CONTENT

| S. No. | Content | | | | |
|--------|--|--|--|--|--|
| 1 | Introduction | | | | |
| 2 | nilosophy | | | | |
| 3 | Purpose | | | | |
| 4 | Course Description | | | | |
| 5 | Budget | | | | |
| 6 | Physical Facilities | | | | |
| 7 | Clinical Facilities | | | | |
| 8 | Admission Terms and Conditions | | | | |
| 9 | Organization of the Course | | | | |
| 10 | Examination Scheme | | | | |
| 11 | Examination | | | | |
| 12 | Certification | | | | |
| 13 | Clinical Nursing – I | | | | |
| 14 | Clinical Nursing – II | | | | |
| 15 | Supervision & Management, Clinical Teaching, | | | | |
| | Elementary Research & Statistics | | | | |
| 16 | Teaching Learning Activities | | | | |
| 17 | Methods of Assessment | | | | |
| 18 | Essential Clinical/Practical Activities | | | | |

POST BASIC DIPLOMA IN GERONTOLOGICAL NURSING

INTRODUCTION

Population ageing is a worldwide phenomenon. Older people constitute about 8% of the total population in India. India has the second largest aged population in the world. The health status of older people vary and it is influenced by many factors such as living conditions, lifestyle and supporting factors of family, community and health care delivery system. The magnitude of the problems of older population is also expected to increase. This invites for promotive, preventive curative and rehabilitative measures. Provision of affordable quality health care to older persons has emerged as a major concern for health system in India. Nurses play an important role in the hospital and community in rendering health care. They need to be prepared for taking care of older persons both in hospital and community by way of undergoing specialized courses in Gertontological Nursing.

This challenge in health care demands for older persons requires adequate number of nurses specially trained in gerontological nursing. It is essential for the health care system to meet such needs effectively.

National policy for older persons (1999) has recognized the older persons' right to health & directed for special provisions for older persons with regard to welfare measures & special provision for health care services.

The National Health Policy (NHP) 2002 focuses on the preventive, curative and palliative aspects of the care. Since 1983 the NHP has guided the health care system in meeting the needs of the people to a great extent. The policy recognizes "the need for establishing training courses for super-specialty nurses required for tertiary care institutions".

Post basic diploma in Gerontological Nursing is designed to develop specially trained Gerontological Nurses. The outcome of the program will be to have more nurses prepared for providing competent care at the institutional and community levels.

PHILOSOPHY

INC believes that registered nurses need to be trained in specialized areas of practice in order to provide competent care to the older persons. Expanding roles of nurses and advances in technology necessitates additional training to prepare them for effective participation in care of older persons.

PURPOSE

The purposes of the course are to:

- 1. Provide quality care to older persons.
- 2. Manage & supervise care of older persons at all the three levels of care.
- 3. Teach nurses, allied health professionals, care providers and communities in areas related to gerontological nursing.
- 4. Conduct research in areas of gerontological nursing.

COURSE DESCRIPTION

The course is designed to prepare registered nurses (GNM or B. Sc) with specialized knowledge, skills and attitude in providing advance quality care to older persons, their families, caregivers and communities at all the three levels of care.

BUDGET

There should be budgetary provision for staff salary, honorarium for part time teachers, clerical assistance, library and contingency expenditure for the programme in the overall budget of the institution.

PHYSICAL FACILITIES

- 1. Class room -1
- 2. **Nursing Laboratory** -1
- 3. **<u>Library</u>** Library having current nursing textbooks & journals in medical surgical, orthopaedic, cancer, neuro sciences, rehabilitation, geriatric, community health nursing etc
- 4. **Teaching Aids** Facilities for the use of
 - □ Overhead projector
 - ☐ Slide Projector
 - ☐ Video viewing
 - ☐ LCD projector
 - Computer
 - ☐ Equipment for demonstration of skills

5. Office facilities-

- ☐ Services of typist, peon, safai karamchari
- ☐ Facilities for office, equipment and supplies, such as
 - Stationary
 - Computer with printer
 - Xerox machine/Risograph
 - Telephone

CLINICAL FACILITIES

Minimum Bed strength

| 250-500 beds and geriatric ward/unit/clinic facility |
|--|
| Affiliation to old age homes |
| Affiliation to community health centers- urban and rural for |
| geriatric home care |

ADMISSION TERMS AND CONDITIONS

The student seeking admission to this course should:

- 1. Be a registered nurse (R.N & R.M) or equivalent
- 2. Possess a minimum of one year experience as a staff nurse.
- 3. Nurses from other countries must obtain an equivalence certificate from INC before admission.
- 4. Be physically fit.
- 5. No. of seats -
 - Hospital which is having 250-500 beds with minimum 10% geriatric patients = 5-10 seats
 - Hospital having more than 500 beds with minimum 20% geriatric patients = 10-20 **seats**

ORGANIZATION OF THE COURSE

A. **Duration:** Duration of the course is one academic year.

B. Distribution of the Course:

| 1. Teaching: Theory & Clinical practice | 42 weeks |
|---|----------|
| 2. Internship | 4 weeks |
| 3. Examination (including preparation) | 2 weeks |
| 4. Vacation | 2 weeks |
| 5. Public holidays | 2 weeks |
| | |

C. Course objectives:

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 gerontological nursing.

Specific Objectives:

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

- 1. Describe the demographic transition of population and its implications for health services.
- 2. Describe ageing and ageing process.
- 3. Describe the concepts & principles in caring for older persons
- 4. Provide high quality evidence based nursing care to older persons and their families including the underprivileged and disabled using nursing process.
- 5. Communicate effectively, respectfully and compassionately with older adults and their families.
- 6. Perform assessment of functional, physical, cognitive, psychological, social and spiritual status of older persons by using appropriate tools.
- 7. Describe the modifications required for age friendly environment in home, community, clinics, institutions & community.
- 8. Recognize and manage common health problems of older persons including geriatric syndromes.
- 9. Appreciate the pharmaco dynamics and pharmacokinetics related to common drugs used in disease condition of older persons.
- 10. Use technology to enhance older persons functional independence and safety.
- 11. Provide culturally appropriate end of life care to older persons.
- 12. Teach and supervise nurses, allied health workers & caregivers in

- skills necessary to deliver care to older persons.
- 13. Coordinate with key stakeholders in providing care to older persons in hospital and community.
- 14. Identify the research priorities in gerontological nursing for evidence based practice & to conduct research
- 15. Demonstrate skills in management of geriatric services
- 16. Design a plan for organization of geriatric care units in different settings.

D. Course of Studies:

| | Theory | Practical |
|---------------------------------------|-----------|------------|
| 1. Clinical Nursing-I | 155 Hours | |
| (Inclusive of foundation courses) | | Integrated |
| 2. Clinical Nursing-II | 155 Hours | Clinical |
| 3. Supervision & Management, Clinical | | Practice |
| Teaching, Elementary Research & | | |
| Statistics | | 1280 Hours |
| (i) Supervision & Management | 30 Hours | |
| (ii) Clinical Teaching | 30 Hours | |
| (iii) Elementary Research & | 30 Hours | |
| Statistics | | |
| 4. Internship | | 160 Hours |
| | | |
| TOTAL | 400 Hours | 1440 Hours |

- Hours distribution for theory and practice 42 weeks X 40hours/week
 = 1680 hours
 - Block classes 4 weeks X 40 hours/week
 - = 160 hours
 - Integrated theory & clinical practice 38 weeks X 40 hours/week = 1520 hours
 - (Theory 400 hrs)* Theory 6 hours /week38 weeks X 6 hours/week
 = 240 hours
 - Clinical experience 34 hours/weeks 38 weeks X 34 hours/week = 1280 hours
 - Internship: 4 weeks x 40 hours = 160 hours

E. Clinical Experience

Areas of clinical experience required

| *Geriatric Services | - 38 weeks |
|---|------------|
| Medical wards/geriatric ward | - 6 weeks |
| Surgical wards | - 6 weeks |
| Intensive care units/CCU | - 2 weeks |
| Geriatric clinic | - 4 weeks |
| Psychiatric OPD | - 1 week |
| Neuro OPD | - 1 week |
| Physiotherapy/rehabilitation Unit | - 4 weeks |
| Community/medicare clinics/follow up services | - 6 weeks |
| Day Care Center* | - 2 weeks |
| Old Age Home | - 6 weeks |
| Hospice* | - 2 weeks |

*modify the nature and duration of the experience mentioned above as per the availability of clinical facilities

Two weeks evening and two weeks night

EXAMINATION SCHEME

| | Int. Ass. Marks | Ext. Ass. Marks | Total marks | Duration (in hours) |
|-------------------------------|-----------------------|-----------------------|----------------|---------------------------|
| A. Theory | | | | |
| Paper I- Clinical Nursing I | 50 | 150 | 200 | 3 |
| Paper II- Clinical Nursing II | 50 | 150 | 200 | 3 |
| Paper III- Supervision & | | | | |
| Management, | 50 | 150 | 200 | 3 |
| Clinical Teaching, | | | | |
| Elementary | | | | |
| Research & | | | | |
| Statistics | | | | |
| B. Practical | | | | |
| Clinical Nursing (teaching & | 100 | 100 | 200 | |
| supervision to be integrated) | | | | |
| Grand Total | 250 | 550 | 800 | |

C. Conditions for Admission to Examination

The Student:

- 1. Has attended not less than 75% of the theoretical instruction hours in each subject during the year.
- 2. Has done not less than 75% of the clinical practical hours. However, students should make up 100% of attendance for integrated practice experience and internship in term of hours and activities before awarding the certificate.

EXAMINATION

The examination to be conducted by the State Nursing Registration Council/State Nursing Examination Board/University recognized by the Indian Nursing Council.

Standard of Passing

- In order to pass a candidate should obtain at least 50% marks separately in internal Assessment and external examination in each of the theory practical and papers.
- a) Less than 60% is Second division,
 - b) 60 % and above and below 75% is First division,
 - c) 75 % and above is Distinction.
- 3. Students will be given opportunity of maximum of 3 attempts for passing

CERTIFICATION

- A. TITLE Post Basic Diploma In Gerontological Nursing.
- B. A diploma is awarded upon successful completion of the prescribed study programme, which will state that
 - i) Candidate has completed the prescribed course of Gerontological Nursing.
 - ii) Candidate has completed prescribed clinical experience.
 - iii) Candidate has passed the prescribed examination.

CURRICULUM

CLINICAL NURSING - I

(Including Foundation Courses)

Description:

This course is designed to develop an understanding of the principles of related biological and behavioral sciences, and gerontological nursing

Objectives:

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

- 1. Describe the principles of behavioral, biological and nursing sciences as applied to gerontological nursing.
- 2. Describe ageing & ageing process.
- 3. Describe the physical, physiological and emotional changes occurring during ageing process.
- 4. Communicates effectively, respectfully and compassionately with older adults and their families.
- 5. Describe the policy & welfare programs for older persons.
- 6. Describe the concepts & principles of gerontological Nursing.
- 7. Describe Nursing process pertaining to geriatric care.
- 8. Explain concept & components of healthy ageing & role of the nurse in promoting active/healthy ageing
- 9. Describe characteristics of age friendly environment in home, institutions & community.
- 10. Explain principles of administration of drugs to older persons.

Theory = 155 hours

| | | Theory = 155 hours |
|----------------------|-------|--|
| Subject | Hours | Content |
| Unit I Psychology | 10 | Review Individual differences Learning, Motivation, attention & perception Emotions Developmental needs of older adults Psychological changes in ageing Human behavior & needs in crisis Stress & coping in crisis situations Leadership Communication and IPR Counselling Attitudes and humanizing care |
| Unit II Sociology | 10 | Review Social organization & community resources Leadership roles in community, Social roles & aspects in care of older persons Family and family relationships Socio cultural influences on care of older persons The personal & social problems of the family. |
| Unit III | 5 | Demography and Demographic transition ageing population Definition, meaning, population trends – global and Indian |

| | | 11 |
|----------|----|---|
| Unit IV | 10 | Ageing & ageing process |
| | | • What is ageing? |
| | | Ageing theories |
| | | Ageing process |
| | | Psychosocial aspects of ageing |
| Unit V | 15 | Applied Anatomy & Physiology |
| | | Review: age related changes in |
| | | Nervous system |
| | | Respiratory system |
| | | Cardiovascular system |
| | | Gastro intestinal system |
| | | • Endocrine system |
| | | Musculoskeletal system |
| | | Genitourinary system |
| | | Reproductive system |
| | | Sensory organs |
| Unit VI | 10 | Communication Skills & IPR |
| | | Process & methods |
| | | Establishing & maintaining good IPR & |
| | | communication with family, staff and |
| | | colleagues |
| | | Multidisciplinary team & role of nurses |
| | | Guidance & Counseling |
| Unit VII | 10 | Social support & services for ageing |
| | | Implementation of National policy and |
| | | National Health policy for older persons |
| | | Ageing & society |
| | | Role of governmental organizations & NGOs |
| | | Agencies working for elderly: national & |
| | | state: |
| | | Social support & social networking, self help |
| | | groups, elderly clubs, role of police |
| | | Welfare measures & provisions for the older |
| | | persons |

| 1 | • | |
|-----------|----|---|
| Unit VIII | 10 | Introduction to Gerontological nursing Definition, concepts and principles of gerontological nursing Definition of terms Nursing process Levels of gerontological care and role of nurse Principles of prevention of infections in older persons Standard safety measures & biomedical waste management |
| UNIT IX | 30 | Geriatric nursing Assessment Baseline Evaluation of newly –worsened health status or newly discovered risk factor Components Clinical Functional Activities of Daily Living(ADL) Environment Social support Mini mental status examination Multi disciplinary geriatric assessment Geriatric nursing Assessment Tools & scales for assessment |
| UNIT X | 10 | Healthy ageing O Health risks in older persons- Smoking, Alcohol Health promotion: O Nutrition Exercise O Screening O Prevention of accidents O Prevention of substance use-alcohol, drugs etc O Smoking cessation |

| | | Prevention of adverse drug reactions Immunization |
|---------------------------|----|---|
| UNIT XI Communit y Health | 15 | Health services and programs for older persons Types of services for care of older persons: Health promotion & disease prevention: Health education Screening of general health Screening for cancer of uterine cervix Specific health promotion programs (smoking cessation, immunization) Curative: Early diagnosis & treatment of day to day ill health in PHC, medicare/mobile clinics Health insurance/securities Diagnosis & treatment of serious ill health in secondary & tertiary care hospitals Chronic care in home/long term care institutions, Rehabilitative: physiotherapy, restorative surgery, Prosthesis, occupational therapy Mental health services: counseling services for retirement, relocation, widowhood & bereavement, drug & substance abuse, ambulatory treatment for mental diseases Organization of services for older people Health education: concepts, principles, approaches and methods Contents of health education for older persons |

| Unit XII | 10 | Age friendly environment |
|-----------|----|---|
| | | Safety considerations, prevention of risks, |
| | | falls injuries |
| | | Modifications in home, institutions & |
| | | community: roads, buildings, hospitals, |
| | | public places, old age homes |
| | | Technology to enhance independence |
| | | Assisting devices |
| | | Role of society, neighbours, police |
| Unit XIII | 10 | Review |
| Pharmacol | | Pharmacodynamics & Pharmacokinetics of |
| ogy | | common drugs used in management of |
| | | health problems of older persons |
| | | Principles of drug administration in older |
| | | persons, role of nurses and care of drugs |
| | | |

CLINICAL NURSING - II

Description:

This course is designed to develop an understanding of etiology, pathophysiology, symptomatology, diagnostic measures and nursing management of patients with geriatric problems including rehabilitation.

Objectives:

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

- 1. Describe the morbidity & mortality in old age.
- 2. Apply nursing process in the management of common medical, surgical & psychiatric problems in older persons.
- 3. Identify older abuse & counsel old persons, families & community.

- 4. Provide culturally sensitive end of life care to older persons.
- 5. Identify caregiver stress & provide support.

Total Hours: 155

| | | Total Hours: 155 |
|---------|-------|---|
| Unit | Hours | Subject |
| UNIT I | 15 | Introduction |
| | | Morbidity & mortality in old age |
| | | Stereotyping of ageing- common myths & facts |
| | | Nursing process in caring for older persons |
| | | Challenges in caring for older persons |
| | | Role of nurses in supporting older persons |
| UNIT II | 60 | Management of common diseases of older |
| | | persons |
| | | Etiology, pathophysiology, signs & symptoms, |
| | | medical & nursing diagnosis, treatment & |
| | | Management including nursing management of |
| | | common diseases of ageing persons |
| | | - CVS - hypertension, IHD, CCF, other common |
| | | problems, syncope |
| | | - Endocrine- DM, hypo/hyperthyroidism, |
| | | pituitary disorders |
| | | - GI- Hernia, GERD, peptic ulcer, non ulcer |
| | | dyspepsia, cancers of GIT, constipation, |
| | | hepato-biliary disease nutritional assessment |
| | | - CNS-, 3D- Dementia delirium, depression, |
| | | CVA, Parkinsons', Alzheimer's |
| | | - Respiratory- COPD, pneumonia, tuberculosis, |
| | | bronchial asthma, lung cancer |
| | | - Genito urinary- UTI, BPH, urinary |
| | | incontinence, prostatic Ca, Ca cervix |
| | | - Musculo skeletal: osteoporosis, osteoarthritis, |
| | | rheumatoid arthritis, falls, injuries, fractures |

| _ | | 16 |
|---------|----|---|
| | | Eye- cataract, glaucoma, macular degeneration, diabetic retinopathy, blindness ENT – Hearing problems, Presbycusis (age related loss of heaing), ear wax Dermatological problems: skin infectionsherpes, scabies, pyoderma, leprosy, decubitus ulcers, pruritis, Xerosis, seborrheic dermatitis, drug reactions Taste & smell: loss Dental problems |
| NIT III | 10 | Psychiatric problems of older persons |
| | | Depression Sleeping disorders Self neglect Alcoholism Drug & substance abuse Cognitive impairment & Dementia Other disorders |
| Unit IV | 15 | Malignacies of ageing Cancers in old age Principles of management: surgery, radiotherapy, chemotherapy QOL in older persons with cancer Palliative care, Hospice care Care of terminally ill- End of life care |
| Unit V | 20 | Counseling the older person Definition, principles, dimensions, process & techniques of counseling Counseling the older person Common problems requiring counseling Special considerations in counseling the older persons: retirement, relocation, widowhood & bereavement, climacteric, |

| | | relationships, drug & substance use, death & dying, ambulatory treatment for mental |
|----------|----|---|
| | | diseases |
| Unit VI | 10 | Elder Abuse & violence |
| | | Definition & spectrum |
| | | Dentification of elder abuse |
| | | Likely victims |
| | | Prevention & Management |
| | | Counseling clients, abuser/ family |
| Unit VII | 5 | Care giver stress |
| | | Burden of care giving |
| | | Assessment of care giver burden |
| | | Supporting the care giver |
| | | |
| UNIT | 20 | Rehabilitation & Occupational therapy |
| VIII | | • Needs |
| | | • Principles |
| | | • Components |
| | | assisting devices |
| | | • innovations |

Supervision & Management, Clinical Teaching, Elementary Research & Statistics

Total Hours: 90

| Section-A | Supervision & Management | -30 HRS |
|-----------|----------------------------------|---------|
| Section-B | Clinical Teaching | -30 HRS |
| Section-C | Elementary research & Statistics | -30 HRS |

Description:

This course is designed to develop an understanding of the principles of supervision and management, clinical teaching and research.

Objectives:

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

- 1. Describe Professional trends.
- 2. Describe role of nurse in management and supervision of nursing personnel in geriatric care.
- 3. Teach nurses and allied health workers about gerontological nursing.
- 4. Describe research process and perform basic statistical tests.
- 5. Plan and conduct research in gerontological nursing

| Unit | Hours | Subject |
|--------|-------|---|
| UNIT I | 20 | SUPERVISION & MANAGEMENT |
| | | Management |
| | | Definition & Principles |
| | | • Elements of management of care:-Planning, |
| | | Organizing, Staffing, Reporting, Recording and Budgeting |
| | | Management of service settings for elderly e.g. geriatric clinics, wards, hospitals, mobile |
| | | clinics, old age homes etc. Time, material & personnel |
| | | Layout and Design of units for care of elderly: home, institution |
| | | Clinical supervision |
| | | Introduction, definition and objectives of supervision |
| | | Principles & Functions of supervision |
| | | Qualities of supervisors |
| | | Responsibilities of clinical supervisors |
| | | Practice Standards of care of elderly |
| | | - Policies and Procedures |
| | | - Establishing Standing orders and Protocols |
| | | - Orientation programme for new recruits |

| | • | 19 |
|----------|---|--|
| | | Quality Assurance Programme in geriatric units Nursing audit Performance Appraisal Principles of performance evaluation Tools of performance appraisal Rating scales Checklists Peer reviews Self appraisals Staff development Introduction & purposes In-service education Continuing education |
| UNIT II | 5 | Professional trends Introduction Code of Ethics, code of professional conduct and practice standards of Nursing in India Ethical issues in care of older persons Expanding role of the nurse: Specialist nurse, Nurse Practitioner etc Professional organizations |
| UNIT III | 5 | Legal aspects Provisions, Legislations and regulations related to services for older adults Constitutional Legal National policy for older persons Plan of action Consumer Protection act (CPA) Negligence & Malpractice Legal responsibilities of nurses Case studies of judgment to negligence of |

| | | services in the Hospital - Medico legal aspects – elder abuse, • End of life issues; Making a will, organ donations, advance directives, funerals etc. • Records and Reports • Role of the nurse in Legal issues |
|---------|----|--|
| UNIT IV | 30 | Teaching learning process Introduction and concepts Principles of teaching and learning Formulation of learning objectives Lesson Planning Teaching methods Lecture Demonstration, Simulation Discussion Clinical teaching methods Micro teaching Self learning Fevaluation Purposes Type Steps Tools for assessing knowledge, skill and attitude Use of media in teaching learning process |
| UNIT 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 gerontological care

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

Teaching Learning Activities

(i) Methods of Teaching:

- √ Lecture
- √ Demonstration & Discussion
- √ Supervised practice
- √ Seminar
- √ Role play
- √ Workshop
- √ Conference
- √ Skill training
- √ Simulations
- √ Field visits
- √ Research project

(ii) A.V Aids:

- √ Over head projector
- √ Slide Projector
- √ Black board
- √ Graphic Aids
- √ Programmed Video shows
- √ Models & Specimens
- √ LCD projector
- √ Computer

METHODS OF ASSESSMENT:

- √ Written examination
- √ Objective type
- √ Short notes
- √ Assignments
- √ Case studies/care notes
- $\sqrt{}$ Clinical presentation
- √ Seminars
- √ Project

ESSENTIAL CLINICAL/PRACTICAL ACTIVITIES

- Patient Care Assignments
- Writing of Nursing care plan for assigned patients
- Writing case studies **5**
- Case presentations **5**
- Writing Observation report
- Planned health teaching **5**
- Project **1**
- Clinical teaching **3**
- Conduct bedside rounds
- Prepare clinical rotation plan

- Prepare clinical teaching plan for students
- Perform clinical evaluation of students/staff
- Unit management plan- Designing
- Supervision techniques- Writing unit report, Performance appraisal, Guidance, Staff assignment, Material management
- Maintenance of Records and Reports

Essential gerontological nursing skills No. of times

I. Procedures Assisted:

- i. Advanced life support
- ii. Lumbar Puncture
- iii. Arterial Blood Gas
- iv. ECG Recording
- v. Arterial B P monitoring
- vi. Blood transfusion
- vii. IV cannulation & therapy
- viii. Arterial catheterization
 - ix. Chest tube insertion
 - x. Endotracheal intubation
 - xi. Ventilation
- xii. Insertion of long line

II. Procedures Performed:

i. Airway management

- a) Application of Oro Pharyngeal Airway
- b) Oxygen therapy
- c) Care of Tracheostomy
- d) Endotracheal Intubation
- ii. Cardio pulmonary Resuscitation
- iii. Monitoring- clinically & with monitors, ECG

iv. Geriatric Nursing Assessment:

v. **Feeding** - management of OG tube insertion, gavage feeding, TPN,

- vi. **Administration of Drugs:** I/M, IV injection, IV Cannulation & fixation infusion pump Calculation of dosages, Monitoring fluid therapy, Blood administration.
- vii. **Procedures for prevention of infections**: Hand washing, disinfections & sterilization, surveillance, fumigation
- viii. Collection of specimens
 - ix. **Setting, Use & maintenance of basic equipment**: Ventilator, O₂ analyzer, monitoring equipment, Infusion pump,
 - x. Use of assisting devices
 - xi. Physiotherapy, exercise program for older persons
- xii. Helping older persons with mobility problems
- xiii. Communicating with older persons with hearing & visual problems

III. Other Procedures: