

B.Sc. Semester - 5 (CBCS) Examination
December -2020 (NEW COURSE)
Forensic Chemistry (Core)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figures to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any three of the following questions.
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Q1 (A) Answer in short: (04)

1. Define forensic chemistry.
2. Give examples of separation techniques.
3. Mention types of identification techniques.
4. Define forensic chemist.

Q1 (B) Answer any one in brief: (03)

1. What is the scope/importance of forensic chemistry?
2. Enlist the evidences encountered in cases related to arson case.

Q1 (C) Answer any one in detail: (07)

1. Write a note on types of evidence in chemistry division and instruments used for analysis.
2. Write a note on types of cases solved by forensic chemistry division.

Q2 (A) Answer in short: (04)

1. What is meant by drug of abuse?
2. From what alkaloid is heroin obtained?
3. From which plant is cocaine obtained?
4. Which chemical in cannabis majorly affects the CNS?

Q2 (B) Answer any one in short: (03)

1. Name the countries in Golden Triangle and Golden Crescent.
2. Explain the process of making heroin from morphine.

Q2 (C) Answer any one in detail: (07)

1. Write a note on barbiturates.
2. Enlist the effects of overdose of Barbiturates and medical uses of the same.

Q3 (A) Answer in short: (04)

1. Who is the father of forensic toxicology?
2. Define toxicity.
3. Define dose response.
4. Enlist the four groups in which poisons are generally divided.

Q3 (B) Answer any one in brief: (03)

1. Enlist the ingredients of universal antidote and their useful properties.
2. Write a brief note on preservation of toxicological evidence.

Q3 (C) Answer any one in detail: (07)

1. Define poison and explain the ADME process of toxic materials in human body.
2. Define toxicology, LD₅₀, toxicity, dose response, toxin, toxic and poison.

Q4 (A) Answer in short: (04)

1. What are the modes of heat transfer?
2. What does CCI stand for?
3. What is the ideal smoke point of kerosene?
4. Who are pyromaniacs?

Q4 (B) Answer any one in brief: (03)

1. Enlist and write a line on each type of arsonists.
2. Give examples of petroleum products.

Q4 (C) Answer any one in detail: (07)

1. Explain the process of arson crime scene management.
2. Give the full forms of ATF, FBP, IBP, ASTM, RON, CCI and EC Act.

Q5 (A) Answer in short: (04)

1. From what materials is country made liquor usually produced?
2. What is used for adulteration of ghee?
3. What is the effect of consumption of methanol?
4. What is the name of the laxative powder used with phenolphthalein?

Q5 (B) Answer any one in brief: (03)

1. Explain iodoform test for ethanol.
2. Write the tests for detection of chalk powder in jaggery.

Q5 (C) Answer any one in detail: (07)

1. Write the tests for analysis of phenolphthalein.
2. Mention adulterants used in milk with their detection tests (at least three).
