BACHELOR OF PHARMACY (B. PHARM.) (CBCS-2019 COURSE) B. Pharm. Sem-II: WINTER- 2022

SUBJECT: BIOCHEMISTRY

Day: Tuesday

Date: 24-01-2023

W-20662-2022

Time: 10:00 AM-01:00 PM

Max. Marks: 75

N.B.

All questions are **COMPULSORY**. 1)

- Answer to both sections should be written in **SEPARATE** answer books. 2)
- Figures to the **RIGHT** indicate **FULL** marks. 3)

SECTION-I

Answer ALL the following objective type questions (10X2) Q.1

(20)

- a) Explain the significance of carnitine shuttle in beta oxidation
- **b)** Describe the condition fatty liver.
- c) Explain biological significance of adrenaline
- d) Write a note on Atherosclerosis
- e) Explain in short disorders associated with defective catabolism of phenyl alanine and tyrosine
- f) Write the role of t-RNA in translation process
- g) Explain DNA double helix structure.
- h) Describe significance of enzyme DNA polymerase in DNA replication process.
- i) Describe the condition phenylketoneurea.
- j) What is the function of initiation and termination codons in protein synthesis?

Answer any **TWO** of the following **THREE** questions Q.2

(20)

- a) Describe in detail beta oxidation of saturated fatty acid and it's clinical significance.
- b) Elaborate the process of DNA replication in eukaryotes using neat labeled schematic diagram.
- c) Explain synthesis and significance of dopamine and adrenaline

SECTION-II

Answer any SEVEN from the following NINE questions Q.3

(35)

- a) Explain in brief biological role of nucleic acid and proteins.
- b) Describe energy rich compounds in detail.
- c) Explain oxidative phosphorylation and it s mechanism
- d) Explain in brief glycogen metabolism pathways.
- e) Write a note on 6-GPD deficiency
- f) Explain detail Diabetes mellitus
- g) Explain in detail citric acid cycle with energetics
- h) Describe inhibitors of ETC and oxidative phosphorylation
- i) Describe glycolysis with it's significance