



மனோன்மணியம் சுந்தரனார் பல்கலைக்கழகம்  
**MANONMANIAM SUNDARANAR UNIVERSITY**

**SYLLABUS FOR DIPLOMA IN OPERATING ROOM ASSISTANCE  
PROGRAM OFFERED THROUGH DIRECTORATE OF VOCATIONAL  
EDUCATION (COMMUNITY COLLEGES AND VOCATIONAL SKILL DEVELOPMENT  
CENTRES) FROM 2019 – 2020**



கல்விசார் நிலைக்குழுக் கூட்டம்

**MEETING OF THE STANDING COMMITTEE ON  
ACADEMIC AFFAIRS HELD ON FRIDAY  
THE 28<sup>th</sup> JUNE 2019**

**DIPLOMA IN OPERATING ROOM ASSISTANCE**

அறுவை அரங்க உதவியியல் பட்டயம்

**SCHEME OF EXAMINATION**

Subject code	Title of Course	Credit	Hours	Passing Minimum
<b>SEMESTER I</b>				
C19OR11/E19OR01	Anatomy and Physiology	6	90	40/100
C19OR12/E19OR02	Fundamentals of Health	6	90	40/100
C19OR13/E19OR03	Medical and Surgical Care I	6	90	40/100
C19CE10/E19CE10	Communicative English	6	90	40/100
C19ORP1/E19ORP1	Practical I – Basic Care	4	120	40/100
<b>SEMESTER II</b>				
C19OR21/E19OR04	Operating Room Technique	6	90	40/100
C19OR22/E19OR05	Medical and Surgical Care II	6	90	40/100
C19LS23/E19LS05	Life Skill	6	90	40/100
C19ORP2/E19ORP2	Practical II – Positioning and Operating Room Procedures	4	120	40/100
C19ORPW/E19ORPW	Project - Advanced Care	10	150	40/100

**Eligibility for admission:** Pass in 12<sup>th</sup> Std. Examination Conducted by the Govt. of Tamil Nadu Board of Secondary Education, Government of Tamilnadu (or) Any Other Equivalent Examination

**Examination:** Passing minimum for each Course is 40%.classification will be done on the basis percentage Marks of the total marks obtained in all of the Courses and given as below:

40% but less than 50% - Third Class  
 50%but less than 60% - Second Class  
 60% and above - First Class

**Theory Paper**

Internal Marks-25

External Marks-75

**SYLLABUS****SEMESTER I**

Course I : Anatomy and Physiology  
 Course II : Fundamentals of Health  
 Course III : Medical and Surgical Care I  
 Course IV : Communicative English  
 Course V : Practical I – Basic Care

**SEMESTER II**

Course VI : Operating Room Technique  
 Course VII : Medical and Surgical Care II  
 Course VIII : Life skill  
 Course IX : Practical II - Positioning and Operating Room Procedures  
 Course X : Project - Advanced Care

**\*(Semester Pattern for Community College Only)**

## **Program Objectives**

- Communicate effectively using interpersonal skills
- Utilize evidence-based interventions to achieve optimal adaptation.
- Safely perform and prioritize appropriate PRE-INTRA-POST OPERATIVE care skills.
- Employ appropriate thinking to safely and effectively PERFORM OPERATIVE ROOM TECHNIQUES

## **SEMESTER I**

### **COURSE I**

### **(C19OR11/E19OR01)ANATOMY AND PHYSIOLOGY**

#### **Objectives**

- To equip the students with the knowledge of human body system.
- To understand the function of various structure of the human body

#### **Unit I**

**18 Hrs**

The Body as a whole - Cavities of the body and their Contents – Cells and tissues – Organs and systems – The skin and appendages – Structure and function of skeleton - The skull – The Vertebral column – The Thorax – Bones of the upper limbs – Bones of the lower limbs. Joints and Muscles – Types of Joints – The muscular system.

#### **Unit II**

**18 Hrs**

Nervous system– The brain – cerebrum – cerebellum – mid brain – brain stem – pons and Medulla - The spinal cord and spinal nerves - The meninges and cerebrospinal fluid - The eye – The ear – The sense of smell and taste

#### **Unit III**

**18 Hrs**

Circulatory system -The blood – Blood clotting – Blood grouping – Cross matching - The heart and blood vessels - Respiratory System-The nose pharynx – larynx – The Trachea – Bronchi – Lungs.

#### **Unit IV**

**18 Hrs**

Digestive System – structure and functions-The mouth – pharynx – Oesophagus – The stomach – small intestine- large intestine –rectum-anus- liver-salivary glands-gall bladder-pancreas

#### **Unit V**

**18 Hrs**

The Endocrine glands – Thyroid – Parathyroid – Pituitary – Adrenal gland - Male and female reproductive system,– The Excretory system –Kidneys-ureters-urinary bladder-urethra- Urine and micturation - water and salt balance

#### **Reference Books**

1. Text Book for health workers – A.M Chalkey Vols I & II
2. Manual for Health worker –Ministry of Health and Family welfare
3. Bruce Forciea (2012) An text of Human Anatomy and Physiology, Creative Commons Attribution
4. Eldon D Enger, FC Ross and DB Bailey (2005) Concepts in Biology, (11thEdn), TMH
5. Tortora Gerald J and Bryan Derrick son (2014) Anatomy and Physiology, India Edn, Wiley India

**COURSE II**  
**(C19OR12/E19OR02) Fundamentals of Health**

**Objectives**

- The student know about assessment of patient, care of patient ,basic needs and maintaining health.
- To improve skill to taking care of patient

**Unit I**

**18 Hrs**

Vital signs-temperature-pulse-respiration – Blood pressure – weight checking – height checking – history taking –methods of physical examination-types of positions-preparation for diagnostic procedures

**Unit II**

**18 Hrs**

Drugs-uses-sources-classification of drugs-routes of administration-oral medication – injection – infusion – hot and cold application –dressing of a wound-- Types of record – types of Reports.

**Unit III**

**18 Hrs**

Hand washing technique – use of gloves – use of masks in medical - asepsis - mask – gloves – gowns for surgical use – surgical hand scrub – handling the sterile articles-admission of patient - discharge of patient-death care.

**Unit IV**

**18 Hrs**

Care of the skin – Care of the hair –pediculosis treatment Care of the mouth – Care of pressure sore – meeting eliminational needs –urine test-collection of specimen- bed making - Use of comfort device.

**Unit V**

**18 Hrs**

Enema – bowel wash – oxygen administration – ryles tube feeding – Catheterization-nebulizer-assisting for vaginal –rectal examination-lumbar puncture-pre and post operative care.

**Reference Books**

1. Text Book for health workers – A.M Chalkey Vols I & II
2. Introduction to patients care – Dugas
3. Manual for Nursing procedures – Teluram
4. Manual for Health worker –Ministry of Health and Family welfare
5. Potter and Perry's Fundamentals of Nursing: Second South Asia Edition4
6. Principles & Practice Of Nursing Vol 1 Nursing Arts Procedures Sr.Nancy 7th Edition

**COURSE III**  
**(C19OR13/E19OR03)Medical and surgical care I**

**OBJECTIVES**

- To Have a Knowledge Of Medical Surgical Nursing
- To Understand The Various Problems And Treatment Of Diseases

**Unit I**

**18 Hrs**

Skeletal system including, diseases, risk factors, signs and symptoms and diagnosis and treatment- Osteoarthritis. Rheumatoid Arthritis-Arthritis-Lateral Epicondylitis (Tennis Elbow) Medial Epicondylitis (Golfer's or Baseball Elbow)-Carpal Tunnel Syndrome-Ligament Injuries to the Knee.

**Unit II**

**18 Hrs**

Cardiology system including diseases, risk factors, signs and symptoms, and diagnosis and treatment- Coronary artery disease-Atherosclerosis-Hypertension.-Heart failure-Aortic aneurysm-Myocarditis and pericarditis.-Cardiomyopathy.

**Unit III**

**18 Hrs**

Urinary system including diseases, risk factors, signs and symptoms ,and diagnosis and treatment-Bladder Cancer-Bladder Diseases.-Interstitial Cystitis-ureter and Kidney Stones-Urinary Incontinence.

**Unit IV**

**18 Hrs**

Respiratory system including diseases, risk factors, signs and symptoms and diagnosis and treatment-Chronic Obstructive Pulmonary Disease (COPD) - Chronic Bronchitis. -Emphysema-asthma-Lung Cancer-Bronchiectasis. -Pneumonia.-Pleural Effusion.

**Unit V**

**18 Hrs**

Reproductive diseases, risk factors, signs and symptoms, diagnosis and treatment- Prostate cancer - Breast cancer - Ovarian cancer - Cancer of the ovary-infertility-fibroid uterus-Uterine cancer - Testicular cancer.

**Reference**

- Brunner, vol 1,vol2, A text book of medical and surgical nursing.
- Hinkle, J.L. & Cheever, K.H. (2018). Brunner & Suddarth's Textbook of Medical-Surgical Nursing (14th ed.). Philadelphia: Wolters Kluwer.
- Ignatavicius, D.D., Workman, M.L., & Rebar, C.R. (2018). Medical-Surgical Nursing: Concepts for Inter professional Collaborative Care (9th ed.). St. Louis: Elsevier.
- LeMone, P., Burke, K.M., Bauldoff, G., &Gubrud, P. (2015). Medical-Surgical Nursing: Critical Reasoning in Patient Care (6th ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.
- Lewis, S.L., Dirksen, S.R., Heitkemper, M.M., Bucher, L., & Harding, M.M. (2017). Medical-Surgical Nursing: Assessment and Management of Clinical Problems (10th ed.). St. Louis: Elsevier.

**Course IV**  
**(C19CE10/E19CE10) Communicative English**

- 1. Basic Grammar:**
  - a. Review of grammar
  - b. Remedial study of grammar
  - c. Simple sentence
  - d. Word passive voice etc.
- 2. Bubbling Vocabulary:**
  - a. Synonyms
  - b. Antonyms
  - c. One – work Institution
- 3. Reading and Understanding English**
  - a. Comprehension passage
  - b. Précis – writing
  - c. Developing a story from hints.
- 4. Writing English**
  - a. Writing Business letters.
  - b. Paragraph writing
  - c. Essay writing
  - d. Dialogue writing
- 5. Speaking English**
  - a. Expressions used under different circumstances
  - b. Phonetics

**Reference:**

1. V.H.Baskaran – “English Made Easy”
2. V.H.Baskaran – “English Composition Made Easy”  
(Shakespeare Institute of English Studies, Chennai)
3. N.Krishnaswamy – “Teaching English Grammar”  
(T.R.Publication, Chennai)
4. “Life Skill” – P.Ravi, S.Prabakar and T.TamzilChelvam,  
M.S.University, Tirunelveli.

## **Course V**

### **Practical I**

#### **(C19ORP1/E19ORP1)Basic Care**

- a) The surgical team
- b) Prevention of infection
- c) Hazards
- d) Personal attitude
- e) Equipment
- f) Rubber goods
- g) Glass ware
- h) Drugs and solutions
- i) Linen
- j) Admission of patient to theatre
- k) Draping
- l) Care of specimen

## **SEMESTER II**

### **COURSE VI**

#### **(C19OR21/E19OR04)Operating Room Techniques**

#### **Objectives**

- The student gain more skill about Operating Room Techniques

#### **Unit I**

**18 Hrs**

Infection and Control Including Asepsis And disinfection, Hospital Waste Management. Role Of Nurses In Infection control-surgical hand washing, mask, gown, glove using techniques

#### **Unit II**

**18 Hrs**

Responsibility of scrub person and circulating person General operative procedures equipments and uses-laparotomy, minor set, major set, gynaecological ,orthopaedic ,thoracic instruments

#### **Unit III**

**18 Hrs**

Blood transfusion-Antigen antibody reactions ,hypersensitivity-Sutures-types-needles-types-blades –haemostatic agents.

#### **Unit IV**

**18 Hrs**

Pre operative check list informed consent-Patient identification –safe surgery check list – allergy- any infectious disease-site marking-surgical count- Handling sterile equipment and autoclave

#### **Unit V**

**18 Hrs**

Management of emergency equipment-Oxygen cylinder-suction apparatus-diathermy-defibrillator-positioning and safety measures-equipment know how and maintenance of operating table-dome light-scopes

#### **Reference**

- MV. Rammanama , A text book of microbiology for B.sc (nursing)
- Brunnervol1 Vol2 Medical and surgical Nursing
- LeMone, P., Burke, K.M., Bauldoff, G., &Gubrud, P. (2015). Medical-Surgical Nursing: Critical Reasoning in Patient Care (6th ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.
- Lewis, S.L., Dirksen, S.R., Heitkemper, M.M., Bucher, L., & Harding, M.M. (2017). Medical-Surgical Nursing: Assessment and Management of Cli
- college of Operating Department Practitioners (2009) Standards, recommendations and guidance for mentors and practice
- placements: Supporting pre-registration education in Operating Department Practice provision: London CODP clinical Problems (10th ed.). St. Louis: Elsevier.



**Course VII**  
**(C19OR22/E19OR05)Medical and Surgical Care II**

**Objectives**

- To Have a Knowledge Of Medical Surgical Nursing
- To Understand The Various Problems And Treatment Of Diseases

**Unit I**

**18 Hrs**

Gastro Intestinal System Including Diseases and Risk Factors, Signs And Symptoms, Diagnosis And Treatment- Gastroesophageal reflux disease- Appendicitis-peptic ulcer-intestinal obstruction-hernia

**Unit II**

**18 Hrs**

Brain System Including Sign And System Diagnosis Treatment-Alzheimer's disease. Bell's palsy-cerebral palsy-Epilepsy-Motor neurone disease (MND) - Multiple sclerosis (MS) -Parkinson's disease.

**Unit III**

**18 Hrs**

Immune system disease including care and treatment- Systemic lupus erythematosus (lupus)-Multiple myeloma-Type 1 diabetes mellitus-Guillain-Barre syndrome-hodgkin lymphoma

**Unit IV**

**18 Hrs**

ENT-diseases and surgeries -Dizziness-Dysphagia (Difficulty Swallowing)Ear Infection (Otitis Media-Hearing Loss-Hoarseness-Meniere's - Nosebleeding-- Sleep Apnea-Snoring-Tinnitus (Ringing in the Ears)-TMJ Pain (Temporo-Mandibular Joint)-Tonsils & Adenoid Problems

**Unit V**

**18 Hrs**

EYE -diseases and surgeries Age-related Macular Degeneration (AMD) of eye-. -Cataract-Diabetic Eye Disease-Glaucoma.-Dry Eye.-Low Vision - Ectropion. - Entropion.-Facial palsy-Trichiasis.

**Reference**

- Brunnervoll Vol2 Medical and surgical Nursing
- Hinkle, J.L. & Cheever, K.H. (2018). Brunner &Suddarth's Textbook of Medical-Surgical Nursing (14th ed.). Philadelphia: Wolters Kluwer.
- Ignatavicius, D.D., Workman, M.L., & Rebar, C.R. (2018). Medical-Surgical Nursing: Concepts for Interprofessional Collaborative Care (9th ed.). St. Louis: Elsevier.
- LeMone, P., Burke, K.M., Bauldoff, G., &Gubrud, P. (2015). Medical-Surgical Nursing: Critical Reasoning in Patient Care (6th ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.
- Lewis, S.L., Dirksen, S.R., Heitkemper, M.M., Bucher, L., & Harding, M.M. (2017). Medical-Surgical Nursing: Assessment and Management of Clinical Problems (10th ed.). St. Louis: Elsevier.

## **COURSE VIII**

(C19LS23/E19LS05)**Life Skill**

### **I Life Coping or adjustment**

- (a) External and internal influence in one's life
- (b) Process of coping or adjustment
- (c) Coping with physical change and sexuality
- (d) Coping with stress, shyness, fear, anger far live and criticism.

### **II Attitude**

- (a) Attitude
- (b) Self acceptance, self – esteem and self actualization
- (c) Positive thinking

### **III Problem Solving**

- (a) Goal Setting
- (b) Decision Making
- (c) Time Management and stress Management.

### **IV Computers**

- (a) Introduction to Computers
- (b) M.S.Office
- (c) Power Point

### **V Internet**

- (a) Introduction to internet
- (b) E – mail
- (c) Browsing

### **References**

- 1) Life Skill Programme course I & II by Dr. Xavier Alphona MCRDCE Publications. R.K.Mutt Road, Chennai – 28
- 2) ஆளுமைபண்புவுளர்த்தல் மற்றும் தகவல் தொடர்பு by M.Selvaraj Community College,Palayamkottai
- 3) “Life Skill” –P.Ravi, S.Prabahar&T.TamilChelvam, M.S. University, Tirunelveli

## **Course IX**

### **Practical II**

#### **(C19ORP2/E19ORP2)Positioning and Operating Room Procedures**

- Identification of Instruments and its uses
- Sterilization -Autoclave
- Suture material
- Set up of suction apparatus
- Diathermy
- Responsibility to anaesthetist
- Minor procedures
- Position of patient
- Operating instruments trolley set up
- Assisting for procedures-pre-intra-post
- documentation

## **Course X**

#### **(C19ORPW/E19ORPW)Project-Advanced care**

##### **Advanced care in**

Sterilization -Autoclave -CSSD

LINEN AND EQUIPMENT SET UP IN STERILE TRAYS

- Set up of suction apparatus
- Diathermy
- Operating instruments trolley set up
- Minor procedures

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