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Total No. of Printed Pages: 2

Enrollment No.....



Faculty of Science
End Sem Examination Dec-2023

FS3CO13 Forensic Toxicology

Programme: B.Sc. (Hons.)

Branch/Specialisation: Forensic
Science

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. The father of forensic toxicology is: **1**
 (a) Karl Landsteiner (b) Edmond Locard
 (c) Mathieu J.B. Orfila (d) Calvin Goddard
- ii. A toxic substance produced by biological system is specially referred to as a _____. **1**
 (a) Toxicant (b) Toxin (c) Xenobiotic (d) Poison
- iii. 'Stass-Otto' process is used for: **1**
 (a) Extraction of poisons (b) Extraction of DNA
 (c) Extraction of antigens (d) Isolation of compliments
- iv. Which of the following is not a volatile poison? **1**
 (a) Methanol (b) Phenol (c) Nicotine (d) Ethanol
- v. Which one can cause blindness? **1**
 (a) Ethyl Alcohol (b) Methyl Alcohol
 (c) Glycol (d) Phenol
- vi. Poison with garlic smell is _____. **1**
 (a) Carbolic acid (b) Citric acid
 (c) Phosphorous (d) Mercuric chloride
- vii. The colour of the blood is cherry red due to: **1**
 (a) Hydrogen sulphide
 (b) Carbon tetrachloride
 (c) Carbon monoxide
 (d) Methane

- viii. Vitriolage means _____. **1**
 (a) Using vitriol for suicide
 (b) Using vitriol for murder
 (c) Vitriol-throwing
 (d) Perforation of stomach after consuming H_2SO_4
- ix. The Spinal poison is _____. **1**
 (a) Strychnine (b) HCN
 (c) Cocaine (d) Yellow oleander
- x. Botulism is a form of _____. **1**
 (a) Volatile poison (b) Food poisoning
 (c) Pesticide (d) Metallic poisoning
- Q.2 i. Define Poison. **2**
 ii. Mention 3 important roles of a forensic toxicologist. **3**
 iii. Write about factors influencing the action of poison. **5**
 OR iv. Write a brief note on types of poisons. **5**
- Q.3 i. Define Pharmacokinetics. **2**
 ii. Write a brief note on the collection and preservation of viscera. **8**
 OR iii. Briefly explain metallic poisons with important types. **8**
- Q.4 i. What are barbiturates? **3**
 ii. Write a brief note on the medicolegal aspects of death due to pesticides. **7**
 OR iii. Write a brief note on arsenic or mercury poisoning with an appropriate case study. **7**
- Q.5 i. What are alkaloids? Give examples of it. **4**
 ii. Write a short note on drugs of abuse in sports. **6**
 OR iii. Write a brief note on LSD. **6**
- Q.6 Attempt any two: **5**
 i. Explain any two vegetable poison. **5**
 ii. Write a short note on food poisoning. **5**
 iii. Write a brief note on poisonous fungi. **5**

Marking Scheme

Forensic Toxicology (T) - FS3CO13 (T)

Q.1	i)	Answer: - c) Mathieu J.B. Orfila	1
	ii)	Answer: - b) toxin	1
	iii)	Answer: (a) Extraction of poisons	1
	iv)	Answer: c) Nicotine	1
	v)	Answer: b) Methyl Alcohol	1
	vi)	Answer: c) Phosphorous	1
	vii)	Answer: c) Carbon monoxide	1
	viii)	Answer: c) vitriol-throwing	1
	ix)	Answer: a) Strychnine	1
	x)	Answer: b) Food poisoning	1

Q.2	i.	Proper definition	2 marks	2
	ii.	One mark for each role		3
		Role 1	1 Mark	
		Role 2	1 Mark	
		Role 3	1 Mark	
	iii.	Action of poison	2 Marks	5
		Factors	3 Marks	
OR	iv.	Poison	1 Mark	5
		Types	4 marks	

Q.3	i.	Proper definition	2 Marks	2
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	ii.			
	iii.	Collection	4 Marks	8
		Preservation	4 Marks	
OR	iv.	Metallic poison	4 Marks	8
		Important poisons	4 Marks	
Q.4	i.	Definition	2 Marks	3
		Examples	1 Mark	
	ii.	Pesticides	3 Marks	7
		Medicolegal aspects=	4 marks	
OR	iii.	Arsenic/mercury poisoning	4 Marks	7
		Case study	3 Marks	
Q.5	i.	Alkaloids	2 Marks	4
		Examples	2 Marks	
	ii.	Drugs of abuse	3 Marks	6
		Abuse in sports	3 Marks	
OR	iii.	Definition	2 Marks	6
		Symptoms, lethal dose and other features	4 Marks	

Q.6				
	i.	Vegetable poison	3 Marks	5
		Diagram	2 Marks	
	ii.	Food poisoning definition	2 Marks	5
		Causing factors and sources	3 Marks	
	iii.	Definition of poisoning fungi	2 Marks	5
		Appropriate examples and other features	3 Marks	
