



EKLAVYA
UNIVERSITY

ज्ञानं प्राप्तये सक्षयं संदीप्तम्

Estd. by Medica Pradesh Nil (Vishwanandiyaya) (Shilasa Exam Sanchalana) Adayatna, 2020

SCHOOL OF NURSING

Scheme of Examination (Post Basic Diploma in Operation Room) First Year

[For batch admitted in Academic Session 2020-2021]

Subject wise distribution of marks

Course code	Subject	Duration Hr.	Internal assessment marks	External examination marks	Total marks
	A. Theory				
DPBOR20Y101	Paper-I-clinical nursing-I	3	50	150	200
DPBOR20Y102	Paper-II-clinical nursing-II	3	50	150	200
DPBOR20Y103	Paper-III- supervision and management, clinical teaching, elementary research and statistics.	3	50	150	200
	B. Practical				
	Clinical nursing (teaching & supervision to be integrated)		100	100	200
Grand Total			250	550	800

Dean

School of Nursing
Paramedical Science

**Scheme of Examination (Post Basic Diploma in Ortho and Rehabilitation)
First Year**

[For batch admitted in Academic Session 2020-2021]

Subject wise distribution of marks

course code	Subject	Duration Hours	Assessment			Total
			Internal	External	Total	
	Theory					
DPORR20Y101	Foundations to Orthopedic & Rehabilitation Specialty nursing practice	3	25	75	100	100
DPORR20Y102	Orthopaedic and Rehabilitation Specialty Nursing- I	3	25	75	100	100
DPORR20Y103	Orthopaedic and Rehabilitation Specialty Nursing -II	3	25	75	100	100
DPOR20Y104	Practicum-Orthopedic and Rehabilitation Specialty Nursing	6	75 (25+50)	150 (150+100)	225	225
	OSCE including Viva Observed Practical/clinical (Direct observation of actual performance at real settings) including viva- Mini clinical evaluation exercise for 3-4 hours (Nursing process application and direct observation of procedural competencies)	6	(OSCE-25 Observed Practical-50)	(OSCE-50 & Observed Practical-100)	225	225
Grand Total						525


Department Of Nursing Science

SYLLABUS

FOR

Post Basic Diploma In Operation Room Nursing

1 Year Course


19/7/2024
Dean
School of Nursing
Paramedical Science

SCHEME OF EXAMINATION
Post Basic Diploma In Operation Room Nursing

Subject	Course code	Duration hours	Internal assessment marks	External examination marks	Total marks
A. Theory					
Paper-I-clinical nursing-I	DPBOR20Y101	3	50	150	200
Paper-II-clinical nursing-II	DPBOR20Y102	3	50	150	200
Paper-III- supervision and management, clinical teaching, elementary research and statistics.	DPBOR20Y103	3	50	150	200
B. Practical					
Clinical nursing (teaching & supervision to be integrated)	DPBOR20Y104		100	100	200
Grand Total		9	250	550	800



SCHOOL OF NURSING AND PARAMEDICAL SCIENCE

DETAILED CURRICULUM

School of Nursing & Paramedical Sciences

Department of Nursing

SYLLABUS

Operation Room Nursing - I

GENERAL OBJECTIVE

At the end of the course the student will be able to - Develop an understanding of philosophy, principles, methods and issues, management, education and research in operation room nursing. Furthermore, this course will enable them to develop skills and attitude in providing competent operation room nursing care.

PROGRAMME OBJECTIVES:

At the end of the course the student will be able to-

1. Describe the concepts and principles of operation room nursing.
2. Communicate effectively with patients having undergoing surgery and their family members.
3. Perform advance life support skills.
4. Apply nursing process in caring of patients undergoing surgery.
5. Participate effectively as a member of the health team.
6. Organize and demonstrate skills in management of operation room.
7. Make a plan for organization of operation room.
8. Assist during surgical procedures and coordinate with the members of Operationroom team.
9. Conduct research operation room nursing.
10. Teach and supervise nurses and allied health workers.

OPERATION ROOM NURSING –I

Theory: 155 hours

Course code	OPERATION ROOM NURSE –I	
DPB0R20Y101		
Pre-requisite	Nil	Syllabus version
Course Objectives:		
<ol style="list-style-type: none">1. Apply the knowledge of structure and function of various system of human body relevant to surgical procedures.2. Describe the pharmacodynamics of common drugs and anesthetic agents used in Operation room.3. Apply principles of microbiology in infection control practices in Operation room.4. Describes the principles, types and methods of anesthesia and nurses responsibilities.5. Apply principles of biophysics and chemistry in use of various gadgets.6. Discuss ethical and legal responsibilities of Operation room nurse.		
Course Outcome:		
<ol style="list-style-type: none">1. Describe the concept and principles of operation room nurse.2. Communicate effectively with patient undergoing surgery and there family members.3. Perform advance life support skills.4. Apply nursing process in caring of patients undergoing surgery.5. Participate effectively as a member of the health team.6. Organize and demonstrate skills in management of operation room.7. Make a plan for organization of operation room.8. Assist during surgical procedures and coordinate with the member of operation room team.9. Conduct research in operation room nursing.10. Teach and supervise nurses and allied health workers.		

Student Learning Outcomes (SLO):

1. Children have a strong sense of identity.
2. Children are connected with and contribute to their world.
3. Children have a strong sense of wellbeing.
4. Children are confident and involved learners.
5. Children are effective communicators.

Unit	Hrs	Content
I	20	ANATOMY AND PHYSIOLOGY: Review, Body Musculo- skeletal system, fluids & electrolyte balance , Respiratory system , Cardiovascular system , Central Nervous system , Special senses Ear & Hearing, Eye & Vision Elementary system , Metabolism & Nutrition – Vitamins – Minerals Blood , Urinary System , Skin.
II	45	SURGICAL ANATOMY: GENERAL SURGERY: Abdominal Surgery- Anatomy of abdominal wall incisions, hernia alimentary canal, gall bladder, bile duct, liver, spleen, pancreas, surgery of head and neck mouth and breast, thyroid gland, ORTHOPEDICS: Bones and joints, UROLOGY: Kidney, ureters, Bladder, prostate, testes, EAR, NOSE AND THROAT: Surgery of pharynx larynx nose and ear, GYNAEC AND OBST.: Pelvic viscera & other supports, Uterus, fallopian tubes, ovaries, cervix, vagina CARDIOTHORACIC SURGERY: Chest wall, heart, blood vessels, trachea, bronchi, lungs NEURO SURGERY: Brain, spinal cord, peripheral & sympathetic nerves PAEDIATRIC SURGERY: Body systems OPHTHALMOLOGY: Eyes
III	10	BIO-PHYSICS CHEMISTRY Review Units of measurement, Gas laws, Heat, Electrostatics, Laser rays used in operation room, Chemicals used in Operation Room, Occupational hazards in Operation Room, Its prevention, control and management in emergency Radioactive materials, operation tables mechanics positioning Principles underlying use of various gadgets.

IV	10	COMMUNICATION SKILLS & IPR: Process and methods, Establishing and maintaining good IPR, & communication with family staff and colleagues Breaking of bad news , multidisciplinary team and role of nurses Guidance & Counseling.
V	10	ANAESTHESIA: Introduction, Principles, Types, Stages Method of administration, Anesthetic machines and equipments, Nurses role and responsibilities, Drugs used in anesthesia , Anesthetic agents used: types Methods of administration, Actions and effects, side effects, Antidotes Nurses responsibilities.
VI	10	LEGAL RESPONSIBILITIE: Identification of patients , Identification of right part to be operated, Valid consent – for patient - use of body tissue and organ transplant , Care of dentures , Counting of sponges, instruments etc ,Prevention of unusual incidences(fall of patient, burn, fire hazards) ,Records in operation theatre – Its medico –legal importance
VII	35	PHARMACOLOGY: Review Pharmacokinetics, Drug reactions and toxicity, Principles of drug administration , role of nurses , Antiseptics and disinfectants , Hypnotics and Barbiturates , Tranquillizers and sedatives , Narcoleptic drugs , Phenothiazines , Butobarbitone , Anticonvulsants Analgesics , Intraoperative analgesia , Nonsteroidal anti-inflammatory drugs ,Narcotic antagonists , Intravenous induction agents , Isopynatime Bronchodilators , Respiratory stimulants ,Antidysarrythmics Vasopressin, Vasodilators, Antihypertensive drugs, Ganglion blockers, Plasma Expanders , Muscle relaxant ,Beta blockers ,Uterine stimulators, Uterine inhibitors ,Insulin. Histamine and H1 and H2 receptor antagonists , Anticoagulants , Anticholinergics , Drugs acting on eye, ENT etc.
VIII	10	MICROBIOLOGY: Inflammation and Infection ,Principles of asepsis ,Classification of Microorganisms ,Principles and methods of Sterilization and Infection , Diagnostic tests in microbiology and related nurses responsibility ,Culture and Growth ,Standard safety measures and Biomedical waste management.

IX	5	CARE OF DYING PATIENTS: Spiritual support to the dying , Grief and grieving process , Bereavement support , Organ donation and counseling ,Care of dead.
# Mode: Lecture cum discussion, Demonstration, Seminar / Presentations, Workshop.		
<p>Text Book</p> <p>Microbiology</p> <ul style="list-style-type: none"> ✓ Bernard D. Davis, Rentap Dalbecco Herman N. Eisen & Harold S. Ginsberg, "Microbiology", 3rd ed, A Harper International edition. ✓ Hug L. L Moffet, (1981) "Clinical microbiology", 2nd ed., J. B. Lippincott Co. <p>Anatomy and Physiology</p> <ul style="list-style-type: none"> ✓ Waugh, Anne (2003), "Ross & Wilson's Anatomy & Physiology in health & illness" 10th ed., Churchill Livingstone. ✓ Tortora, (2003), "Principles of Anatomy & Physiology," 10th ed., Wiley inter. 3. Chaurasia, B.D. (2004), "Human Anatomy", 4th ed., CBS publishers. <p>Pharmacology</p> <ul style="list-style-type: none"> ✓ Satoskar, Bhandarkar, Ainapure: Pharmacology and pharmacotherapeutics, 18 Edition Popular Prakashan Mumbai.2007. ✓ K D Tripathi: Essentials of medical pharmacology, 4 Edition, Jaypee Brothers, Bangalore.2009. . Lippincott Williams and Wilkins (2008), Nurses Drug Guide. <p>Communication, Nursing Process, Care of Dying patient</p> <ul style="list-style-type: none"> ✓ The Lippincott Manuel of Nursing Practice (2005), 7th edition, Nettina, Sandra, Lippincott Williams and Wilkins, Philadelphia. ✓ Potter A.P., Perry A.G,(2005), Fundamentals of Nursing, 6th edition; C.V.Mosby company. Kozier B et al, (2004), Fundamentals of Nursing concepts, process and practice, Pearson education , Inc 2nd Indian Print. 		

OPERATION ROOM NURSING –II

Theory: 155 hours

Course code	OPERATION ROOM NURSING –II	
DPBOR20Y102		
Pre-requisite	Nil	Syllabus version
Course Objectives:		
<ol style="list-style-type: none"> 1. Demonstrate the skill in assisting different operative procedures. 2. Apply nursing process in preoperative, operative and post-operative stages. 3. Demonstrate skill in organization of tasks, time, motion, equipment, supplies, materials and resources 4. Demonstrate knowledge and principles of sterilization and disinfection 5. Participate with other surgical team member 		
Course Outcome:		
<ol style="list-style-type: none"> 1. This course is designed to prepare OR nurses with specialized knowledge and skills in assisting for various surgical procedures and practicing infection control measures. 2. This course is designed to help the students to review their knowledge of structure and function of human body, pharmacodynamics of drugs acting on various systems of body and their relation with promotion of health and application of principles of microbiology as applied to infection control practices in the operation room. 		
Student Learning Outcomes (SLO):		
<ol style="list-style-type: none"> 1. Integrate evidence, clinical judgment, inter-professional perspectives, and patient preferences in planning, implementing, and evaluating outcomes of care. 2. Demonstrate skills in using patient care technologies, information systems, and communication devices that support safe, effective nursing practice. 3. It states both the substance of learning and how its attainment is to be demonstrated. 		

Unit	Hours	Content
I	10	<p>OPERATION ROOM TABLE AND ORGANIZATION: Equipments and amenities, Different types of tables and accessories, Organization of table and equipments, Nurses role and responsibilities.</p>
II	15	<p>INFECTION CONTROL: Environment :- Cleaning, disinfecting O.R, Area, equipments, air conditioning system , Aseptic Techniques – hand washing, use of mask, gowning, gloving, head cover , Sterilization – preparing and packing of instruments, dressing materials, linen, suture materials, drainage tubes, and catheters, care of electro medical equipments, handling and storing of sterilized material, equipments, instruments , Collection of various specimens for laboratory tests , Bio medical waste management: - Universal standards and its application in operation room Nursing , Nurses role and responsibility.</p>
III	70	<p>PREPARATION AND ASSISTING FOR VARIOUS SURGICAL PROCEDURE; AS CIRCULATING AND SCRUB NURSE: Setting up of operation room and table , Setting up of trays and trolleys for various surgical procedures , Part preparation for surgical procedures Positioning and draping according to the surgical procedures , Incisions for various surgical procedures , Minor surgeries – surgical instruments and suturing materials , Major surgeries – surgical instruments , General, gynaecology , Obstetrics , Orthopedics , Plastic and Reconstructive Surgeries , Ophthalmic , Head and Neck , ENT , Cardio-Thoracic , Neuro, Paediatric , Dental , Laser and robotic surgery , Records and reports , Nurses role and responsibilities.</p>
IV	5	<p>OPERATING MICROSCOPES: Types, Accessories, Attachments, Uses, Disinfection, Maintenance and storage, Nurses role and responsibilities.</p>

VI	10	ENDOSCOPIES: Definition, Types, Uses, Maintenance and Storage, Preparation of patients, Nurses role and responsibilities.
VII	5	BANDAGES, SPLINTS, CASTS AND TRACTION: Types, Uses, Preparation, Maintenance and storage.
VIII	25	RECOVERY ROOM/ SURGICAL INTENSIVE CARE UNIT Set up and organization.
IX	10	FLUID THERAPY Fluid and electrolytes , Blood and blood components , Plasma and plasma , Allergies and reactions , High risk patients , Management of anaphylactic shock , Records and reports Nurses role and responsibilities.
		# Mode: Lecture cum discussion, Demonstration, Seminar / Presentations, Workshop.
Text book:		
<ul style="list-style-type: none"> ✓ Hakim, Mumin; Walia, Hina; Dellinger, Heather L.; Balaban, Onur; Saadat, Haleh; Kirschner, Richard E.; Tobias, Joseph D.; Raman, Vidya T. (2018-04-06). "The Effect of Operating Room Temperature on the Performance of Clinical and Cognitive Tasks" ✓ Rosenberger, Laura H.; Politano, Amani D.; Sawyer, Robert G. (June 2011). "The Surgical Care Improvement Project and Prevention of Post-Operative Infection, Including Surgical Site Infection". ✓ Porter, R (2001). The Cambridge illustrated history of medicine. Cambridge University Press. 		

Supervision and Management, Clinical Teaching, Elementary Research and Statics

Section - A Supervision & Management	-30 Hrs
Section - B Clinical Teaching	-30 Hrs
Section - C Elementary research & Statistics	-30 Hrs
Total	-90Hrs

Course code	Supervision and Management, Clinical Teaching, Elementary Research and Statics	
Pre-requisite	Nil	Syllabus version
Course Objectives:		
<ol style="list-style-type: none"> 1. Describe professional trends. 2. Describe role of nurse in management and supervision of nursing personnel in operation room. 3. Teach nurse and allied health workers in operation room. 4. Describe research process and perform basic statistical tests. 5. Plan and conduct research in operation room nursing. 		
Course Outcome:		
<ol style="list-style-type: none"> 1. This course is designed to prepare operation room nurses with specialized knowledge and skills in assisting for various surgical procedures and practicing infection control measures. 2. This course is designed to help the students to review their knowledge of structure and function of human body, pharmacodynamics of drugs acting on various systems of body and their relation with promotion of health and application of principles of microbiology as applied to infection control practices in the operation room. 		
Student Learning Outcomes (SLO):		
<ol style="list-style-type: none"> 1. Integrate evidence, clinical judgment, inter-professional perspectives, and patient preferences in planning, implementing, and evaluating outcomes of care. 2. Demonstrate skills in using patient care technologies, information systems, and communication devices that support safe, effective nursing practice. 3. It states both the substance of learning and how its attainment is to be demonstrated. 		

Unit	Hours	Content
I	20	<p>SUPERVISION AND MANAGEMENT Management, Definition & Principles, Elements of management of Operation room – planning, organizing, staffing, reporting, recording and budgeting, Operation room management – time, material and personnel. , Physical Layout of Operation room: Design, size, shape, color, ventilation with air conditioning, lighting, ultra clean air system, traffic flow pattern, zones of risk, sign of various facilities. Clinical supervision, Introduction, definition and objectives of supervision, Principles and functions of supervision, Qualities of supervisors, Responsibilities of clinical supervisors, Practical standards of Operation room nurse. - Policies and procedures - Establishing standing orders and protocols, Orientation programmer for new recruits. Quality Assurance programmer in Operation room, Nursing Audit , ISO, NABH , JCI accreditation Performance appraisal, Principles of performance evaluation, Tools of performance appraisal – rating scales, checklist, peer reviews, self appraisal Staff development, Introduction and purposes , In-service education ,Continuing education.</p>
II	5	<p>PROFESSIONAL TRENDS Introduction, Code of ethics, code of professional conduct and, practice standards of Nursing in India. Ethical issues, Expanding role of the nurse: Specialist nurse, nurse practitioner etc. Professional organizations.</p>
III	5	<p>MEDICO – LEGAL ASPECTS Legislations and regulations related to operation room, Consumer Protection Act (CPA), Negligence and Malpractice, Legal responsibilities of nurses, Bill of Right of a patient , Case studies of Judgment with regard to negligence of services in the Hospital Records and Reports, Role of the nurse in Legal issues, Professional practice issues in the operation room, Bioethical issues in operation room, ethics, ethical principles, withholding and withdrawing treatment, Ethical decision making in a operation room, Code of professional conduct and practice standards.</p>

IV	30	TEACHING LEARNING PROCESS Introduction and concepts, Principles of teaching and learning, Formulation of learning objective, Lesson planning, Teaching methods, Lecture , Demonstration, simulation , Discussion , Clinical teaching methods , Microteaching , Self learning Evaluation- Assessment of students, Purposes, Types , Steps , Tools for assessing knowledge, skill and attitude Use of media in teaching learning process.
V	30	RESEARCH Research, and research process, Types of Research, Research problem /question, Review of Literature, Research approaches and designs, Sampling, Data collection: tools and techniques, Analysis and interpretation of data, Communication and utilization of Research, Research priorities in operation room. STATISTICS Sources and presentation of data, Qualitative and quantitative , Tabulation, frequency distribution, percentiles , Graphical presentation Measures of central tendency: Mean, Median, Mode Measures of Variance Normal probability and tests of significance, Co-efficient of correlation, Statistical packages and its application, Preparing a research proposal, Application of Computers.
# Mode: Lecture cum discussion, Demonstration, Seminar / Presentations, Workshop.		
<p>Text book:</p> <p>Supervision and management</p> <ul style="list-style-type: none"> ✓ TNAI. Nursing Administration and Management, Academic Press: New Delhi, ✓ Shakharkar, B M. Principles of Hospital Administration and Planning, Jaypee Brothers: Bangalore, ✓ Basavanthappa, B T. Nursing Administration, J P Brothers Medical Publishers: New Delhi <p>Clinical Teaching</p> <ul style="list-style-type: none"> ✓ Bhatia, Kamala & Bhatia B.D.: The Principles and Methods of Teaching: Delhi, Doaba House. ✓ Neeraja, Nursing Education, New Delhi, Jaypee Brother. ✓ Safaya, Raghunath & Shaida, B.D. Educational Theory & Practice, Delhi, Dhanpat Row & Sons. <p>Elementary research and statistics</p> <ul style="list-style-type: none"> ✓ Polit, D.F. & Beck CT, Nursing Research, Principles and Methods, Lippincott Williams & Wilkins, Philadelphia. ✓ Polit Dennis and Hunglar B P, Nursing research principles and methods, Lippincott, 		

Philadelphia.

✓ Laura A. Talbot, Principles and practice of nursing research, Mosby St. Louis

ESSENTIAL CLINICAL / PRACTICAL ACTIVITY

Patient care assignment.

Writing of nursing care plan for assigned post operative patients.

Work as scrub nurse.

Work as circulatory nurse.

Writing case study.

Case presentation.

Writing observation report.

Planned health teaching.

Project.

Drug study.

Prepare clinical rotation plan.

Prepare clinical teaching plan for students.

Prepare clinical evaluation of students/staff.

Operation room management plan-designing.

Supervision techniques- writing unit report, performance appraisal, guidance, staff assignment, material management.

Maintenance of record and reports.

ESSENTIAL CRITICAL CARE NURSING SKILLS

1- Procedure Observed: Surgical Intervention In All The Minor And Major Ots.

2- Procedure Assisted: Monitoring Intra Cranial Pressure (ICP), Advanced Life Support System, Arterial Blood Gas, Eco Cardio Gram (ECH), Arterial Catheterization, Chest Tube Insertation, Endotracheal Intubation, Ventilation, Central Line, Arterial Line, Cardiac Pacing, Use Of Defibrillator, Cardiopulmonary Resuscitation, Endoscopy, Dialysis-Hemodialysis And Peritoneal Dialysis, Intra Venous Pyelography (Ivp), Eeg, Bronchoscopy.

3- Procedure Performed: Work As A Scrub Nurse, Work As A Circulatory Nurse, Setting Up Of Trays And Trolleys Of All Surgical Procedure, Skin Preparation, Draping And Positioning, Transferring Of The Patient, Use Of Operation Room Care Plan, Specific Teaching Related To

Patients Surgery, Adequate Instrumentation, Use Special Supplies And /Or Equip, Dressing Of All Wounds, Sterilization And Asepsis, Microbiology And Environment, Preparation Of Supplies And Instruments, Working Knowledge Of Disposable Packs, Disposable Gowns, Proper Handling Of Paper Wrappers, Neurological Assessment; Glasgow Coma Scale, Pulse Oxymetry, Arterial Bp Monitoring, Venous Access, Abg Collection Monitoring, Oxygen Administration, Suctioning, Respiratory Therapy, Tracheotomy Toilet, Airway Management, Care Of Intercostals Drainage, Nebulization, Chest Physiotherapy, Monitoring Of Critical Ill Patients- Clinical & With Monitors, CRT (Capillary Refill Time), Ecg, Maintenance Of Intake And Output Charts, Wound Dressing And Prevention Of Contractures, Rehabilitation.

**THIS SYLLABUS IS
APPROVED BY BOARD OF STUDIES OF
EKLAVYA UNIVERSITY, DAMOH (M.P)**