

B.Sc. Semester - 4 (CBCS) Examination
March/April-2023 [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.

Q.1(A) Answer the following questions. (04)

1. NMR is powerful tool for investigating _____ structure.
2. _____ is the most important parts of the NMR instrument.
3. Which parameter is measured in TGA?
4. Define: Atomization.

Q.1(B) Answer the following question. (Any One) (03)

1. Write the reasons for taking TMS as the reference compound.
2. Explain the detector used in AAS.

Q.1(C) Answer the following question. (Any One) (07)

1. Write a brief note on Differential Scanning Calorimetry.
2. Explain the instrumentation of NMR.

Q.2(A) Answer the following questions. (04)

1. Define: Epitope.
2. Which cells play main role in production of antibody?
3. Full form of ELISA_____.
4. T-Cells are the element of _____ immunity response.

Q.2(B) Answer the following question. (Any One) (03)

1. Explain Antigen-Antibody reaction.
2. What is Agglutination-Adsorption test?

Q.2(C) Answer the following question. (Any One) (07)

1. Write a note on different classes of human Immunoglobulin.
2. Explain: ELISA

Q.3(A) Answer the following questions. (04)

1. Define: Adulteration.
2. Write the density of standard petrol at 15° C.
3. In trap related cases generally which chemicals are used?
4. What is fire tetra hydrant model?

Q.3(B) Answer the following question. (Any One) (03)

1. Explain the types of heat transfer.
2. Write the chemical test for Phenolphthalein.

Q.3(C) Answer the following question. (Any One) (07)

1. Write a note on crime scene management of arson.
2. Write a brief note on Petrol & its test method for its analysis.

Q.4(A) Answer the following questions. (04)

1. Name the father of Question Document.
2. Write the types of passports.
3. What is counterfeiting?
4. Study of Seal is known as _____.

Q.4(B) Answer the following question. (Any One) (03)

1. Write the security features of Master Card.
2. Write the security features of Indian Passport under visible light.

Q.4(C) Answer the following question. (Any One) (07)

1. Write a short note on types of alteration in documents.
2. Explain forensic examination of Coin.

Q.5(A) Answer the following questions. (04)

1. Define: Cyber Crime.
2. Full form of UPI _____.
3. What is phishing?
4. Write the examples of digital payment app.

Q.5(B) Answer the following question. (Any One) (03)

1. Write the general tips to prevent the cyber-crime.
2. Explain the term: (i.) Cracking (ii.) Salami Attack (iii.) Malware.

Q.5(C) Answer the following question. (Any One) (07)

1. Write note on difference type of digital payment system:
(i.) UPI app's (ii.) AEPS
2. Write a note on: (i.) Data Security (ii.) Mobile Security (iii.) E-mail Security.
