

**O.T. ASSISTANT
SYLLABUS**

**DEPARTMENT OF HEALTH, [MEDICAL EDUCATION AND
INDEGENOUS MEDICINE] GOVERNMENT OF BIHAR, PATNA,**

**COURSE/CURRICULUM FOR 2 YEARS
DIPLOMA IN OPERATION THEATRE ASSISTANT COURSE**

**SCHEME OF EXAMINATION FOR DEPLOMA IN MEDICAL LABORATORY
TECHNICIAN COURSE**

First Year

| THEORY | | | | |
|------------------------------|--------------|-----------|------------|------------|
| Sl. No. | Subject | | Full Marks | Pass Marks |
| 1 | Anatomy | | 100 | 50 |
| 2 | Physiology | | 100 | 50 |
| 3 | Microbiology | | 100 | 50 |
| Total Theory Marks | | | 300 | 150 |
| PRACTICAL | | | | |
| 4 | A. | Practical | 100 | 50 |
| | B. | Viva | 40 | 20 |
| Total Practical Marks | | | 140 | 70 |

Second Year

| THEORY | | | | |
|------------------------------|-----------------|-----------|------------|------------|
| Sl. No. | Subject | | Full Marks | Pass Marks |
| 1 | General Nursing | | 100 | 50 |
| 2 | Medicine | | 100 | 50 |
| 3 | Surgery | | 100 | 50 |
| 4 | Anaesthetic | | 100 | 50 |
| Total Theory Marks | | | 400 | 200 |
| PRACTICAL | | | | |
| 5 | A. | Practical | 100 | 50 |
| | B. | Viva | 40 | 20 |
| Total Practical Marks | | | 140 | 70 |

SYLLABUS OF OPERATION THEATRE ASSISTANT COURSE

ANATOMY

1. Introduction of the subject, Terminology & Various Plains.
2. Head & Neck.
3. Thorax.
4. Abdomen &, Pelvis.
5. Upper Limb.
6. Lower Limb.
7. Urogenital System.

PHYSIOLLOGY

1. Introduction of the subject & General Considerations.
2. Gastro-intestinal Tract [GIT].
3. Cardiovascular System [CVS].
4. Respiratory System.
5. Haematology including Anaemia.
6. Nervous System [C.N.S. & P.N.S.]
7. Endocrine Glands [Thyroid, Para-Thyroid, Pituitary, Pancreas, Adrenals etc.]
8. Fenito – Urinary System.

MICROBIOLOGY

1. Introduction of the subject, Various Terminology, History & Scheme of Microbiology.
2. Distribution of Micro – Organism and their classification: - Algae, Fungi, Moulds, Protozoa, Bacteria, Virus, Rickettsia, Mycoplasma, Spores etc.
3. Bacteriology: - Characteristics of bacteria and their Classification, Study of common pathogens, Control of bacteria.
4. Infection: - Route & Mode of transfer of Microbes from and person/patient/linen/specimen to another person. Control of infection and antimicrobials.
5. Immunity & its Classification, Immunity & resistance of persons and Microbes.
6. Principles of collection, handling, preservation and transport of various sterile, infected, malignant specimens e.g. blood, pus, urine, C.S.F., stool, sputum, any normal/abnormal tissue, organ, stone for pathological examination of culture.
7. Sterilization, Disinfection, Antisepsis, Asepsis, Fumigation, common Disinfectants & Antiseptics: their Classification, Composition, uses and harms.
8. Short term/ long term hazards of working inside the Operation Theatre complex and their prophylaxis e.g. vaccination against Hepatitis B etc.

BIOCHEMESTRY

1. Basic Biochemistry of Carbohydrate, Protein fat vitamins.
2. Antioxidants and trace elements.

GENERAL NURSING

1. Cleaning, dusting, bed making and operation table setting in O.T. Dress.
2. Preoperative case and transfer conscious, unconscious bed – ridden patients (both children & adult) to operation table.
3. Ryle's tube insertion and urinary catheterization.
4. Pulling out of the dress ~~of the dress~~ of the patient (male, female, child) to expose the site of operation before/after general as well as regional Anaesthesia (Conscious patients).
5. Making various postures of the patient for a particular operation and care of head, eyes, nose, pinna, breast & genitalia during operation.
6. Opening of sterile wrapped packing, care of sterilized instruments and trolley setting.
7. Hand washing and wearing of sterilized gown and gloves.
8. Pre – operative skin scrubbing of operable sites and patient draping.
9. Care of patient during operation specially preventive steps against decubitus ulcer cauterium, electrocution, free fall of arms/legs etc.
10. Moral & Ethical duties of O.T. Technician toward patients, fellow then, doctors.
11. Post – operative dressing and bandaging wounds and care of the drains.
12. Transfer of the operated patient with due care and cover from the operation table.
13. Vital signs specially respiration, pulse, blood pressure, cyanosis, shock, hemorrhage etc.
14. Post – anaesthesia/post – operative nursing care including care for vomiting, patent air – way, post operative oxygenation etc.
15. Legal responsibilities of the O.T. Technician for patient care specially in the light of Consumer Protection Act.

MEDICINE

1. Diabetes mellitus.
2. Typhoid Fever.
3. Hepatitis – B.
4. HIV/AIDS.
5. Renal failure.
6. Cardiovascular and Neurological diseases.
7. Importance of having knowledge of various medical diseases for O.T. Technicians.
8. History taking in brief, physical examination (pulse, blood pressure, pallor, cyanosis, skin infection, oedema etc.)
9. Hypertension, Valvular heart diseases, heart Failure.
10. Pulmonary Tuberculosis, other of Tuberculosis specially that of Intestine and Bone.
11. Chronic Obstructive Pulmonary Diseases (C.O.P.D.).

SURGERY

1. Various incisions and operations for Neurological diseases and spin region.
2. E.N.T. surgery.
3. Thyroid and related surgery of the neck.
4. Various incisions and operations of the Thorax.
5. G.I.T. surgery: Both Emergency & Elective.

6. Hepatobiliary surgery.
7. Urogenital surgery including Obstetrical and Gynaecological surgery.
8. Limb surgery.
9. Pediatric & Plastic – cum- Reconstructive surgery.
10. Orthopaedic surgery including casts & slabs.
11. Post – operative dressing and bandaging specially of scalp, nose, lips, neck, thorax, scrotum, penis, finger/toes etc.

ANAESTHESIA & ADMINISTRATION INCLUDING OPERATION THEATRE ROOM MANAGEMENT

1. Introduction to the subject including various techniques: General outline.
2. Various types of fluid including blood used during perianaesthetic Period.
3. Pre – anaesthetic medication.
4. Anaesthetic gases and oxygen therapy.
5. Agents used as inhalation anaesthetic.
6. Intravenous anaesthetic agents and adjuvant.
7. Management of patent air way.
8. Muscle relaxants and their antidotes.
9. Local anaesthetic drugs and local anaesthesia.
10. Brachial plexus including common peripheral nerve blocks.
11. Spinal, saddle, epidural & caudal block.
12. Common anaesthetic accidents: Prevention & Cure.
13. Role of O.T. technicians in the management of cardiac arrest in the O.T. complex.
14. Artificial ventilation and short concept of I.C.U.
15. Maintenance (Cleaning, Sterilization etc.) of O.T. and Anaesthetic equipments.

Diploma in O.T. Assistant course will be of two years duration. First years student will be promoted to second year course only after passing first year course, for which internal department Examination will be held at the end of first year.

A student should be given rotational responsibility of training/working in the operation theatre complex in three shifts i.e. morning, evening & night duty of eight hours duration out of 24 hours including that in the emergency operation theatres of all the specialties separately.

Every student should be posted in/with each of the following:-

1. Pre – operative room.
2. O.T. Assistant Technician.
3. Anesthesiologist.
4. Surgeons.
5. Sterilization.
6. Post – operative/recovery room.
7. I.C.U.
8. Gloves, linen, instruments washing & packing room.
9. Endoscopy room.

10. Handling, preserving & transporting samples / specimens from O.T. to Biochemistry, Microbiology, Pathology or Blood bank etc.
11. O.T. cleaning and fumigation incharge.
12. Co – ordination with water, electric, gas, drugs supply units / stores, repair units / personnel and with higher authorities.
13. Maintains: Log book of his/her own work, stock register, attendance register, movement register, circular file, indenting procedure.
14. Help in demonstration classes, Examination, auditing and in the maintaining law & order problems arising in the O.T. complex with strict maintenance of O.T. discipline.
15. Oh University / Government holidays, a student of Diploma in O.T. Assistant course is supposed to be on duty if O.T. is functioning, without attending lecture / demonstration class.

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