

B.Sc. Semester - 4 (CBCS) Examination**April/May -2022 [OLD COURSE]****FORENSIC SCIENCE (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 (A) Answer in short: (04)

1. Mention types of atomizers.
2. What does DSC stand for?
3. What is the principle of AAS?
4. Mention two forensic applications of thermal analysis.

Q - 1 (B) Answer any one in brief: (03)

1. What are the sources of AAS? Explain any one in brief.
2. Explain the principle of NMR in detail.

Q - 1 (C) Answer any one in detail: (07)

1. Explain the NMR signals in brief.
2. Write a note on instrument of any one: TG/DTA

Q - 2 (A) Answer in short: (04)

1. Define antibodies.
2. What does RIA stand for?
3. What are the types of immunity?
4. Which antigens are absent in people with Bombay Blood Group?

Q - 2 (B) Answer any one in brief: (03)

1. Explain precipitation reaction in antigen and antibody.
2. Draw a labeled figure of the structure of antibody.

Q - 2 (C) Answer any one in detail: (07)

1. Write a detailed note on ELISA.
2. Explain types of antibodies in detail.

Q - 3 (A) Answer in short: (04)

1. What is RON calculated for?
2. For which petroleum product is filter paper test used?
3. What is fire triangle?
4. What is the color of PDS kerosene?

Q- 3 (B) Answer any one in brief: (03)

1. Explain types of fire.
2. What are the requirements for TLC of phenolphthalein?

Q - 3 (C) Answer any one in detail: (07)

1. Write full forms of the following: ATF, FBP, IBP, ASTM, RON, CCI, PDS
2. Explain arson scene investigation.

Q - 4 (A) Answer in short: (04)

1. What is the maximum possible denomination Indian Government can issue?
2. What is page substitution?
3. What are the uses of stamps and seals?
4. What are the stamps and seals made up of?

Q - 4 (B) Answer any one in brief: (03)

1. Define passport and give types based on size.
2. Explain characteristics of additions.

Q - 4 (C) Answer any one in detail: (07)

1. What are the security features of currency notes?
2. Explain deletions in detail.

Q - 5 (A) Answer in short: (04)

1. Define salami attack.
2. Give examples of any two digital payments banks.
3. What is digital evidence?
4. Mention any two services under e-banking.

Q - 5 (B) Answer any one in brief: (03)

1. Mention security features of credit and debit cards.
2. Explain types of e-banking in short.

Q - 5 (C) Answer any one in detail: (07)

1. What are the disadvantages of e-banking?
2. Give the types of cyber crimes with at least seven examples for each.
