

## **School of Medical and Allied Sciences**

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

Duration : 180 Minutes Max Marks : 100

## Sem I - L1UD103T - Introduction to Quality and Patient safety

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

- Define Quality Improvement Tools used in healthcare, and provide examples of how they can be applied to enhance the quality of care.
- 2) Demonstrate the application of antimicrobial stewardship in a K2(4) healthcare setting. Provide a practical scenario to show how stewardship programs can be implemented to combat antibiotic resistance effectively.
- 3) Summarize and explain the history of antibiotics, highlighting key milestones and breakthroughs. How have antibiotics transformed healthcare practices over time?
- 4) Organize the elements of a disaster preparedness plan, including resource allocation and risk reduction strategies. How can a wellorganized plan ensure effective emergency management in various scenarios?
- Organize the primary consequences of antibiotic resistance into K3(9) categories such as clinical, economic, and public health impacts. How can this organization help healthcare professionals and policymakers better understand the magnitude of the problem?
- 6) Justify the need for preparedness and risk reduction strategies in K5(10) emergency management. How can you justify investments in proactive measures to mitigate potential disaster impacts on public health and safety?
- 7) Categorize the consequences of antibiotic resistance into shortterm and long-term impacts on healthcare. What are the distinct effects of resistance in each category, and how can healthcare systems address them?
- 8) Evaluate the effectiveness of One- and Two-rescuer CPR K5(15) techniques in terms of patient survival rates and the ability to sustain adequate circulation during resuscitation efforts.
- 9) Evaluate the use of Automated External Defibrillators (AEDs) in different healthcare settings. What are the key factors to consider when evaluating the suitability and efficiency of AEDs for a particular facility?

**10)** Design a system for monitoring and controlling cross-infection in a busy hospital environment. What technology and protocols should be implemented to ensure the highest level of protection for both patients and healthcare workers?