School of Medical and Allied Sciences

B.Sc Medical Lab Technology
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem IV - L1UD402T- BMLS4002 - Applied Haematology-I

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)	Define Packed Cell Volume (PCV) or Hematocrit.	K1(2)
2)	Demonstrate the preparation of reagents for coagulation studies, including M/40 Calcium chloride, brain thromboplastin, cephalin adsorbed plasma, and screening tests.	K2(4)
3)	Summarize the principles, composition, and preparation of staining reagents for Romanowsky's stains (Giemsa's stain, Leishman's stain, Wright's stain, Field's stain, JSB stain). Explain the staining procedures and their utility in Differential Leucocyte Count (DLC).	K2(6)
4)	Organize the procedures and principles for hemoglobinometry	K3(9)
5)	Organize information on validating auto verification and rules for hematology analyzer.	K3(9)
6)	Justify the importance of understanding normal and absolute values in Hematology for accurate diagnosis and monitoring of various hematological disorders.	K5(10)
7)	Categorize the various reagents utilized in coagulation studies, such as M/40 Calcium chloride, brain thromboplastin, and cephalin adsorbed plasma, according to their specific roles and applications in laboratory testing.	K4(12)
8)	Evaluate the principles, compositions, and preparation methods of Romanowsky's stains, including Giemsa's stain, Leishman's stain, Wright's stain, Field's stain, and JSB stain. Discuss their significance in differential leucocyte count (DLC).	K5(15)
9)	Evaluate the principles, compositions, and preparation methods of leishman's stain. Discuss their significance in differential leucocyte count (DLC). Mention their merits and demerits.	K5(15)
10)	Design a system for performing a Differential Leucocyte Count (DLC) effectively, considering staining techniques and observation methods.	K6(18)