



TEERTHANKER MAHAVEER UNIVERSITY

(Established under Govt. of U.P. Act No. 30, 2008)

Delhi Road Moradabad (U.P)

Study & Evaluation Scheme

Of

Value Added course

22/8/22

Name	Advanced technique in clinical microbiology.
Course Code	M02
Course offered by	Department of Microbiology
Duration	16 hours
Course for	MBBS/MD/MS/M.Sc Medical Microbiology/B.Sc Nursing/Paramedical courses.
Intended learning out comes	❖ Understand laboratory safety measures. ❖ Understand pathological analysis of clinical specimens. ❖ Gain knowledge about automated techniques in clinical laboratory technology.
Medium	English
Maximum credit	
Assessment /Assignment	Post course completion .
Certificate	Certificate will be provided for students with 80% attendance .
Feed back	Online feedback will be obtained at the end of the course.
Course - fee	Free of cost

SYLLABUS

Course Content: The course should be complete within 6 weeks, which includes theoretical and practical training in the different aspects of hospital infection control parameter.

ADVANCED TECHNIQUES IN CLINICAL MICROBIOLOGY

Hours: 16 Hrs.

Learning Objectives (LOS): To learn the basic and advanced techniques in clinical Laboratory unit

Unit— 1: Laboratory Safety

Organization of laboratory and safety precautions in laboratory --- Personal hygiene and care, General health care , Vaccination Schedule for technicians , Laboratory care and cautions — Do's and Dont's - lab accidents - Cuts and wounds - Fire Accidents (Chemical Gas, Flammable Chemicals, Electrical , Spirit I-armp, Gas) - Chemical burns.

Unit- 2: Sample Analysis

Sample collection, processing, preservation and transportation of various clinical samples and further Analysis of clinical specimens.

Unit - 3: Microscopic Analysis

Microscopic analysis of clinical specimens - Urine, Stool, Sputum, Pus, Blood, CSF and other body fluids

Unit - 4: Culture Methods

Culture methods - Culturing and isolation of pathogens from clinical specimens.

Culture media General Purpose media - special media - selective media - differential media -transport media

Unit 5: Advanced Techniques : Automation & Molecular techniques

ELISA , RT- PCR, Automated culture systems automated Blood culture Automated Urine culture ,Automated Antibiotic Sensitivity testing (Vitek).