EXAM SESSION)

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS) PCI Regulation 2017 – SEMESTER II PAPER III – BIOCHEMISTRY O.P. Code: 562018

Time: Three hours Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

 $(2 \times 10 = 20)$

- 1. Describe the Hexose Monophosphate shunt pathway and add a note on metabolic significance.
- 2. Briefly discuss the composition of DNA with a suitable diagram.
- 3. Discuss the reactions of gluconeogenesis.

II. Write notes on: Answer any SEVEN questions.

 $(7 \times 5 = 35)$

- 1. Translation
- 2. Write down the reaction of β -oxidation.
- 3. Structure of t-RNA.
- 4. Classify the proteins with suitable examples.
- 5. Adenosine Triphosphate (ATP)
- 6. Clinical applications of enzymes.
- 7. Explain glycogenolysis.
- 8. Diabetes mellitus.
- 9. Classification and nomenclature of enzymes.

III. Short answers on: Answer ALL questions.

 $(10 \times 2 = 20)$

- 1. Name sulphur containing amino acids.
- 2. Deamination.
- 3. Fatty liver.
- 4. cAMP.
- 5. Oxidative phosphorylation.
- 6. Alkaptonuria.
- 7. Gout.
- 8. Ketosis.
- 9. What is Nucleotide? Give example.
- 10. Role of Carnitine.
