

**B.Sc. Semester - 4 (CBCS) Examination****April/May -2022 [NEW COURSE]****Forensic Science-FS401 (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 sources of AAS.
2. Give the types of TG.
3. What does DTA stand for?
4. What is the principle of NMR?

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

1. Mention types of atomizers and explain any one.
2. Write the full form, chemical formula, delta and tesla values of TMS and draw its structure.

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

1. Explain the instrument of TG in brief.
2. Explain the NMR instrument in brief.

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

1. Define antigens.
2. What does ELISA stand for?
3. Mention types of antibodies.
4. Define innate immunity.

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

1. Draw the diagram of general structure of antibody.
2. Explain production of antibodies in brief.

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

1. Explain Radio Immuno Assay in detail.
2. Write a detailed note on types of antibodies.

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

1. What is PIONA?
2. What is the chemical formula for phenolphthalein?
3. What should be the smoke point for ideal kerosene?
4. What is CCI calculated for?

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

1. Explain filter paper test for petrol.
2. Explain modes of heat transfer.

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

1. Explain types of arsonists.
2. Write a detailed note on TLC and HPLC for Petrol.

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

1. Define interlineations.
2. Mention types of erasures?
3. What is numismatic?
4. What is Indian Currency known as?

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

1. Write a brief note on paper used for currency notes.
2. Mention and explain types of passports based on color.

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

1. Explain security features of passport.
2. Write a note on analysis of counterfeit coins.

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

1. Give any two examples of digital evidence.
2. What is the full form of BHIM?
3. Define digital forensics.
4. Name any two e-wallets.

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

1. Define Cyber Crime as per IT Act 2000 and give examples of four cyber crimes.
2. Define any three: Trojan/Worm/Virus/Zombie

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

1. Define cyber crime and enlist at least ten examples.
2. Define credit card and debit card. Mention types of cards provided by banks to the account holders.

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