

**BHARATHIAR UNIVERSITY, COIMBATORE 641 046**  
**CENTRE FOR COLLABORATION OF INDUSTRIES AND INSTITUTIONS (CCII)**  
**DIPLOMA IN HEALTH CARE ASSISTANCE**

(For the CCII students admitted from the academic year 2015-16 onwards)

**Course Title and Course Description**

The programme will be conducted at a Hospital recognized by the Bharathiar University under the CCII collaborative programme. Candidates shall abide by the stipulated timings, discipline, rules and regulations of the hospital to which they will be assigned for the entire course.

**1. SCHEME OF EXAMINATION:**

Sl. No.	Course Title	Total Marks
	<b>Semester I</b>	
1.	Paper I -Basics of Anatomy & Physiology	100
2.	Paper II - Applied Microbiology	100
3.	Practical I - Applied Microbiology	100
	<b>Semester II</b>	
4.	Paper III - Basics of Patient Care and Health care Assistance -I	100
5.	Paper IV - Basics of Patient Care and Health Care Assistance - II	100
6.	Practical II - Basics of Patient Care and Health Care Assistance I and II	100
	<b>Total</b>	<b>600</b>

**2. Admission Criteria:**

- a) Pass in +2
- b) Graduates can also apply

**3. Course Duration:**

The duration shall be 12 months Full Time. The candidates admitted to this course would spend at least six hours a day and 30 hours per week in the Bharathiar University Recognized Hospitals.

**4. Medium of Instruction:**

English shall be the medium of instruction

**5. Practical Training:**

Being practical oriented programme the focus will be more for practical training. The candidate shall undergo a practical training in various OPD's and wards in the Bharathiar University affiliated Hospitals.

**First Semester:  
PAPER I  
BASICS OF ANATOMY & PHYSIOLOGY**

**OVERALL OBJECTIVE:** At the end of the programme the students will be able to understand the basic concepts of Anatomy and Physiology and develop desirable attitude and skill in application of this knowledge while providing care to the patients.

**SPECIFIC OBJECTIVES:** The students will be able to

- 1) Explain the organization of Human body
- 2) Describe the location, features and parts of systems of the body
- 3) Understand the function of various systems of the body

**UNIT I**

**ORGANISATION OF HUMAN BODY:**

Definition & subdivisions of anatomy, anatomical position and terminology, regions and system of the body, cavities of the body and their contents.

Size and shape of cells. Parts of cells, cell division. Tissues of the body, characteristics and function of different types of tissues and types of glands.

**UNIT II**

**THE SKELETAL SYSTEM:**

Skeleton – Definition axial and appendicular skeleton with names and location of bones

Joints – Types of joints & kinds of movement possible

Muscles – Definition, types of muscles, difference between striated & smooth muscle

Functions of the muscles, bone and joints.

**UNIT III**

**THE NERVOUS SYSTEM:**

Subdivisions of nervous system, brain – location, external features and functions of brain &

Spinal cord, location, features, functions of the sense organs

**UNIT IV**

**CARDIO VASCULAR AND RESPIRATORY SYSTEM:**

The types and structure of blood vessels. Shape, structure of heart, blood supply to heart and functions of cardio vascular system.

The name, location of organs of respiration and Physiology of respiration.

**UNIT V**

**OTHER SYSTEMS OF THE BODY**

Name, parts and functions of alimentary canal and accessory organs

Names of endocrine gland – location & features and function of the endocrine glands Parts and functions of kidney, ureter, bladder and urethra

### Reference Books

1. Vijaya D Joshi , Ashalata , (2014), Anatomy and Physiology for Nursing and Healthcare, 2<sup>Nd</sup> Edition, Lippincott Williams & Wilkins
2. Anne Waugh, Allison Grant,(2014), Ross and Wilson Anatomy and Physiology in Health and Illness,12<sup>th</sup> Edition, Churchill Livingstone
3. Basic Nursing Procedure Manual & Essentials – First Edition C.P. Thresyamma – CBS Publishers and Distributors Pvt LTD, Ansari Road ,New delhi

## PAPER II APPLIED MICROBIOLOGY

**OVERALL OBJECTIVE:** At the end of the course the students will be able to acquire knowledge on the basic concepts of Microbiology and microbes and develop desirable skill and attitude in sterilization and disinfection and other methods of prevention of infection.

**SPECIFIC OBJECTIVES:** The students will be able to

1. Describe the morphological features, sources and mode of transmission of various organisms.
2. Explain concurrent and terminal disinfection methods.
3. Demonstrate skill in disinfection and sterilization of equipments, rubber goods and glass wares.
4. Follow the standard precautions to prevent blood borne infections.
5. Segregate Biomedical waste materials and dispose it appropriately.

### UNIT I

#### INTRODUCTION:

Definition & importance of microbiology for health care assistance - Classification of microorganisms - Brief morphological features of microbes - General properties of bacteria, viruses and fungus

### UNIT II

#### CHAIN OF INFECTION:

Definition of infection- Chain of infection – Sources of microbes, routes of infection, and mode of spread Hospital acquired infection and prevention of hospital acquired infection Immunity and its types.

### UNIT III

#### STERILIZATION AND DISINFECTION:

Sterilization – Definition and classification physical methods of sterilization, use of autoclave, preparation and sterilization of surgical packs - Disinfection – Definition and classification, methods of disinfection - Principles of cleaning and disinfecting the rubber, goods, glass wares, packs, linens, equipments

### UNIT IV

#### STANDARD PRECAUTION AND BIOMEDICAL WASTE MANAGEMENT

Collection and transport of specimen - standard precaution for prevention of blood borne infection- Collection of culture sources from theatre- Biomedical waste segregation and waste management.

**UNIT V**  
**ENVIRONMENTAL HYGIENE**

Maintenance of Ward hygiene, Terminal and concurrent disinfection - Role of the health care assistants in maintaining cleanliness of the patient and environmental hygiene.

**Reference Books**

1. Margaret J. Parker, Vivien A. Stucke, (1982) Microbiology for Nurses, 6<sup>th</sup> Edition, Bailliere Tindall
2. Basic Nursing Procedure Manual & Essentials – First Edition C.P. Thresyamma – CBS Publishers and Distributors Pvt LTD, Ansari Road ,New delhi
3. Principles & Practice Of Nursing- Vol-I- - Sister Cecy Correia- Jaypee Brothers , Coimbatore

**PRACTICAL I: APPLIED MICROBIOLOGY**

**UNIT I :**  
Hand Washing Techniques and Patient Unit Preparation.

**UNIT II :**  
Various methods of sterilization & disinfection.  
Specimen Collection

**UNIT III :**  
Biomedical waste management – collection , sterilization , treatment & disposal . .

**UNIT IV :**  
Standard & universal precaution  
Use of PPE

**UNIT V :**  
Pre – operative skin preparation  
Setting up of Dressing tray  
preparation of Surgical packs .

**SECOND SEMESTER: PAPER III**  
**BASICS OF PATIENT CARE AND HEALTH CARE ASSISTANCE-I**

**OVERALL OBJECTIVE:** at the end of the course the students will be able to acquire knowledge on the basic concepts of patient care and develop desirable skill and attitude in providing basic care to the patients and assist the registered nurses in delivery of quality care.

**SPECIFIC OBJECTIVES:** The students will be able to

1. Explain the factors health and the impact of illness on the patients and family members
2. Demonstrate skill in basic care such as Mouth care, Sponge bath, Back care, nail care etc.,
3. Assist the nurses in therapeutic procedures, catheterization, intravenous cannulation.
4. Prepare the patient for surgery.
5. Provide death care.
6. Demonstrate skill in cardiopulmonary resuscitation and first aid.

**UNIT I: HEALTH AND WILLNESS**

Definition of health and illness, factors influencing health and Illness behaviour, Impact of the illness on patient and family, Prevention of Illness, Organization of hospital, Inpatient and outpatient department, Role of Health care assistance in each department admission to the Hospital – Unit preparation, Admission procedure discharge from the hospital – Types, Discharge, procedure role and responsibilities of the health care assistants in Admission and discharge, Communication among the health care team and maintaining effective communication.

**UNIT II : BASIC HUMAN NEEDS**

Bed making, Types of beds and various positions, Promotion of comfort, Rest and sleep hygienic needs – definition, factors influencing hygiene, Basic care – bath, back care, back massage, feet and nail, mouth care, eyes, ear and nose, hair care and pediculosis, treatment, prevention of bed sore, providing urinal / bed pan, perineal care and catheter care, bowel elimination, Enemas, Sitz bath, Suppository, Passing Flatus tube, Assisting the patients with vomiting, Diarrhoea and death care, Assisting the patient for feeding vital signs, Checking the temperature, pulse and respiration, hot and cold applications – indication , contraindication and procedure.

**UNIT III : SAFETY IN HEALTH CARE FACILITY**

Body mechanics – principles, factors affecting body alignments, range of motion and joint, mobility, prevention of injuries and promotion of safety, transporting the patient from bed to wheel chair and vice versa, Records and reports – Types and issues, common legal and ethical, problems, negligence, mal practice, defamation, of character.

**UNIT IV : FIRST AID**

Basic principles of First Aid

Wounds – Types of Wounds, Wound care and Bandages,

Bleeding – Types and first aid measures, Bleeding from special parts.

Fracture – Types and first aid measures

First aid for abdominal injury, drowning, poisoning, burns

Basic life support

Lifting and transporting the unconscious victim.

## **UNIT V : PREPARATION OF THE PATIENT PRIOR AND AFTER THE SURGERY**

Preoperative Skin preparation,

Sending and receiving the patient from operation room, assisting the nurses in the operation theatre, maintaining the theatre hygiene

### **Reference Books**

1. Axalla J. Hoole, Robert A. Greenberg, C. Glenn Pickard, (1995), Patient Care Guidelines for Nurse Practitioners, 5<sup>Th</sup> Edition, Lippincott Williams
2. Stephanie's Principles & Practice Of Nursing- Vol-II- Sr. Nancy- Fourth edition N. R. Brothers M.Y.H. Road, Indore
3. Principles & Practice Of Nursing- Vol-II- - Sister Cecy Correia- Jaypee Brothers , Coimbatore
4. Basic Nursing Procedure Manual & Essentials – First Edition C.P. Thresyamma – CBS Publishers and Distributors PVT LTD24 Ansari roads, New Delhi

## **PAPER IV**

### **BASICS OF PATIENT CARE AND HEALTH CARE ASSISTANCE-II**

**OVERALL OBJECTIVE:** To introduce to the student the significant of medical disorders, patient receiving, assessment in OPD and ward, maintain the patient and ward record

#### **UNIT I**

Introduction to Patient care: General methods of clinical observation- History taking, vital signs and General systemic/physical examination

#### **UNIT II**

Special procedures & Emergency Care:

Catheterization, Blood Transfusion, Dressing, EndoTracheal Intubation, Oxygen, Administration & Suction.

Cardiac Arrest (Heart Attack), Anaphylaxis, Epilepsy, Fracture, Head Injury & Unconsciousness.

#### **UNIT III**

Infectious diseases - Measles, Rubella, Hopping cough, Diphtheria - Diseases of gastrointestinal system - Diseases of liver spleen, stomach, intestine and colon

Diseases of metabolism - Vitamin deficiency diseases, diabetes mellitus, gout, obesity

#### **UNIT IV**

Patient Assessment: Patient attending assessment, provisional diagnosis, treatment plan in OPD

#### **UNIT V**

Patient Management: Patient receiving, admission, history taking, assessment, investigation chart, provisional, differential diagnosis, patient and ward record and preparation the patient for discharge

### **Reference Books**

1. Axalla J. Hoole, Robert A. Greenberg, C. Glenn Pickard, (1995), Patient Care Guidelines for Nurse Practitioners, 5<sup>th</sup> Edition, Lippincott Williams
2. Stephnie's Principles & Practice Of Nursing- Vol-II- Sr. Nancy- Fourth edictionN. R. Brothers M.Y.H. Road, Indore
3. Principles & Practice Of Nursing- Vol-II- - Sister Cecy Correia- Jaypee Brothers , Coimbatore
4. Basic Nursing Orocedur Manual & Essentials – First Edition C.P. Thresyamma – CBS Publishers and Distributors PVT LTD24 Ansari roads, New Delhi

## **PRACTICAL II: BASICS OF PATIENT CARE AND HEALTH CARE ASSISTANCE - I & II**

### **Unit I**

Bed making,  
Cold compress, tepid sponging, cold sponging Ice cap, hot water bags

### **Unit II**

Recording Vitals : Temperature, Respiration, Pulse, Blood Pressure  
Ryles tube ASPIRATIO & FEEDING

### **Unit III**

Perineal care and catheter care  
Administering Enema, Suppositories  
Sitz bath and passing flatus tube.

### **Unit IV**

Oxygen therapy, Inhalation, Nebulization and suction  
Transporting the patient from bed to wheel chair and vice versa

### **Unit V**

Maintenance of records and reports  
Admission and discharge procedures  
IV drug administration & Blood Transfusion