

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**Feb/Mar. -2021 (NEW COURSE)****Forensic Biology, Serology and Anthropology (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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- Q 1 A: Objective type question (each question have one marks) 4
1. What kind of chemical test can identify a vomit made by a person who has been poisoned?
(a) Acid Phosphate test (b) Benzidine (c) Starch-Iodine (d) Gunzberg's
 2. Microscopic examination of human semen reveals what type of cells are found.
(a) RBC (b) Sperm (c) epithelial cell (d) WBC
 3. What kind of test is done to identify whether it is human blood or animal blood?
(a) Precipitin test (b) Benzidine (c) Corona test (d) Takayama test
 4. What kind of body fluid can help solve a crime if a person is killed by a sword? -
(a) Blood & sweat (b) Semen (c) Saliva (d) Bone
- Q 1 B: Answer in brief (Any 1 out of 2)..... 3
1. What is secretor?
 2. Semen role in forensic science.
- Q 1 C : Write note on (Any 1 out of 2)..... 7
1. Morphological and histological properties of blood.
 2. Collection and storage of biological sample in crime scene.
- Q 2 A: Objective type question (each question have one marks) 4
1. Who pioneered DNA-based identity testing.
(a) Hem chandra bose (b) Azizul haque (c) Mathieu Orfila (d) Sir Alec John Jeffreys
 2. Human genome project started was
(a) 2010 (b) 2011 (c) 1990 (d) 2009
 3. Which of the following important tests is used to identify a person from a vaginal swab in a gang rape case?
(a) ABO blood group (b) Y-STR (c) Acid Phosphate test (d) Microscopic
 4. Which of the following is true?
(a) GC pairs have two hydrogen bonds.
(b) AT pairs have four hydrogen bonds.
(c) GC pairs have three hydrogen bonds.
(d) AT pairs have one hydrogen bonds.
- Q 2 B: Answer in brief (Any 1 out of 2)..... 3
1. Role of DNA fingerprinting in forensic science.
 2. Full form (i) RFLP, STR and PCR.
- Q 2 C : Write note on (Any 1 out of 2)..... 7
1. PCR technique and its role in forensic science.
 2. Explain Y-STR and its importance in paternity identification.
- Q 3 A: Objective type questions (each question have one marks) 4
1. Which enzyme is broken down into protein to amino acid.
(a) Ligases (b) Lipase (c) Protease (d) Hydrolases
 2. Which enzyme joins two molecules through covalent bond?
(a) Protease (b) Hydrolases (c) Ligases (d) Lipase
 3. Which enzyme is present in saliva
(a) Amylase (b) Lipase (c) Vitamin (d) maltase
 4. What is the wavelength of red color in visible spectrometry?
(a) 400-420nm (b) 620-780nm (c) 440-490nm (d) 100-400nm

Q 3 B: Answer in brief (Any 1 out of 2).....	3
1. Explain about UV-Visible spectrophotometric in forensic science.	
2. Immobilized enzymes.	
Q 3 C : Write note on (Any 1 out of 2).....	7
1. Explain enzyme assay technique.	
2. Explain enzyme classification.	
Q 4 A: Objective type question (each question have one marks)	4
1. Medullary index of human hair is _____.	
(a) less than 1/3 (b) more than 2/3 (c) less than 2/3 (d) more than 1/3	
2. What kind of schedule dose the lion come in _____.	
(a) schedule- I (b) schedule –II (c) schedule- III (d) schedule- IV	
3. Give the name of biological warfare agent is a height risk in human body	
(a) Agar (b) Anthrax (c) Penicillium (d) botulism	
4. Palynology is known as _____.	
(a) Study of pollen grains (b) Study of human (c) Study of Plant (d) Study of corona	
Q 4 B: Answer in brief (Any 1 out of 2).....	3
1. Blowfly life cycle diagram.	
2. Botanical (scientific) name of Opium, cannabis and tobacco.	
Q 4 C : Write note on (Any 1 out of 2).....	7
1. Explain wildlife protection act-1972.	
2. Application of botany in aid of forensic science.	
Q 5 A: Objective type question (each question have one marks)	4
1. Which bones is useful in mass disaster cases.	
(a) long bone (b) finger (c) talus bone (d) Scapula	
2. Cranium capacity in female is _____.	
(a) 10% more than male (b) 10% less than male (c) 5% more than male (d) 5% less than male	
3. Number of temporary teeth found in human is _____.	
(a) 18 (b) 20 (c) 22 (d) 24	
4. Cusp is present on _____.	
(a) Teeth (b) Hair (c) Skull (d) Bone	
Q 5 B: Answer in brief (Any 1 out of 2).....	3
1. What is forensic anthropometry explain it.	
2. Definition of anthropology and give any four long bone name.	
Q 5 C : Write note on (Any 1 out of 2).....	7
1. Explain Karl pearson formula for WET (wet) bone male and female	
2. Type and structure of teeth.	
