

OPERATION THEATER TECHNICIAN

PROGRAM STRUCTURE	
Institutes	EduCareer Sindh Institute (Private) Limited Al Shifa Trust Eye Hospital Sukkur
Program Name	Operation Theater Technician
Program Type	Condensed
Duration	1 Year
Eligibility	Matric (Science)
Attendance	70% Attendance is compulsory
Requirement for Award of Diploma	The candidate must secure Fifty percent (50%) in Theory and Fifty percent (50%) in Practical to pass the exams.
Re Appearance in the Exams	The candidate can re appear for two attempts in the exams in case of failure. If Candidate passes theory or practical exams respectively, he/she will not be required to re appear in the exams of theory or practical respectively.
Grading System	The candidate, qualifying for the grant of Diplomashall be placed in following grades; A1 Grade – More Than 80% Marks A Grade – More than 70% Marks B Grade – More than 60% Marks C Grade – More than 50% Marks
Examination	Annual Exams announced by the SBTE.

Operation Theater Technician –Marks Distribution				
No	Subject	Theory Marks	Clinical/ Practical Training Marks	Total Marks
1.	Operation Theater Management	100 Marks	100 Marks	200 Marks
2.	Equipment and Devices	100 Marks	100 Marks	200 Marks
3.	Sterilization and Disinfection	100 Marks	100 Marks	200 Marks
Total of 1 Year		400 Marks	400 Marks	800 Marks

Operation Theater Assistant – Training Plan					
Type of Training	Daily Training	Weekly Training	Total Weeks	Total Training	Total No of Months
Institute Training	1 Hours	5 Hours	44 Weeks	220 Hours	11 Months
Clinical Training	3 Hours	15 Hours	44 Weeks	660 Hours	
Total	4 Hours	20 Hours	44 Weeks	880 Hours	
Vacations & Other Activities				1 Month	
Total of 1 Year				12 Months	

1. Operation Theater Management – Curriculum		
Rationale	The Diploma Holder of Operation Theater has a very significant role in Management of Operation Room. He should have knowledge of various administrative procedures for smooth functioning of operation department.	
Scope	The content will prepare student in the issues related to care of OT before, during and after a surgical procedure. The focus would also be on development of correct attitudes in OT and on economizing OT resources.	
Learning Objectives	After completing this section the students will be able to: Understand the organization and functioning of Operation Theater Appropriately administer Operation Theater and manage its resources	
Workshop/ Lecture Title	Class Room Training	Practical Training
1. Introduction to operating department	2 Hours	5 Hours
2. Organization and design: the operation room suite, single and multiple theatre units	6 Hours	12 Hours
3. The surgical team: required attributes; OT etiquette and protocols	6 Hours	15 Hours
4. Duties of OT technician	6 Hours	13 Hours
5. Admission & transfer procedure	6 Hours	14 Hours
6. Essential documentation: informed consent forms	6 Hours	16 Hours
7. Care of operating room – before, during & after surgery	8 Hours	30 Hours
8. Lighting and ventilation requirements	5 Hours	16 Hours
9. Humidity and heating requirements	5 Hours	14 Hours
10. Electrical and fire safety	5 Hours	14 Hours
11. Prevention of physical, electrical, chemical injuries/hazards to patient	7 Hours	24 Hours
12. Tissue Disposal	7 Hours	16 Hours
13. Economizing theater resources	7 Hours	11 Hours
Total Teaching Hours	70 Hours	200 Hours
	270 Hours	

2. Equipments and Devices - Curriculum		
Rationale	The Diploma Holder of Operation Theater has the responsibility of handling and maintaining various equipments available in the operation theater. He must, therefore, possess knowledge and skills to manage such equipment and devices.	
Scope	The content will provide a thorough understanding of the machinery employed in OT; this will also include maintenance and minor repairs of this machinery.	
Learning Objectives	After completing this section the students will be able to: <ul style="list-style-type: none"> • Conduct a comprehensive and appropriate equipment check. • Identify and take appropriate action when confronted with equipment- related malfunctions, and maintain service records 	
Workshop/ Lecture Title	Class Room Training	Practical Training
1. Electro-medical / electrosurgical equipment used in O.T. Use and care of electronic equipment – grounding system	10 Hours	30 Hours
2. O.T. lights: uses, types, lamps etc; shadow less lighting – features, types; direct, semi direct, indirect lighting; emergency lighting	5 Hours	15 Hours
3. Monitoring equipments: cardiac monitors, pulse oxymeter	10 Hours	30 Hours
4. Defibrillators	10 Hours	30 Hours
5. Electrosurgery: structure, block diagram, types; safety precautions; bipolar diathermy machines; harmonic scalpel; LigaSure	10 Hours	30 Hours
6. Fiber-optic endoscopy: introduction, types, procedures and care of instruments	5 Hours	14 Hours
7. Operating microscopes: principle, parts, use and care	5 Hours	14 Hours
8. Gas Cylinders; medical gas pipeline systems & manifold room	5 Hours	14 Hours
9. Suction machines	5 Hours	17 Hours
10. Handling, fixing and troubleshooting of equipments	10 Hours	36 Hours
Total Teaching Hours	75 Hours	230 Hours
	305 Hours	

3. Sterilization and Disinfection – Curriculum		
Rationale	Maintaining utmost asepsis is the foundation of modern surgery. The OT Technician should be well versed with different techniques for maintaining an infection free OT environment and ensuring sterilization of instruments used during the surgical processes.	
Scope	The content will cover the concepts of infection, cross-infection and asepsis. The student will build upon the knowledge gained during the core course and will be enabled to employ different sterilization and asepsis techniques in appropriate manners.	
Learning Objectives	After completing this subsection, the students will be able to: <ul style="list-style-type: none"> • Taking precautions to prevent the spread of infection • Ensuring the cleaning of the Operation Theatre prior to operations • Cleaning, packing, sterilization, maintenance and storage of instruments and other equipment used in Operation Theatre • Manage sterile stock 	
Workshop/ Lecture Title	Class Room Training	Practical Training
1. Definition of cross infection; modes and types	5 Hours	15 Hours
2. Principles of microbial control: prevention of cross infection to the patient and surgical team	5 Hours	15 Hours
3. Some common infective conditions; gangrene and tetanus – causes and prevention	5 Hours	15 Hours
4. Definition of sterilization, disinfection, antiseptic, aseptic, carrier state	10 Hours	26 Hours
5. General principles of sterilization; types of sterilizations Sterilization by gaseous chemicals	5 Hours	15 Hours
4. Sterilization by gamma radiation & Chemical sterilization & disinfection; use of different anti- septic chemotherapeutic agents	5 Hours	14 Hours
6. Sterilization by filtration & Sterilization by dry and moist heat	5 Hours	14 Hours
7. Designing sterilization process; methods of instrument sterilization; preparation & packing	5 Hours	14 Hours
8. Autoclave for instrument, linen and perishable items; working principle, main parts and maintenance	5 Hours	14 Hours
9. Environmental disinfection: cleaning and disinfection of Operating Room	5 Hours	14 Hours
10. Detergents, types and uses	4 Hours	16 Hours
11. Scrubbing and its methods	4 Hours	16 Hours
12. Central sterile supply department (CSSD)	4 Hours	14 Hours
13. Handling of infectious hospital waste	4 Hours	14 Hours
14. Self-protection; gown, gloves, shoes, dress	4 Hours	14 Hours
Total Teaching Hours	75 Hours	230 Hours

3. Sterilization and Disinfection – Curriculum	
	305 Hours
Clinical Attachment	
<p>The student will get a rotation amongst them. General Surgery Minor OT Emergency Obstetrics & Gynecology ENT/ Ophthalmology Orthopedics Anesthesia ICU, Sub-specialties</p>	
Practical Notebook	
<p>Students will maintain a record of their attachment in the ‘Practical Note Books’ (one for each section), the last portion of which would be designed as a ‘Log Book’ which shall be a work diary and record. Special mention shall be made of the procedures, if any, conducted by the candidate. This diary shall be scrutinized and certified by the Head of the Department and Head of the Institution, and presented in the practical /viva examination.</p>	
Reference Books	
<ol style="list-style-type: none"> 1. Handbook of Operation Theatre Techniques: Publisher, Jaypee 2. Operating Room Technique - Berry and Kohn's; Publisher: Mosby Elsevier Health Science Operating Room Technique – Raymond John Brigden 3. The Operating Room Aide; Publisher: Career Pub 4. Surgical Nursing and Technique: A book for nurses, dressers, house surgeons – Charles Plumley: Childe 5. Operation Theater Guide, Usman Publications Lahore 	