

B.Sc. Semester - 5 (CBCS) Examination
Oct/Nov. - 2022(Old Course)
FORENSIC CHEMISTRY (CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Q-1 Give the answer of following question. (14)
- (A) Answer the following question very shortly (04)
- (1) The Greek philosopher Socrates was sentenced to death by drinking_____ Poison.
 - (2) Define Forensic Chemist?
 - (3) Classified the types of explosive, with examples?
 - (4) Explain Sec.45 of IEA?
- (B) Answer the following question in brief (Any one) (03)
- (1) Give the Preliminary Screening test used in Forensic Chemistry?
 - (2) What are the legal aspects of Forensic Chemistry?
- (C) Answer the following question in detail (Any one) (07)
- (1) Explain the following cases comes which under forensic chemistry-
- Fire & arson cases - Explosives cases.
 - (2) Write a note on Gas Chromatography with labeled diagram?
- Q-2 Give the answer of following question. (14)
- (A) Answer the following question very shortly (04)
- (1) Define Narcotic Substances?
 - (2) Write the active Metabolite of Paracetamol?
 - (3) Give the full form of NCB & in which year it gets established?
 - (4) Give the two examples of Drug included in Category-2 of precursor Drugs?
- (B) Answer the following question in brief (Any one) (03)
- (1) How to detect Clandestine labs. and where they are located?
 - (2) Write a short note on LSD drug?
- (C) Answer the following question in detail (Any one) (07)
- (1) Write a note on *Cannabis Sativa* plant as Narcotic Drugs?
 - (2) Give the Pathways of Drug Metabolism through various phases?
- Q-3 Give the answer of following question. (14)
- (A) Answer the following question very shortly (04)
- (1) Examples of Chronic Poisoning?
 - (2) Write the Different Route of Administration of drugs?
 - (3) Who is the Father of Toxicology?
 - (4) What is Lethal Dose (LD₅₀) in relation to Drugs?
- (B) Answer the following question in brief (Any one) (03)
- (1) Difference between Toxic & Toxin. Define Median Lethal Dose (LD₅₀).
 - (2) Explain Solvent Extraction, and also Define Soxhlet Extraction?

- (C) Answer the following question in detail. (Any one) (07)
- (1) Write a note on Dry Ashing and Wet Digestion Methods?
 - (2) What is Distillation; explain its type with proper diagram?
- Q-4 Give the answer of following question. (14)
- (A) Answer the following question very shortly (04)
- (1) Define Arson, and name the types of Arsonist?
 - (2) Give the Density of LDO at standard 15°C temperature?
 - (3) What is Vandalism?
 - (4) Give the full form of LPG & CNG.
- (B) Answer the following question in brief (Any one) (03)
- (1) Classification of Fire on the basis of their source of Ignition?
 - (2) Give Distillation Method for Petrol as per ASTM and draw diagram?
- (C) Answer the following question in detail. (Any one) (07)
- (1) Explain in detail about the Cases related to Arson
 - (2) Write a note on Characteristics of standard Petrol. Give its different Parameters?
- Q-5 Give the answer of following question. (14)
- (A) Answer the following question very shortly (04)
- (1) Full form of FSSAI & BIS.
 - (2) Give the test for detection of Formalin in Milk?
 - (3) Name the two Enzymes that take part in alcohol Metabolism?
 - (4) The color of Phenolphthalein fades in basic medium due to the formation of ____ & ____.
- (B) Answer the following question in brief (Any one) (03)
- (1) Give the chemical method used for the detection of Ethyl Alcohol?
 - (2) Write any three test used for the detection of Phenolphthalein?
- (C) Answer the following question in detail. (Any one) (07)
- (1) Describe the bribe trap cases and give the chemical analysis method for Phenolphthalein?
 - (2) Write a note on Hooch Poisoning. Describe the offences related to alcohol?
