

B.Sc. OT Technology

Program Outcome	Course Name	Course Outcomes
<p>After successful completion of the degree in B.Sc. O.T, the students should be able to:</p> <ul style="list-style-type: none"> ❖ Operation Theatre Technicians are allied healthcare professionals. Their tasks include assisting Doctors in Surgery, arranging surgical instruments before surgery, sterilizing instrumentation before surgery, cleaning surgical instruments after surgery, carrying out Surgeons' commands during surgery and taking care of anesthesia equipment. ❖ OT Technicians work at Operation Theatre of hospitals, Intensive Care Units as well as Emergency Departments. Their main task is to assist Doctors and Surgeons during surgery or emergency procedures. ❖ Under the setup of a hospital, Operation Theatre technicians are usually part of a team that consists of Doctors, nurses and other allied healthcare professionals. 	<p>1. Human Anatomy and Physiology</p>	<p>Understand normal anatomy of various structures & their location of organs of the body and Bones by lectures demonstrations. Establish skills to identify and describe the major structures of the human body, the structural organization and functions of each system of the human body, knowledge of human anatomy to solve questions regarding function and disease.</p>
	<p>2. General Pathology and Microbiology</p>	<p>Presentation of patients sample slides performing sample collection techniques on live patients. lab investigation of Blood, Urine, Body fluids, and biopsy sample for different pathological parameters. Microscopy of patients sample slides and microbes (employability) performing cultivation techniques and identification techniques, sample collection techniques on live patients. lab investigation of Blood, Urine, Body fluids, and biopsy sample to identify different microbes.</p>
	<p>3. Medical biochemistry</p>	<p>Understanding of fundamental biochemical principles, such as the structure/function of biomolecules, metabolic pathways, and the regulation of biological/biochemical processes, pharmaceutical, biotechnology, food, water and agricultural companies (employability). They can work in laboratories, team up with other scientists to research and develop new drugs and medical treatments.</p>
	<p>4. Introduction to O.T Technology</p>	<p>Understanding of operation theatre principles ,such as responsible for caring for all the surgical instruments and additionally their disinfection and sterilization, help the specialist amid operations and nearly take care of the medications, anesthetic gases, curtains, and sterilization necessities during surgery. lab equipments and also handling maintenance of the lab.</p>
	<p>5. Computational skills & Biostatistics</p>	<p>Study about computer fundamentals, data representation, network terminology, multimedia, problem solving through excel, word, powerpoint, email, office etc. Program permits specialization in probability, statistical theory and analysis,</p>

		biostatistics, and interdisciplinary areas of application.
	6. General English and Communication Skills	Students Can understand and, speak and write english fluently. Students can improve their grammar and upgrade their communication skills.
	7. Applied Anatomy and Physiology	Establish skills to identify and describe the major structures of the human body, the structural organization and functions of each system of the human body, knowledge of human anatomy to solve questions regarding function and also can study about the clinical aspects of organs, bones, tissues, nerves etc
	8. Clinical Pharmacology	At the end of the course the student should be able to understand the commonly use of drug, List the indications, contra indications and adverse reactions of commonly used drugs, Integrate the concept of rational drug therapy in clinical pharmacology by lecture demonstration .
	9. Clinical Pathology and Applied Microbiology	Students able to understand that how to make a slide, sample collection ,tissue processing, embedding, section cutting, staining procedures. Students also can study about the blood banking such as-set up and functioning, rare and common blood group, cross matching, preparation of grouping sera, blood storage, blood components, transportation, screening test etc. In applied microbiology student will study about the health care associated infections and antimicrobial resistance, sterilization and importance, infection control measures for ICU's, preparations of materials for autoclaving etc.
	10. Medical ethics and Research Methodology	Study about moral principles that apply values to the practice of clinical medicine and in scientific research, To apply various methods in research . To apply various methods in research and find new ways to detect nature, relation and effects of pathogen in human body and in environment.
	11. CSSD Technique and Nursing Procedure	Study about the hand washing , cleaning preparing of materials, sterilization, loading the sterilizer, waste management; nursing knowledge through the application of critical thinking, judgment and skill such as temperature ,pulse,

		BP, respiration monitor; types of injections, oxygen therapy, nebulization, care of unconscious patients, urinary catheterization. Adoption of a holistic approach to care, addressing the biological, psychological, social, and spiritual needs of patients.
	12. Medicine relevant to Operation Theater	At the end of the course the student should be able to understand the filling case sheet, about diseases, commonly use of drug, List the indications, contra indications and adverse reactions of commonly used drugs, Integrate the concept of clinical conditions and drug therapy by lecture demonstration.
	13. Basics of Surgery	Learning about basics of surgery such as head injury intracranial bleed , PIVD, Caesarian section, pediatric surgery, cataract, basics of fracture and management.
	14. O.T. Technology-Clinical	Candidate should be able to make Physical facility such as-layout of O.T, transition, peripheral support areas, operating room, special procedure rooms and principals of aspects and sterile technologies, learn about specialized surgical equipments and positioning preparing and draping the patient.
	15. O.T. Technology-Applied	Enhancing Knowledge Through lecture demonstration in clinical posting about preoperative preparation of the patient such as-diagnostic procedures, pathological examination, radiological examination, MRI, Ultrasonography, Endoscopy and also student should be able to make Anaesthesia techniques such as- types and choice of anaesthesia, indications, complications, and monitoring.
	16. O.T. Technology-Advance	Enhancing Knowledge Through lecture demonstration in clinical posting about operation theatre techniques for speciality surgery such as-urological surgery, orthopedic surgery, neurosurgery, plastic and reconstructive surgery, thoracic surgery, cardiac surgery, thyroid etc, and also learn about preparation of O.T, nursing requirements, equipments including instruments, sutures etc.