



NAM-003-038601

Seat No. _____

B. Voc. (MLMDT) (Sem. VI) (CBCS) Examination

March / April - 2017

**MLMDT-6.1 : Therapeutic Drug Monitoring &
Toxicology**

Faculty Code : 003

Subject Code : 038601

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) Draw neat diagram wherever is required.
(3) Figures on right indicate marks.

1 Answer the following : **20**

- (1) Define : Therapeutic index.
- (2) What is Meconium?
- (3) What is Withdrawal?
- (4) What is first pass metabolism?
- (5) What is Drug abuse?
- (6) What is Drug addiction?
- (7) Define : Therapeutic equivalence
- (8) Marijuana is obtained from _____ plant.
- (9) Opium is obtained from _____ part of the plant.
- (10) What is pharmacokinetics?
- (11) What is bioavailability?
- (12) Define : Glomerular filtration.
- (13) What is osmolal Gap?
- (14) What is the result of Oncogene activation?
- (15) Define: Electroendosmotic flow.
- (16) What is SCOT?
- (17) What is Binge Drinking?
- (18) Define : Guard Column.
- (19) What is anti antibody?
- (20) Give example of Spinal Poison.

- 2** (a) Answer specifically : (any **three**) **6**
- (1) Write four advantages of Capillary Electrophoresis.
 - (2) Discuss in brief Lateral flow immunoassay.
 - (3) Comment on - Homogenous assays are preferred over heterogenous assays for Drug Monitoring.
 - (4) Enlist the factors governing the choice of route.
 - (5) Discuss the situations in which TDM is become unnecessary.
 - (6) What is the purpose of TDM?
- (b) Answer Specifically : (any **three**) **9**
- (1) Write in brief on CEDIA.
 - (2) Discuss the use of NPD.
 - (3) Describe in brief Micellar Electrokinetic Capillary Chromatography.
 - (4) What are causative interferences in TDM?
 - (5) How to detect and correct interferences in TDM?
 - (6) What are the characteristics of drugs to require monitoring?
- (c) Write short notes : (any **two**) **10**
- (1) Discuss in detail Capillary electrophoresis.
 - (2) Write an essay on ELISA.
 - (3) Write in detail on Fluorescence Polarisation.
 - (4) Write a note on Interference of various agents.
 - (5) Write a note on factors affecting TDM?
- 3** (a) Answer specifically : (any **three**) **6**
- (1) How substance abuse starts?
 - (2) Enlist the sign and symptoms of Drug Abuse.
 - (3) Define: Iron Poisoning as an Environmental carcinogen.
 - (4) What is in vitro and in vivo toxicology?
 - (5) What is the mechanism of action of Poison?
 - (6) What are anticonvulsants?

- (B) Answer Specifically : (any **three**) **9**
- (1) What is an OSHA selected Carcinogen?
 - (2) Which classes of chemical tend to be carcinogens?
 - (3) Write a note on mechanism of action of Barbiturates.
 - (4) Write a note on phase I metabolism reactions.
 - (5) Which drugs are measured in TDM?
 - (6) Classified poisons according to their mode of action.
- (c) Write short notes : (any **two**) **10**
- (1) Write a note on Alcohol Poisoning.
 - (2) Write a note on Arsenic toxicity.
 - (3) Write a detailed note on Western blotting.
 - (4) Write a note on Environmental Carcinogens.
 - (5) Write a note on Therapeutic drug monitoring of anti-inflammatory drugs.
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