MASTER OF SCIENCE (MEDICAL BIOTECHNOLOGY) (CBCS-2018 COURSE)
M.Sc. (Medical Biotechnology) Sem-III : WINTER :- 2021
SUBJECT: MEDICAL BIOCHEMISTRY & DRUG DISCOVERY

Day : Thursday
Date 27-01-2022

W-20235-2021

Time : 10:00 AM-01:00 PM
Max. Marks: 60

N.B.

1) All questions are **COMPULSORY.**
2) Figures to the right indicate **FULL** marks.
3) Answers to both the sections should be written in the **SAME** answer book.

SECTION – I

Q.1 Attempt any **FIVE** of the following: **(10)**

a) Define polyphagia.
b) What are lipoproteins? Give the various classes of lipoproteins.
c) Define prothrombin time.
d) Give the role of insulin in blood glucose maintenance.
e) Enlist symptoms of phenylketouria.
f) What is hemogram? Give its clinical significance.
g) What are the three general procedures for collection of blood sample?

Q.2 Answer any **TWO** of the following: **(10)**

a) Explain various methods for diagnosis of diabetes mellitus.
b) Define health. Explain various factors causing diseases.
c) Describe fibrinolysis and its biological significance.

Q.3 Write short notes on any **TWO** of the following: **(10)**

a) Gout
b) Glycogen storage disorders
c) Phase I reaction of xenobiotics

SECTION – II

Q.4 Attempt any **FIVE** of the following: **(10)**

a) What is meant by therapeutic index?
b) Define pharmacogenomics.
c) What are ethical considerations in utilizing animals for drug discovery?
d) State Lipinski's rule.
e) What are the various stages of clinical trials?
f) What are the applications of RNA interference technology?
g) Give full form of USFDA and TDM.

Q.5 Answer any **TWO** of the following: **(10)**

a) Describe drug delivery system with respect to enteric coated formulations.
b) Explain the process of drug dosage adjustments.
c) Differentiate between clinical research and clinical practice.

Q.6 Write short notes on any **TWO** of the following: **(10)**

a) Pharmacogenetics
b) ZFN technology
c) Drug and cosmetics act

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