School of Biomedical Science
Bachelor of Science in Clinical Nutrition and Dietetics
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem IV - Q1UA403B - Forensic Serology and bloodstain pattern analysis

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1) Explain the characteristics of white blood cells that aid in their identification under a microscope. — K2 (2)

2) Define key features observed when identifying blood under a microscope? — K1 (3)

3) Explain the identification of blood under a microscope and how it contribute to forensic investigations? — K2 (4)

4) Explain the identification of blood using microscopic methods compare to other techniques, such as DNA analysis, in terms of reliability and specificity? — K2 (6)

5) Illustrate how does the phenolphthalein test compare to other methods used for blood detection in forensic science, such as luminol or hemoglobin tests? — K3 (6)

6) Illustrate how can the phenolphthalein test be applied to differentiate between human and animal blood in forensic analysis? Explain. — K3 (9)

7) Analyze the potential health risks associated with the use of benzidine in forensic laboratories and the precautions taken to mitigate them. — K4 (8)

8) Analyze the legal implications of using the benzidine test results as evidence in criminal proceedings, considering its reliability and potential for false positives or false negatives. — K4 (12)

OR

Analyze the principle behind the Teichmann test, different step significance and how this test is able to detect old blood stains? — K4 (12)