

**Maharashtra University of Health Sciences,  
Nahsik**

# **SYLLABUS**

**"POST BASIC CERTIFICATE IN OPERATION  
ROOM NURSING"**

# **POST BASIC CERTIFICATE IN OPERATION ROOM NURSING**

## **INTRODUCTION**

1 College of Nursing, Armed Forces Medical College, is the only one of its kind in the Armed Forces and the oldest college in Maharashtra state established in the year 1964 and was accredited by NAAC and awarded A grade this year. The College conducts B.Sc. Nursing, Post Basic B.Sc. Nursing course & M.Sc Nursing programme under the Maharashtra University of Health Sciences, Nashik. Short term courses such as Orthopaedic Nursing course of 11 months and Operation Theatre Nursing course of 2 years duration under the aegis of Director General Armed Forces Medical Services are also being conducted at this College. It is now proposed to affiliate the Operation Room Nursing course under Maharashtra University of Health Sciences Nashik.

## **PROPOSAL**

2. It is proposed to affiliate the existing Operation Theatre course of one year duration which is presently affiliated to the DGAFMS to the Indian Nursing Council and Maharashtra University of Health Sciences Nashik as a Certificate programme.

## **JUSTIFICATION**

3. The Operation Room Nursing course of two years duration is being conducted in the College of Nursing since 1975 for nursing officers and is governed by the DGAFMS. The nursing officers are posted as OT matrons to service hospitals on completion of the course. They are responsible for the management of the Operation Room, maintenance of equipment and supplies in addition to assisting in the major surgeries. They are required to perform call duties and follow up post operative patient in the Intensive Care Unit

There is a gross deficiency in the Operation Room specialized nursing manpower in the Military Nursing Services as the nursing officers do not volunteer to undergo the course due to factors such as lack of incentive and long working hours with no leave reserve. Affiliation of the course to a recognized statutory body such as INC and provision of Diploma from MUHS Nashik will enhance the worthiness of the course and give it better recognition and make it more attractive for Nursing Officers. The prescribed syllabus by Indian Nursing Council has been implemented in toto..

## **PHILOSOPHY**

4. College of Nursing believes in preparing the specialized cadre of Operation Room Nurses with advanced knowledge, skills and attitudes in providing comprehensive care to patients undergoing surgery. Advances in surgical technology necessitate additional training to prepare them for effective participation as a health team member in operation room

## **AIM**

5. Post basic certificate in operation room nursing is designed to prepare specially Trained Operation Room Nurses who will be able to render competent quality care, manage and supervise care of patient in Operation Room as well as work as effective member of surgical team in the Armed Forces Operation theatre.

## **COLLEGE MANAGEMENT COMMITTEE**

6. The College Management Committee comprises of the following:-

- (a) **President:** Lt Gen D P Vats, SM, VSM  
Director & Commandant, AFMC, Pune
- (b) **Member:** Maj Gen G Ravindranath, VSM  
Dean & Dy.Commandant, AFMC, Pune
- (c) **Secretary:** Col Elizabeth John  
Principal College of Nursing
- (d) **Three elected Members of Teaching Staff:** Lt Col A J Antony  
Lt Col Mala Singh  
Lt Col Punita A Sharma  
Professors, College of Nursing
- (e) **Three Experts Nominated by President :** Brig AK Chaudhury - Brig I/C Administration, AFMC, Pune  
Lt Col MR Arun Iyengar -Administrative Officer, AFMC, Pune  
Maj Mahipal - AQM, AFMC, Pune
- (f) **Non Teaching Clerical Staff:** NK SS Choudhary  
UDC ,CON ,AFMC, Pune

## **STAFFING**

- 7 (a) Full time teaching faculty in the ratio of 1:5(as per INC)  
Minimum number of teaching faculty should be two

### **Qualification:-**

MSc Nursing with Medical Surgical Nursing Specialty **or** Post basic diploma in Operation room Nursing with Basic B.Sc (N)/P.B.B.Sc (N) or GNM with additional qualification of OT course of 2 years

**Experience:** Minimum 3 years.

- (b) Guest faculty – as per curriculum requirement.

## **ADMISSION TERMS AND CONDITIONS:-**

8. Candidates shall be admitted for the Post Certificate Diploma in Operation Room Nursing, if she fulfills the following requirements:-

- (a) The candidate should be a Registered Nurse and Registered Midwife.
- (b) The minimum education requirement is a pass in GNM/ B.Sc Nursing.
- (c) The candidate should have undergone GNM / B.Sc. Nursing/ B.Sc. (H) Nursing/ Post Basic B.Sc. Nursing in an institution, which is recognized by Indian Nursing Council.

- (d) Minimum three years of experience after GNM /Basic B. Sc. Nursing/PB B.Sc. Nursing.
- (e) The candidate shall be medically fit.
- (f) The Age limit of the candidate should not exceed 35 years.
- (g) They should serve for a minimum period of 8 years after completing the course.

### **ENTRANCE/SELECTION TEST**

9. Selection of the candidates should be based on the merit of the qualifying examination in GNM/B.Sc Nursing and also on the basis of the confidential reports received.

### **NUMBER OF SEATS**

10. Number of seats available for admission to the Post Basic Certificate in Operation Room Nursing course shall be eight .

### **ELIGIBILITY**

11. A student who takes admission for the first time to the College of Nursing, AFMC, under MUHS University shall have to fill in the eligibility criteria form for the admission along with the application fee to get her name enrolled with the University. All admissions are provisional till the University approves the eligibility. The following certificates in original along with the Xerox copies should be submitted with the eligibility form:-

- (a) GNM Certificate and Mark sheet / B.Sc. Nursing Examination Degree and Mark sheet.
- (b) Migration Certificate from the previous University.
- (c) Nationality Certificate/ passport/Domicile Certificate.
- (d) H.S.C. Mark sheet.
- (e) Selection letter
- (f) Physical fitness Certificate
- (g) Caste Certificate if applicable
- (h) Caste validity certificate if applicable
- (j) Non-Creamy layer certificate if applicable
- (k) School / College leaving/Transfer certificate
- (l) Self educational Gap Certificate (Affidavit from student)
- (m) Birth Certificate
- (n) State Registration SRN, SRM Certificate
- (o) TNAI Life Membership Card/Certificate
- (p) Experience certificate
- (q) Character certificate

### **MEDIUM OF INSTRUCTION**

12. English shall be the medium of instruction for all the subject of study and for examination of the Post Certificate Diploma in Operation Room Nursing.

## **ATTENDANCE**

13. In order to be eligible for the University examination, the following attendance criteria shall be applicable:-

- (a) Minimum attendance shall be 80% for each subject and 90% for each practical in order to be eligible for the University examination.
- (b) A candidate lacking in the prescribed attendance and progress in one subject in theory or practical shall not be permitted for appearing in University examination in that subject.
- (c) There shall be no condonation of lack of attendance for Post Basic Diploma Programme.

## **CURRICULUM**

14. Curriculum and syllabi for the programme shall be prescribed by the Indian Nursing Council Standing Academic Board from time to time.

## **EXAMINATION SCHEME**

15 The university examination to be conducted at the end of 1<sup>st</sup> year . The scheme of examination is appended below:-

<b>S No</b>	<b>Subject</b>	<b>Internal Assessment Marks</b>	<b>External Assessment Marks</b>	<b>Total Marks</b>	<b>Duration in hrs</b>
<b>A Theory</b>					
Paper-I	Clinical Nursing I	50	150	200	3
Paper-II	Clinical Nursing II	50	150	200	3
Paper-III	Supervision & mgt Clinical Teaching, Elementary Research and Statistics	50	150	200	3
<b>B Practical</b>					
	Clinical Nursing (teaching and supervision & research work to be integrated)	100	100	200	
	<b>Grand Total</b>	<b>250</b>	<b>550</b>	<b>800</b>	

## **SCHEME FOR INTERNAL ASSESSMENT**

16. The scheme for internal assessment is as under

### **A - Theory**

Paper	Subject	Periodic Examination	Mid Term examination	Pre final Exam	Assignment	Total	Internal Assessment
Paper-I	Clinical Nursing I	25	50	75	50	200	25
Paper-II	Clinical Nursing II (Part -I)	25	50	75	50	200	25
Paper-III	Supervision & mgt Clinical Teaching, Elementary Research and Statistics	25	50	75	50	200	25

### **B -Practical**

Subject	Periodic Examination Via Voice	Mid Term examination	Pre final Exam 28 wks of trg	Clinical Assignment	Clinical Evaluation	Research Project	Total	Internal Assessment
Clinical Nursing (teaching and supervision & research work to be integrated)	25	50	75	50	50	50	300	100

#### **(a) MINIMUM STANDARDS OF PASSING**

In order to pass a candidate should obtain at least 50% marks separately in internal assessment and external assessment in each of the theory and practical papers

#### **(b) GRADING**

- (i) Less than 60 % is second division
- (ii) 60% and above but less than 75 % is First division
- (iii) 75 % and above is distinction

Students will be given opportunity of maximum of 02 attempts for passing.

## **RE-EVALUATION OF ANSWER PAPERS**

17. Re- evaluation of answer paper is permitted only once.

## **ORGANIZATION OF THE COURSE**

18. (a) **Duration:** - Duration of the course is one academic years.

(b) **Date of Commencement-** 01 August every year

(c) **Date of Completion of the course** – 31 Jul every year

(d) **Distribution of the course:-**

### **I Year**

(i) Teaching :Theory and clinical practice	42 weeks
(ii) Internship	04 weeks
(iii) Examination (Including preparation)	02 weeks
(iv) Public Holidays	02 weeks
(v) Vacation	04 weeks
<b>Total</b>	<b>52 weeks</b>

(c) **Course Objectives:**

The course will enable the nurse trainee to develop skill in operation room technique which in turn will make them confident and competent nurses.

(d) **Specific Objectives:** - At the end of the course the student will be able to

- (i) Describe the concepts and principles of operation room nursing
- (ii) Communicate effectively with patients undergoing surgery and their family members, other staff of the OT and other dept.
- (iii) Assist skillfully in general surgery and specialized surgical operations.
- (iv) Understand principles of anesthesia
- (v) Conduct basic research in operation room nursing.
- (vi) Teach and supervise nurses and allied health worker.

(e) **Course of studies:**

<b>S. No</b>	<b>Subject</b>	<b>Theory hrs</b>	<b>Clinical hrs</b>
1	<b><u>Clinical Nursing –I</u></b> (Inclusive of Foundation courses) - Physiology - Surgical anatomy - Biophysics & Biochemistry - Communication skills & IPR - Anesthesiology - Legal responsibility - Pharmacodynamics - Microbiology : Bacteriology and sterilization - Fluid therapy - Care of dying patient	149	Integrated Clinical Practice

2	<b><u>Clinical Nursing –II</u></b> -OR table & Organization -Infection control -Preparation & Assisting for various specialized surgical procedures, as circulating and scrub nurse -Operating microscopes -Suture materials and needles -Endoscopies -Ventilators -Bandages splint casts and tractions -Recovery room/surgical ICU	149	Integrated Clinical Practice  1292Hrs
3	<b><u>Supervision &amp; Management, Clinical Teaching, Elementary Research &amp; Statistics</u></b> (i)Supervision & management (ii)Clinical Teaching (iii)Elementary Research and Statistics	30 30 30	
	<b>Internship</b>	-	
	<b>Total</b>	<b>388 Hrs</b>	<b>1452 Hrs</b>

Study Block	- 04 weeks x 40 hrs /week	= 160 hours
Partial Block	- 38 weeks x 40 hours/week	= 1520 hours
• Theory 6 hrs /week	- 38 weeks x 6 hours /weeks	= 228 hours
• Clinical Experience 34hrs/weeks	-38 weeks x34 hours /weeks	=1292 hours
Internship:	- 4 weeks x 40 hours	= 160 hours
	<b>Total</b>	<b>=1840 hours</b>

**(f) Clinical Experience**

Clinical experience is to be provided in Operation Room as per specialization. The breakdown is as follows :-

<b>Clinical Area/Operation Room</b>	<b>Duration</b>
Gastro-intestinal	-04 weeks
Nephro and Uro surgery	-04 weeks
Neuro surgery	-04 weeks
Cardiovascular and thoracic surgery	-04 weeks
Ortho surgery	-04 weeks
ENT	-02 weeks
Ophthalmology	-02 weeks
Gynac and Obst	-04 weeks
Pediatric surgery	-04 weeks
Burns and plastic	-04 weeks
Dental surgery	-02 weeks
<b>Total</b>	<b>-38 weeks</b>
<b>Internship 40 hrs /week</b>	<b>- 04 weeks</b>
Two weeks evening and two weeks night	

## **OPERATION ROOM NURSING -I**

**INC: 149 hrs**

### **Description:**

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 the body and their relation with promotion of health ,and application of principles of microbiology as applied to infection control practices in the operation room .Further it would enable students to acquire knowledge of anaesthesia and responsibilities of the operation room nurse.

### **Objectives:**

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

1. Apply the knowledge of structure and functions of various system of human body relevant to surgical procedures.
2. Describe the pharmacodynamics of common drugs and anesthetic agents used in OR.
3. Apply principles of microbiology in infection control practices in OR.
4. Describes the principles, types and methods of anesthesia and nurse's responsibilities.
5. Apply principles and biophysics and chemistry in use of various gadgets.
6. Discuss ethical and legal responsibilities of OR nurse.

## **ANATOMY AND PHYSIOLOGY**

UNIT	CONTENT	HOURS
I	<b>SURGICAL ANATOMY AND PHYSIOLOGY</b>	35
	<ul style="list-style-type: none"><li>• <b>Cells:</b> Compositions, structure, function and control of cell function</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Body fluids and electrolyte balance:</b> body water, Intercellular and extracellular fluids, capillary and membrane dynamics</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Blood cells and blood coagulation</b></li></ul>	
	<ul style="list-style-type: none"><li>• <b>Musculoskeletal system:</b> Muscles of head, neck and vertebral column, thorax, abdomen, pectoral and pelvic girdle, upper and lower limbs.</li><li>• Classification of joints, joints of upper and lower limbs.</li><li>• <b>Structure of Skull,</b> Vertebral column, sternum, cartilages, clavicle, scapula, male and female bony pelvis, upper and lower extremities.</li><li>• Muscle physiology</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Nervous system:</b> Skull, Gross anatomy of brain, its lobes, sub divisions and broad functions, basic and functional anatomy of cranial nerves, basic anatomy of spinal cord and important neural pathways and plexus, blood supply of CNS</li></ul>	

	<ul style="list-style-type: none"> <li>• Nerve membrane potential, formation of CSF and abnormalities, Sympathetic function of nerves, design of the nervous system, sensation and interpretation of sensation by brain reflex function of the spinal cord and brain stem, thought</li> <li>• processes and control of motor activities, autonomic nervous system.</li> </ul>	
	<ul style="list-style-type: none"> <li>• <b>Nervous system:</b> Skull, Gross anatomy of brain, its lobes, sub divisions and broad functions, basic and functional anatomy of cranial nerves, basic anatomy of spinal cord and important neural pathways and plexus, blood supply of CNS</li> <li>• Nerve membrane potential, formation of CSF and abnormalities, Sympathetic function of nerves, design of the nervous system, sensation and interpretation of sensation by brain reflex function of the spinal cord and brain stem, thought processes and control of motor activities, autonomic nervous system.</li> </ul>	
	<ul style="list-style-type: none"> <li>• Respiratory system: Basic surgical anatomy of nose, paranasal sinuses, pharynx, trachea, bronchial tree, lungs, diaphragm and thoracic cages.</li> <li>• Mechanism of respiration, gas exchange, regulation of respiration and physiology of respiratory abnormalities.</li> </ul>	
	<ul style="list-style-type: none"> <li>• Cardiovascular system: Anatomy of heart and blood vessels</li> <li>• Pumping action of heart and its regulation</li> <li>• Pulmonary, coronary, cerebral and portal circulation</li> <li>• Systemic arterial pressure- hyper and hypo tension</li> <li>• Cardiac output, venous pressure and cardiac failure</li> </ul>	
	<ul style="list-style-type: none"> <li>• Lymphatic system structure of lymph vessels and lymph drainage</li> <li>• Reticuloendothelial system, immunity and allergy</li> </ul>	
	<ul style="list-style-type: none"> <li>• Digestive system: Anatomy of GI tract, liver, spleen, gall bladder, pancreas, and salivary glands, including parotids and tongue</li> <li>• Anatomy of abdominal wall, hernia, inguinal canal</li> <li>• Gastrointestinal movement, secretion and their regulation</li> <li>• Digestive assimilation of fats, carbohydrates and proteins</li> </ul>	
	<ul style="list-style-type: none"> <li>• Urinary system: Anatomy of kidney, ureter, bladder and urethra</li> <li>• Formation and excretion of urine</li> </ul>	
	<ul style="list-style-type: none"> <li>• Sensory system:</li> <li>• Anatomy of eye</li> <li>• Physiology of vision</li> <li>• Anatomy of ear</li> <li>• Physiology of hearing</li> </ul>	
	<ul style="list-style-type: none"> <li>• Endocrine System: Anatomy of ductless glands</li> </ul>	
	<ul style="list-style-type: none"> <li>• Anatomy of male reproductive system including prostate</li> </ul>	
	<ul style="list-style-type: none"> <li>• Anatomy of female reproductive system : Breast, Pelvic viscera and their supports, Uterus, fallopian tubes, ovaries, cervix, vagina</li> </ul>	
	<ul style="list-style-type: none"> <li>• Development of lip, palate, and their anomalies</li> </ul>	
	<ul style="list-style-type: none"> <li>• Congenital abnormalities in new born</li> </ul>	

<b>II</b>	<b>SURGICAL ANATOMY</b>	<b>40</b>
	<b>GENERAL SURGERY</b> <ul style="list-style-type: none"> <li>Abdominal surgery –anatomy of abdominal wall, incisions,hernia alimentary canal,Gall bladder ,bile duct ,Liver spleen, pancreas ,surgery of head &amp; neck,mouth and breast ,thyroid gland.</li> </ul>	
	<b>ORTHOPAEDIC</b> <ul style="list-style-type: none"> <li>Bones and Joints</li> </ul>	
	<b>UROLOGY</b> <ul style="list-style-type: none"> <li>Kidney</li> <li>Ureters</li> <li>Bladder</li> <li>Prostate</li> <li>Testes</li> </ul>	
	<b>EAR,NOSE AND THROAT</b> <ul style="list-style-type: none"> <li>Surgery of pharynx ,Larynx</li> <li>Nose and Ear</li> </ul>	
	<b>GYNAEC AND OBST</b> <ul style="list-style-type: none"> <li>Pelvic viscera and other supports</li> <li>Uterus</li> <li>Fallopian Tubes</li> <li>Ovaries</li> <li>Cervix</li> <li>Vagina</li> </ul>	
	<b>NEURO SURGERY</b> <ul style="list-style-type: none"> <li>Brain</li> <li>Spinal cord</li> <li>Peripheral and Sympathetic Nerves</li> </ul>	
	<b>CARDIO THORACIC SURGERY</b> <ul style="list-style-type: none"> <li>Chest wall</li> <li>Heart</li> <li>Blood Vessls</li> <li>Trachea</li> <li>Bronchi</li> <li>Lungs</li> </ul>	
	<b>PAEDIATRIC SURGERY</b> <ul style="list-style-type: none"> <li>Body Systems</li> </ul>	
	<b>OPHTHALMOLOGY</b> <ul style="list-style-type: none"> <li>Eyes</li> </ul>	
<b>III</b>	<b><u>BIOPHYSICS AND BIOCHEMISTRY</u></b>	<b>10</b>
	<ul style="list-style-type: none"> <li>Units of measurements</li> </ul>	
	<ul style="list-style-type: none"> <li>Gas Laws</li> </ul>	
	<ul style="list-style-type: none"> <li>Heat</li> </ul>	
	<ul style="list-style-type: none"> <li>Electro statistics</li> </ul>	
	<ul style="list-style-type: none"> <li>Laser rays used in operation theatre</li> </ul>	
	<ul style="list-style-type: none"> <li>Chemicals used in operation theatre</li> </ul>	

UNIT	CONTENT	HOURS
	<ul style="list-style-type: none"> <li>Occupational hazards in OR, its prevention, control and management</li> <li>In emergency</li> </ul>	
	<ul style="list-style-type: none"> <li>Radio active materials: Operation table mechanics, positioning</li> </ul>	
	<ul style="list-style-type: none"> <li>Principles underlying use of various gadgets.</li> </ul>	
IV	<b>COMMUNICATION SKILLS AND IPR</b>	<b>10</b>
	<ul style="list-style-type: none"> <li>Process and methods</li> </ul>	
	<ul style="list-style-type: none"> <li>Establishing and maintaining good IPR and communication with family, staff and colleagues</li> </ul>	
	<ul style="list-style-type: none"> <li>Breaking of bad news: Multidisciplinary team and role of nurses</li> </ul>	
	<ul style="list-style-type: none"> <li>Guidance and counseling</li> </ul>	
V	<b>ANESTHESIOLOGY</b>	<b>10</b>
	<ul style="list-style-type: none"> <li>Introduction</li> </ul>	
	<ul style="list-style-type: none"> <li>Principles</li> </ul>	
	<ul style="list-style-type: none"> <li>Types</li> </ul>	
	Stages	
	<ul style="list-style-type: none"> <li>Methods of administration</li> </ul>	
	<ul style="list-style-type: none"> <li>Anaesthetic machines and equipments</li> </ul>	
	<ul style="list-style-type: none"> <li>Drugs used in premedication and anaesthesia, their doses, action, antidotes and methods of combating complications, nursing responsibilities</li> </ul>	
	<ul style="list-style-type: none"> <li>Preparation of patients for various types of anaesthesia/analgesia including laying out of trolleys for same</li> </ul>	
	<ul style="list-style-type: none"> <li>General anesthesia: volatile and gaseous groups</li> </ul>	
	<ul style="list-style-type: none"> <li>Stages of anaesthesia, anaesthetic action</li> </ul>	
	<ul style="list-style-type: none"> <li>Anaesthetic agents: Intravenous agents and muscle relaxing agents</li> </ul>	
	<ul style="list-style-type: none"> <li>Spinal analgesia drugs and its complication</li> </ul>	
	<ul style="list-style-type: none"> <li>Cardio-pulmonary resuscitation and bypass</li> </ul>	
	<ul style="list-style-type: none"> <li>Boyles apparatus and its component parts, preparation of apparatus for administering anaesthesia</li> </ul>	
	<ul style="list-style-type: none"> <li>Care and maintenance of Gas cylinder, color index, capacity of various cylinders, precautions to reduce antistatic friction hazards</li> </ul>	
	<ul style="list-style-type: none"> <li>Haemorrhage- Shock management and Nursing care</li> </ul>	
	<ul style="list-style-type: none"> <li>Fluid and electrolyte balance, calculation of daily fluid requirement</li> </ul>	
	<ul style="list-style-type: none"> <li>Respirators- use and handling of dragger, medevent, evita machines and nursing management of patients on mechanical ventilation</li> </ul>	
	<ul style="list-style-type: none"> <li>Use of defibrillator, cardiac pacemaker, heart-lung machine, cardiac monitoring, SPO2, CVP, Art.Pressure, ECG, PAWP</li> </ul>	
	<ul style="list-style-type: none"> <li>Reception of patients in OT</li> </ul>	
	<ul style="list-style-type: none"> <li>Post anaesthetic care – including instruments and drug in post op room</li> </ul>	
IV	<b>LEGAL RESPONSIBILITIES</b>	<b>10</b>
	<ul style="list-style-type: none"> <li>Identification of patients</li> </ul>	
	<ul style="list-style-type: none"> <li>Identification of right part to be operated</li> </ul>	
	<ul style="list-style-type: none"> <li>Valid consent for operation, use of body tissues and organ transplant ( donor and recipient)</li> </ul>	

UNIT	CONTENT	HOURS
	<ul style="list-style-type: none"> <li>Care of dentures</li> </ul>	
	<ul style="list-style-type: none"> <li>Counting of sponges, instruments etc</li> </ul>	
	<ul style="list-style-type: none"> <li>Prevention of unusual incidences (fall of patients, burn, fire hazards)</li> </ul>	
	<ul style="list-style-type: none"> <li>Records in operation theatre: its medico-legal importance</li> </ul>	
	<ul style="list-style-type: none"> <li>Prevention of unusual incidences (fall of patients, burn, fire hazards)</li> </ul>	
	<ul style="list-style-type: none"> <li>Records in operation theatre: its medico-legal importance</li> </ul>	
<b>VI</b>	<b>PHARMACODYNAMICS</b>	<b>34</b>
	<ul style="list-style-type: none"> <li>Neuroleptic drugs</li> </ul>	
	<ul style="list-style-type: none"> <li>Phenothiazines</li> </ul>	
	<ul style="list-style-type: none"> <li>Butobarbitone</li> </ul>	
	<ul style="list-style-type: none"> <li>Anticonvulsants</li> </ul>	
	<ul style="list-style-type: none"> <li>Analgesics</li> </ul>	
	<ul style="list-style-type: none"> <li>Intraoperative analgesia</li> </ul>	
	<ul style="list-style-type: none"> <li>Nonsteroidal anti-inflammatory drugs</li> </ul>	
	<ul style="list-style-type: none"> <li>Narcotic antagonists</li> </ul>	
	<ul style="list-style-type: none"> <li>Intravenous induction agents</li> </ul>	
	<ul style="list-style-type: none"> <li>Isopyrenatine</li> </ul>	
	<ul style="list-style-type: none"> <li>Bronchodilators</li> </ul>	
	<ul style="list-style-type: none"> <li>Respiratory stimulants</li> </ul>	
	<ul style="list-style-type: none"> <li>Antidysrhythmias</li> </ul>	
	<ul style="list-style-type: none"> <li>Vasopressors</li> </ul>	
	<ul style="list-style-type: none"> <li>Vasodilators</li> </ul>	
	<ul style="list-style-type: none"> <li>Antihypertensive agents</li> </ul>	
	<ul style="list-style-type: none"> <li>Ganglion blockers</li> </ul>	
	<ul style="list-style-type: none"> <li>Plasma expanders</li> </ul>	
	<ul style="list-style-type: none"> <li>Muscle relaxants</li> </ul>	
	<ul style="list-style-type: none"> <li>Beta blockers</li> </ul>	
	<ul style="list-style-type: none"> <li>Uterine stimulators</li> </ul>	
	<ul style="list-style-type: none"> <li>Uterine inhibitors</li> </ul>	
	<ul style="list-style-type: none"> <li>Insulin</li> </ul>	
	<ul style="list-style-type: none"> <li>Histamin, H1 and H2 receptor antagonists</li> </ul>	
	<ul style="list-style-type: none"> <li>Anticoagulants</li> </ul>	
	<ul style="list-style-type: none"> <li>Antiemetics</li> </ul>	
	<ul style="list-style-type: none"> <li>Anticholinergics</li> </ul>	
	<ul style="list-style-type: none"> <li>Drugs acting on eye, ENT, etc.</li> </ul>	
	<ul style="list-style-type: none"> <li>Nurses role and responsibilities</li> </ul>	
<b>VII</b>	<b>MICROBIOLOGY: BACTERIOLOGY AND STERILIZATION</b>	<b>10</b>
	<ul style="list-style-type: none"> <li>Pathogenic and non pathogenic bacteria, mode of spread and cross infection</li> </ul>	
	<ul style="list-style-type: none"> <li>Inflammation and infection</li> </ul>	
	<ul style="list-style-type: none"> <li>Micro-organisms classification</li> </ul>	
	<ul style="list-style-type: none"> <li>Organisms that cause infection</li> </ul>	

UNIT	CONTENT	HOURS
	<ul style="list-style-type: none"> <li>• Sterilization and disinfection: Principles involved in each method of sterilization, wet, steam, pressure sterilization, autoclaving, boiling, dry, heat, gas, chemical sterilization, gamma ray sterilization</li> <li>• Spore bearing organisms, their role, methods of destruction</li> </ul>	
	<ul style="list-style-type: none"> <li>• Cleaning and sterilization of instruments, glass apparatus, anaesthetic equipment, endoscope and rubber goods</li> </ul>	
	<ul style="list-style-type: none"> <li>• Preparation and sterilization of dressing, linen, rubber goods, surgical packs, suture materials, packing of drums for efficient sterilization</li> </ul>	
	<ul style="list-style-type: none"> <li>• Operation and maintenance of Manlove, Alliot, and electric high speed sterilizers</li> </ul>	
	<ul style="list-style-type: none"> <li>• Pre operative skin preparation, and disinfection, extent of skin preparation for various operations</li> </ul>	
	<ul style="list-style-type: none"> <li>• Principles of asepsis: Surgical scrubbing, gowning and gloving procedures</li> </ul>	
	<ul style="list-style-type: none"> <li>• Draping of patients for various operations</li> </ul>	
	<ul style="list-style-type: none"> <li>• Date of sterilization of articles to check back turnover of sterile supplies</li> </ul>	
	<ul style="list-style-type: none"> <li>• Disinfection of OT after infectious cases like tetanus, gas gangrene, HBsAg, AIDS</li> </ul>	
	<ul style="list-style-type: none"> <li>• Diagnostic tests in microbiology and related nurses responsibility</li> </ul>	
	<ul style="list-style-type: none"> <li>• Standard safety measures and biomedical waste management</li> </ul>	
<b>IX</b>	<b>CARE OF DYING PATIENT</b>	<b>5</b>
	<ul style="list-style-type: none"> <li>• Spiritual support to the dying</li> <li>• Grief and grieving process</li> <li>• Bereavement support</li> <li>• Organ donation &amp; Counselling</li> <li>• Care of dead</li> </ul>	

## SYLLABUS – OT NURSING-II

**Theory Hours:149 HRS**

**Description:** This course is designed to prepare operation nurses with specialised knowledge and skills in assisting for various surgical procedures and practicing infection control measures.

### **Specific Objectives:**

On completion of this course the student will:

1. Demonstrate the skill in assisting different operative procedures
2. Apply nursing process in pre-operative, operative and post-operative stages
3. Demonstrate skill in organization of tasks, time, motion, equipment, supplies, materials and resources
4. Demonstrate knowledge and principle of sterilization and disinfection
5. Participate with other surgical team members

UNIT	CONTENT	HOURS
<b>I</b>	<b>OPERATION ROOM TABLE AND ORGANIZATION</b>	<b>10</b>
	<ul style="list-style-type: none"><li>• Equipments and amenities</li></ul>	
	<ul style="list-style-type: none"><li>• Different types of table and accessories</li></ul>	
	<ul style="list-style-type: none"><li>• Organization of table and equipments- nurse's role and responsibilities</li></ul>	
<b>II</b>	<b>INFECTION CONTROL</b>	<b>10</b>
	<ul style="list-style-type: none"><li>• Environment: Cleaning, disinfecting OR area, equipments, Air conditioning system</li></ul>	
	<ul style="list-style-type: none"><li>• Aseptic techniques- hand washing, use of mask, gowning, gloving, head cover</li></ul>	
	<ul style="list-style-type: none"><li>• Sterilization: Preparing and packing of instruments, dressing materials, linen, suture materials, drainage tubes and catheters, care of electro-medical equipments</li></ul>	
	<ul style="list-style-type: none"><li>• Handling and storing of sterilized material, equipments, instruments</li></ul>	
	<ul style="list-style-type: none"><li>• Collection of various specimens for laboratory tests</li></ul>	
	<ul style="list-style-type: none"><li>• Biomedical waste management: Universal standards and its application in O R nursing</li></ul>	
	<ul style="list-style-type: none"><li>• Nurses' role and responsibility</li></ul>	
<b>III</b>	<b>PREPARATION AND ASSISTING FOR VARIOUS SURGICAL PROCEDURES, AS CIRCULATING AND SCRUB NURSE</b>	<b>70</b>
	<ul style="list-style-type: none"><li>• Setting up of operation room and table</li></ul>	
	<ul style="list-style-type: none"><li>• Setting up of trays and trolleys for various surgical procedures</li></ul>	
	<ul style="list-style-type: none"><li>• Part preparation for surgical procedures</li></ul>	
	<ul style="list-style-type: none"><li>• Positioning and draping according to the surgical procedures</li></ul>	
	<ul style="list-style-type: none"><li>• Incisions for various surgical procedures</li></ul>	
	<ul style="list-style-type: none"><li>• Minor surgeries- surgical instruments and suturing materials</li></ul>	
	<ul style="list-style-type: none"><li>• Major surgeries- surgical instruments and suturing materials</li></ul>	
	<ul style="list-style-type: none"><li>• General Gynaeco</li><li>• Obstetrics</li><li>• Orthopaedic</li><li>• Plastic and reconstructive surgery</li><li>• Ophthalmic</li></ul>	

	<ul style="list-style-type: none"> <li>• Head &amp; Neck</li> <li>• ENT</li> <li>• Cardio Thoracic</li> <li>• Neuro</li> <li>• Paediatric</li> <li>• Dental</li> <li>• Laser and robotic surgery</li> <li>• Records and reports Nurses role and responsibilities</li> </ul>	
<b>IV</b>	<b>OPERATING MICROSCOPES</b> <ul style="list-style-type: none"> <li>• Types</li> <li>• Accessories</li> <li>• Attachments</li> <li>• Uses</li> <li>• Disinfection</li> <li>• Maintenance and storage</li> <li>• Nurses role and responsibility</li> </ul>	<b>15</b>
<b>V</b>	<b>SUTURE MATERIAL &amp; NEEDLES</b> <ul style="list-style-type: none"> <li>• Types</li> <li>• Uses</li> <li>• Disinfection</li> <li>• Storage</li> </ul>	<b>05</b>
<b>VI</b>	<b>ENDOSCOPIES</b> <ul style="list-style-type: none"> <li>• Definition</li> <li>• Types</li> <li>• Uses</li> <li>• Maintenance and storage</li> <li>• Preparation of patients</li> <li>• Nurses role and responsibilities</li> </ul>	<b>15</b>
<b>VII</b>	<b>BANDAGES SPLINTS CASTS AND TRACTION</b> <ul style="list-style-type: none"> <li>• Types</li> <li>• Uses</li> <li>• Preparation</li> <li>• Maintenance and storage</li> </ul>	<b>05</b>
<b>VIII</b>	<b>RECOVERY ROOM/SURGICAL ICU</b> <ul style="list-style-type: none"> <li>• Set up and organisation</li> <li>• Management of patient</li> <li>• Reporting and recording</li> <li>• Transportation of patient nurses role and responsibility</li> </ul>	<b>15</b>
<b>IX</b>	<b>FLUID THERAPY</b> <ul style="list-style-type: none"> <li>• Fluid and electrolytes</li> <li>• Blood and blood components</li> <li>• Plasma and plasma products</li> <li>• Allergies and reactions</li> <li>• High risk patients</li> <li>• Management of anaphylactic shock</li> <li>• Records and reports</li> <li>• Nurses role and responsibility</li> </ul>	<b>10</b>

## **SUPERVISION AND MANAGEMENT:**

**INC: 90 hrs**

**Description:** This course is designed to develop an understating of the principles of supervision and management, clinical teaching and research.

Section – A      Supervision & Management      -30 Hours

Section - B      Clinical Teaching      - 30 Hours

Section – C      Elementary Research & Statistics      – 30 Hours

### **Objectives:**

1. Describe professional trends
2. Describe role of nurse in management and supervision of nursing personnel in operation room
3. Teach nurses 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

<b>UNIT</b>	<b>CONTENT</b>	<b>HOURS</b>
<b>I</b>	<b>Management</b>	<b>20</b>
	Definition and principles	
	Elements of management of operation room: Planning, organizing, staffing, reporting, recording and budgeting	
	Operation room: Time, material and personnel	
	Physical layout of O.R	
	Design of OR, 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	
	Practice standards of operation room nurse- Policies and procedures	
	Establishing standing orders and protocols	
	Orientation programme for new recruits	
	Quality assurance programme in operation room nurse	
	Nursing audit	
	Performance appraisal Principles of performance evaluation Tools of performance evaluation Rating scales Checklists Peer reviews Self appraisals Staff Development Introduction & Purposes In service education Continuing education	

UNIT	CONTENT	HOURS
<b>II</b>	<b>PROFESSIONAL TRENDS</b>	<b>5</b>
	<ul style="list-style-type: none"> <li>• Introduction</li> </ul>	
	<ul style="list-style-type: none"> <li>• Code of ethics, code of professional conduct and practice standards of nursing in India</li> </ul>	
	<ul style="list-style-type: none"> <li>• Ethical issues in critical care unit</li> </ul>	
	<ul style="list-style-type: none"> <li>• Expanding role of the nurse: specialist nurse, nurse practitioner etc</li> </ul>	
	<ul style="list-style-type: none"> <li>• Professional organizations</li> </ul>	
<b>III</b>	<b>MEDICO-LEGAL ASPECTS</b>	<b>5</b>
	<ul style="list-style-type: none"> <li>• Legislations and regulations related to critical care</li> </ul>	
	<ul style="list-style-type: none"> <li>• Consumer protection Act</li> </ul>	
	<ul style="list-style-type: none"> <li>• Negligence and malpractice</li> </ul>	
	<ul style="list-style-type: none"> <li>• Legal responsibilities of nurses</li> <li>• Bill of right of a patient</li> <li>• Case studies of judgment with regard to negligence of services in the hospital</li> </ul>	
	<ul style="list-style-type: none"> <li>• Records and reports</li> </ul>	
	<ul style="list-style-type: none"> <li>• Role of nurse in legal issues</li> </ul>	
	<ul style="list-style-type: none"> <li>• Professional practice issues in the operation room</li> <li>• Bioethical issues in operation room: ethics, ethical principles, ethical decision making in operation room code of professional conduct and practice standards</li> </ul>	

<b>IV</b>	<b>TEACHING –LEARNING PROCESS</b>	<b>30</b>
	<ul style="list-style-type: none"> <li>• Introduction and concepts</li> </ul>	
	<ul style="list-style-type: none"> <li>• Principles of teaching and learning</li> </ul>	
	<ul style="list-style-type: none"> <li>• Formulation of learning objectives</li> </ul>	
	<ul style="list-style-type: none"> <li>• Lesson planning</li> </ul>	
	<ul style="list-style-type: none"> <li>• Teaching methods</li> <li>• Lecture</li> <li>• Demonstration, simulations</li> <li>• Discussion</li> <li>• Clinical teaching methods</li> <li>• Micro teaching</li> <li>• Self learning</li> </ul>	
	<ul style="list-style-type: none"> <li>• Evaluation</li> </ul>	
	<ul style="list-style-type: none"> <li>• Assessment of students</li> <li>• Purpose</li> <li>• Type</li> <li>• Steps</li> <li>• Tools for assessing knowledge, skill and attitude</li> </ul>	
	<ul style="list-style-type: none"> <li>• Use of media in teaching learning process</li> </ul>	

<b>UNIT</b>	<b>CONTENT</b>	<b>HOURS</b>
<b>V</b>	<b>RESEARCH</b>	<b>30</b>
	<ul style="list-style-type: none"> <li>• Research and research process</li> </ul>	
	<ul style="list-style-type: none"> <li>• Types of research</li> </ul>	
	<ul style="list-style-type: none"> <li>• Research problem/question</li> </ul>	
	<ul style="list-style-type: none"> <li>• Review of literature</li> </ul>	
	<ul style="list-style-type: none"> <li>• Research approaches and designs</li> </ul>	
	<ul style="list-style-type: none"> <li>• Sampling</li> </ul>	
	<ul style="list-style-type: none"> <li>• Data collection: tools and techniques</li> </ul>	
	<ul style="list-style-type: none"> <li>• Analysis and interpretation of data</li> </ul>	
	<ul style="list-style-type: none"> <li>• Communication and utilization of research</li> </ul>	
	<ul style="list-style-type: none"> <li>• Research priorities in critical care</li> </ul>	
	<ul style="list-style-type: none"> <li>• Statistics</li> </ul>	
	<ul style="list-style-type: none"> <li>• Source and presentation of data</li> <li>• Qualitative and quantitative</li> </ul>	
	<ul style="list-style-type: none"> <li>• Tabulation, frequency distribution, percentiles</li> <li>• Graphical presentation</li> </ul>	
	<ul style="list-style-type: none"> <li>• Measures of central tendency-mean, median mode</li> </ul>	
	Measures of variance	
	<ul style="list-style-type: none"> <li>• Normal probability and tests of significance</li> </ul>	
	<ul style="list-style-type: none"> <li>• Co-efficient of correlation</li> </ul>	
	<ul style="list-style-type: none"> <li>• Statistical packages and its application</li> </ul>	
	<ul style="list-style-type: none"> <li>• Preparing a research proposal</li> </ul>	
	<ul style="list-style-type: none"> <li>• Application of computers</li> </ul>	

○ **Teaching Learning Activities**

- (i) Lecture
- (ii) Demonstration & Discussion
- (iii) Supervised practice
- (iv) Seminars
- (v) Role play
- (vi) Workshop
- (vii) Conference
- (viii) Skill training
- (ix) Simulations
- (x) Field visits
- (xi) Research project

○ **Methods of Assessment**

- 1. Written Examination
- 2. Objective type
- 3. Short notes
- 4. Assignments
- 5. Case studies /care notes
- 6. Clinical presentations
- 7. Seminars
- 8. Project

**ASSIGNMENTS:**

- |   |    |
|---|----|
| 1. Patient Care Assignment  | 02 |
| 2. NCP for Post op Patients   | 01 |
| 3. Work as a scrub nurse  | 10 |
| 4. Work as circulatory nurse  | 10 |
| 5. Case Studies   | 05 |
| 6. Case Presentations   | 05 |
| 7. Writing observation reports  |    |
| 8. Planned health teaching  | 03 |
| 9. Project  | 01 |
| 10. Drug Study  | 02 |
| 11. Prepare clinical rotation plan  |    |
| 12. Prepare teaching plan for students  |    |
| 13. Perform clinical evaluation of students/staff   |    |
| 14. OR management plan-designing  |    |
| 15. Supervision techniques- writing unit report, performance appraisal, guidance, staff management, material management |    |
| 16. Maintenance of records and reports  |    |

## **18. ESSENTIAL CRITICAL CARE NURSING SKILLS**

- I      Procedures Observed  
Surgical intervention in all the minor and major OT's
  
- II      Procedures assisted
  - Monitoring ICP
  - Advanced life support system
  - Arterial Blood gas
  - ECG recording
  - Arterial catheterization
  - Chest tube insertion
  - Endotracheal intubation
  - Ventilation
  - Central line, arterial line cardiac pacing
  - Use of defibrillator CPR
  - Endoscopy
  - Dialysis- haemodialysis and peritoneal dialysis
  - Intra venous pyelography
  - EEG
  - Bronchoscopy
  
- III      Procedures performed
  - Work as a scrub nurse
  - Work as a circulatory nurse
  - Setting up trays and trolleys of all surgical procedures
  - Skin preparation
  - Draping and positioning
  - Transferring of patient
  - Use of operating room care plan
  - Specific teaching related to patient's surgery
  - Adequate instrumentation
  - Use special supplies 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
  - (i) Neurological assessment, Glasgow coma scale
  - (ii) Pulse oxymetry
  - (iii) Arterial BP monitoring
  - (iv) Venous access, ABG collection monitoring
  - (v) Oxygen administration, suctioning respiratory therapy, Tracheostomy toilet
  - (vi) Airway management

- Application of oropharangeal airway
- Oxygen therapy
- C PAP
- Care of Tracheostomy
- Endotracheal Intubation
- (vii) Care of intercostals drainage
- (viii) Nebulisation
- (ix). Chest physiotherapy
- (x) Monitoring of critically ill patients- clinically and with monitors, CRT, ECG
- (xi) Gastric lavage
- (xii). Setting of ventilators
- (xiii) .Assessment of neonates; identification and assessment of risk factors, APGAR score
- (xiv). Admission and discharge of critically ill patients
- (xv) OG tube insertion
- (xvi) Thermoregulation- management of thermoregulation & control, use of hypothermic machines
- (xvii) Administration of drugs IM, IV injection, IV cannulation & fixation infusion pump, calculation of dosages, monitoring fluid therapy.
- (xviii) Administration of blood and its components
- (xix) Procedures for prevention of infections; hand washing, disinfection & sterilization, surveillance fumigation
- (xx) Collection of specimens related to critical care
- (xxi) Burns assessment calculation of fluid crystalloid and colloid
- (xxii) Maintenance of intake output chart
- (xxiii) Wound dressing and prevention of contractures
- (xxiv) Rehabilitation

#### **IV Other procedures**

### **CERTIFICATION**

#### **19 TITLE- Fellowship Course in Operation Room Nursing**

A Certificate is awarded upon successful completion of the prescribed study programme ,which will state that :-

- (a) Candidate has completed the prescribed course of Operation Room Nursing
- (b) Candidate has completed prescribed clinical experience.
- (c) Candidate has passed the prescribed examination.

## **BUDGETARY REQUIREMENT**

20. The budget of the college is met out from central budget of AFMC Pune .

## **EXISTING INFRASTRUCTURE AREA OF THE COLLEGE**

21. The requirement and existing infrastructure for the Clinical Facility in the College is attached as Appx 'A.'

22. The details of existing college infrastructure Area including detailed sketch of the floor plan is attached as Appx 'B.'

23. The details of existing Physical Facilities in the College is attached as Appx 'C.'

24. The details of existing Library Facilities in the College is attached as Appx 'D.'

25. The details of existing Audio visual Aids in the College of Nursing is attached as Appx 'E.'

### **INFRASTRUCTURE REQUIREMENT FOR CLINICAL FACILITY**

Clinical experience to the students of College of Nursing is provided at  
CH(SC)Pune, Artificial Limb Centre (ALC), Pune, MH(CTC) Pune & MH Kirkee..

S No	Requirement of Clinical Facility as per INC	Existing Facility in College of Nursing, AFMC, Pune																		
a	<p><b>Hospital</b></p> <p>There must be a parent/affiliated hospital for providing practical experience to the students with minimum 250 -500 functional beds including spinal surgeries ,traumas, reconstructive surgery ,replacement surgery etc and rehabilitation units (Physiotherapy, occupational, orthotics and prosthetic).</p> <p>• Affiliated Hosp should be in the radius of 10-15 kms.</p>	<p>Parent hospital for clinical experience is CH(SC) Pune with a bed strength of 1047 having 90-95% bed occupancy rate. Other affiliated hospitals are MH (CTC) with a bed strength of 600, ALC (Artificial Limb Centre) with a bed strength of 190 and MH Kirkee a 880 bedded hospital.</p> <ul style="list-style-type: none"><li>• Parent Hospital also has Physiotherapy unit .</li><li>• All clinical areas including specialty-nursing clinical areas are present at CH (SC) Pune. It is also Malignant Disease Treatment Centre.</li></ul> <table><tr><td>CH (SC )</td><td></td></tr><tr><td>Medical</td><td>238</td></tr><tr><td>Surgical(Includes reconstructive surgeries)</td><td>279</td></tr><tr><td>Ob &amp; Gyn</td><td>72</td></tr><tr><td>Paediatric</td><td>68</td></tr><tr><td>Ortho (includes replacement surgeries)</td><td>35</td></tr><tr><td>Eye- 32 ENT</td><td>26</td></tr><tr><td>ICU/ICCU-</td><td>10/10</td></tr><tr><td>Burns-</td><td>12</td></tr></table> <p><b><u>MH Kirkee</u></b> –Orthopaedic and Spinal cord Injury clinical experiences with replacement surgeries and rehabilitation units well equipped physio therapy and occupational therapy centre.</p> <p><b><u>ALC-</u></b> Care of Handicapped and other disabled, orthotics and prosthetic facilities, war wounded soldiers etc.</p> <p><b><u>MH CTC</u></b> – Centre for cardiovascular treatment.</p> <p>Affiliated hospitals are within the permissible limits.</p> <ul style="list-style-type: none"><li>• Parent hospital –Within campus</li><li>• ALC- within campus</li><li>• MH CTC- within 02 Kms</li><li>• MH Kirkee- within 10 Kms</li></ul>	CH (SC )		Medical	238	Surgical(Includes reconstructive surgeries)	279	Ob & Gyn	72	Paediatric	68	Ortho (includes replacement surgeries)	35	Eye- 32 ENT	26	ICU/ICCU-	10/10	Burns-	12
CH (SC )																				
Medical	238																			
Surgical(Includes reconstructive surgeries)	279																			
Ob & Gyn	72																			
Paediatric	68																			
Ortho (includes replacement surgeries)	35																			
Eye- 32 ENT	26																			
ICU/ICCU-	10/10																			
Burns-	12																			

Appx 'B'  
(Refers to Para 22)

**THE INFRASTRUCTURE AREA OF COLLEGE OF  
NURSING**

The college of Nursing is built in an area of 4600 sqmt.

<b>S No</b>	<b>Teaching block</b>	<b>Total Area in Sqmeters</b>
1	Lecture Hall (6)	97.37 Sqmtr each
2	Computer Lab (1)	41.35 Sqmtr
3	Multipurpose hall (1)	197.05 Sqmtr
4	Common Room (1)	88.35 Sqmtr
5	Faculty Offices (7)	312.50 Sqmtr
6	Nursing Arts Lab	197.05 Sqmtr
7	Nutrition Lab	88.35 Sqmtr
8	Library	197.05 Sqmtr
9	Principal's Room	97.37 Sqmtr
10	Vice Principal's Room	88.35 Sqmtr
11	AV Aid Room	190 Sqmtr
12	Toilet Rooms (4)	26.60 Sqmtr

Appx 'C'  
(Refers to Para 23)

**THE EXISTING PHYSICAL FACILITIES IN THE COLLEGE AND  
ADDITIONAL REQUIREMENTS**

S No	Physical Facilities as per INC	Remarks
	<b>Building</b>	Separate building near to parent hospital is available.
	<b>Teaching Block</b>	
	(a) Class rooms	One classrooms needs to be constructed with a capacity to accommodate at least 15 students at a time.
	(b) Nursing Arts Lab	Present
	(c) Library: Permission to use medical/ hospital library having current medical surgical nursing, Orthopaedic and rehabilitation nursing, trauma text books and journals etc.	Total Number of Books : 4150 Total Number of Nsg Journals : 08 Library Hours per day: 07 hrs in College Library & 03 hrs in Mess Library. Moreover, Permission is granted to use Command hospital library and AFMC Main Library is opened from 1100hrs to 2200 hrs daily.
	<b>Office facility</b>	
	(a) Services of typist, Peon, Safaikaramchari	Two typist ,two peon and three safai karamcharies posted in the college
	(b)Facilities for office, equipment and supplies such as Stationery ,Computer with Printer ,Xerox machine/ Risograph, Telephone and Fax	Collage has adequate no of computers with printer facility, Xerox machine and telephone and fax. Stationery requirements are met through central supply of AFMC

Appx 'D'  
(Refers to para 24)

**FACILITIES FOR LIBRARY AVAILABLE AT THE COLLEGE OF  
NURSING**

Total Number of Books : 4150

Total Number of Nsg Journals : 08

Library Hours per day : 07 hrs in College Library & 03 hrs in Mess Library.

Moreover, AFMC Main Library is opened from 1100hrs to 2200hrs daily.

Appx 'E'  
Refers to para 24

Sr. No.	Item	Qty (No.)
1.	Projected Aids	
	Television	02
	Video cassettes	36
	VCP	01
	Slide projector	03
	LCD with Screen	04
	OHP	09
2.	Non-Projected Aids	
	Tape recorder	01
	Charts, Posters Models, Flip charts Biological specimens, Patient care simulators, Nursing skill manikins, White boards Bulletin boards, Flannel graphs, Mobile presentation board, Patient care manikin, Nurse training baby new born, Palpation module, Adult CPR Torso with light controller.	
3.	Typing and Duplicating facilities	
	Type writers	03
	Photocopiers	02
	Duplicating Machine	01

## **REFERENCES**

1. Theater Techniques by Edixon
2. Introduction to operation room techniques by Atkinson
3. OT Techniques by Berry and Kohns
4. Operation Room Techniques by Fortunato
5. Instruments for OT Room by Brooks
6. Manual of medical surgical instruments and procedures by Kapur
7. Perioperative Nursing by Shields
8. Review of Nurse anesthesia by Nagehout
9. Ortho Surgery by Gregory
10. Minor Surgeries – Splinters to Fractures by Buttara Voli
11. Pharmacology and Medicine for Nurse By Downie and J Mackenzie
12. Therapeutic interaction in Nursing by Williams
13. Emergency Nursing Care Curriculum by Saunder
14. Intensive Care Nursing – Philip Woodrow
15. Moroneys Surgery for Nurses – Colmer
16. Master of Surgery for Nurses – Fischer (Vol I & II)
17. SRB’S Surgery for Nurses – Bhat
18. Nursing Practitioners and legal reference by Newberry
19. Leadership and Nursing Care Management by Huber
20. Counseling and communication skills for medical and health practitioners  
by Bayne
21. Guide to Nursing Management by Anne Mariner
22. Human Resource Management in Hospital by Goyal RC
23. Hospital Planning and Administration by Davies RC
24. Medical Surgical Nursing BY Lewis
25. Surgery by Bailey and Love
26. Critical care Nursing by Valenti Lindam
27. Principles of Anatomy and Physiology by Tortora
28. Illustrations of regional anatomy Atlas Jamieson

29. Text book of Biochemistry – Harbans Lal
30. Fundamentals of Biochemistry – Deb
31. Biochemistry – Jacob Anthikad
32. Cardiothoracic Surgical Nursing – Margerson C
33. Surgical Secrets – Alden H Harker