

## Diploma In Health Care Assistant – 2 years

### SCHEME OF EXAMINATION

Subject Code	Title Of The Course	Hours	Passing Minimum
<b>SEMESTER I</b>			
Subject 1	Anatomy and Physiology	3	40/100
Subject 2	Fundamental of Health	3	40/100
Subject 3	Environment and Health	3	40/100
Subject 4	Communicative English	3	40/100
Subject 5	Practical I-Basic Procedures	3	40/100
<b>SEMESTER II</b>			
Subject 1	Nutrition	3	40/100
Subject 2	First Aid	3	40/100
Subject 3	Life Skill	3	40/100
Subject 4	Practical II – Advanced Procedures	3	40/100
Subject 5	Mini Project-Types of diet	3	40/100
<b>SEMESTER III</b>			
Subject 1	Psychology	3	40/100
Subject 2	Microbiology	3	40/100
Subject 3	Sociology	3	40/100
Subject 4	Practical III-Internship in Hospital	3	
Subject 5	Practical IV– Health Education –Cause, Spread, Prevention, Treatment of Communicable Diseases-10	3	40/100
<b>SEMESTER IV</b>			
Subject 1	Child Health	3	40/100
Subject 2	Maternal Health	3	40/100
Subject 3	Perioperative Care	3	40/100
Subject 4	Practical V–Maternal Child Health	3	40/100
Subject 5	Major Project/Internship -Maternal Child Health	3	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 Tamil Nadu 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 : Fundamental of Health  
Course III : Environment and Health  
Course IV : Communicative English  
Course V : Practical I- Basic Procedures

### **SEMESTER II**

Course VI : Nutrition  
Course VII : First Aid  
Course VIII : Life Skill  
Course IX : Practical II – Advanced Procedures  
Course X : Mini Project-Types of diet

### **SEMESTER III**

Course XI : Psychology  
Course XII : Microbiology  
Course XIII : Sociology  
Course XIV : Practical III - Internship in Hospital  
Course XV : Practical IV – Health Education –Cause, Spread, Prevention, Treatment of Communicable Diseases-10

### **SEMESTER IV**

Course XVI : Child Health  
Course XVII : Maternal Health  
Course XVIII : Perioperative Care  
Course XIX : Practical V – Maternal Child Health  
Course XX : Major Project/Internship - Maternal Child Health

**Semester I**  
**Subject I**  
**Anatomy and Physiology**

**Objectives:**

- The student know about the basics of anatomy
- 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

## **Subject II**

### **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.

## **Subject III**

### **Environment and Health**

#### **Objectives**

- The Student gain knowledge about environment and personal hygiene
- To prevent spread of infection in environment

#### **Unit I**

**18 Hrs**

Environmental sanitation and health-safe water supply-sources of water in the community-the problems of impure water-protection of water supply and purification methods-use of water in prevention and treatment of illness

#### **Unit II**

**18 Hrs**

Disposal of refuse and excreta-types of refuse-health hazards-method of disposal of dry refuse-methods of disposal of wet refuse and excreta

#### **Unit III**

**18 Hrs**

Food and milk sanitation-community measures for safe food and milk-safety of food in bazaars stores and eating places-disease caused by contaminated food and milk and specific preventive measures

#### **Unit IV**

**18 Hrs**

Housing regulations in the community-standards of housing-ventilation-lighting-diseases and accidents due to poor housing.

#### **Unit V**

**18 Hrs**

Control of insects, rats and stray dogs-diseases caused by insects-diseases caused by rodent and stray dogs-control measures to be taken by the community.

## **Subject IV**

### **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

## **Subject V**

### **Practical I**

#### **Basic Procedures**

- History taking And physical examination
- Vital Signs
- Height , Weight Monitoring
- Blood Pressure
- Pulse
- Temperature
- Respiration
- Hygienic Procedure :
- Oral Hygiene
- Sponge Bath
- Hair Wash
- Pressure Sore Care
- Giving bed pan and urinal
- Feeding
- Hot and cold applications
- Back care
- Nail care
- Bed making-4types

**Semester II**  
**Subject VI**

**Nutrition**  
**Objectives**

- The student gain knowledge about basic nutritive values
- To gain information about nutritional problem.

**Unit I**

**18 Hrs**

Classification and functions of food nutrients – carbohydrates – protein –fat – vitamins – minerals – water and cellulose – good nutrition – mal nutrition

**Unit II**

**18 Hrs**

Nutritive value of foodstuffs – the balanced diet – food groups for the family – cultural factors – food fads and habits – calorie intake for the venerable groups – sample balance diet – special diet for the patient.

**Unit III**

**18 Hrs**

Protein energy malnutrition – vitamins deficiencies – mineral deficiencies – anemia in women – Health worker Role in prevention of deficiencies and mal nutrition.

**Unit IV**

**18 Hrs**

Food adulteration – selection – storage – preparation of foods – methods of cooking – preservation of foods.

**Unit V**

**18 Hrs**

Nutrition education - principles of nutrition education - methods and media used for nutrition education – types of diets – diets in special condition – preparation of special diets.



## **Subject VII**

### **First Aid**

#### **Objectives:**

- The student know about the basics technique about problems.
- The students gain knowledge about prevent dangerous health problems

#### **Unit I**

**18 Hrs**

First aid – golden rules of first aid – life savings measures – principles of First aid-Dressing and bandages – first aid supplies and kit –

#### **Unit II**

**18 Hrs**

First aid in injuries of the skin – wounds – burns – scalds.  
Bites and stings – dog bite – snake bite – scorpion bite.

#### **Unit III**

**18 Hrs**

Fractures – types of fractures – management for fractures Uses of splints – fracture of Rib – fracture of collar bone – Fracture of upper arm and lower arm – Pelvis fracture – femur fracture. Transport of casualties – cradle method – Human Crutch – Pick – a – back – fireman lift.

#### **Unit IV**

**18 Hrs**

First aid in loss of consciousness – unconscious persons – fainting – effect of excessive heat – sign and symptoms of shock – treatment of shock – electric shock -Cardiopulmonary resuscitation. First aid for foreign bodies in the eye, ear, nose, throat

#### **Unit V**

**18 Hrs**

First aid -general signs and symptom of haemorrhage – External haemorrhage – internal haemorrhage – bleeding from special organs.

## **Subject VIII**

### **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 Coping with stress
- (d) 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

## **Subject IX**

### **Practical II**

#### **Advanced procedures**

- Oral medication
- Oxygen therapy
- Ryle's tube feeding
- Perineal care
- Baby bath
- Enema
- Nebulizer
- Hand washing
- Mask, gown, gloving techniques
- Urine test-sugar and albumin
- Wound dressing
- Preparation for IV infusions
- Subcutaneous injection-insulin
- Catheterization & Checking blood sugar-glucometer
- Catheter Care

## **Subject X**

#### **Mini Project-Types of Diet**

- DIABETIC DIET
- SALT RESTRICTED DIET
- FLUID PLAN
- LOW PROTEIN DIET
- HIGH PROTEIN DIET
- SOFT SOLID DIET
- FLUID DIET
- LOW RESIDUE DIET

**Semester III**  
**Subject XI**

**Psychology**

**Objectives**

- To gain basic knowledge about basic psychology.
- To take care of mental illness clients.

**Unit I**

**18 Hrs**

Definition of psychology – how to learn more effectively – good study habits – observing – thinking – reasoning – problem solving – goals setting .

**Unit II**

**18 Hrs**

Personality – self concepts – self awareness and acceptance – characteristics of a mentally healthy person – factors that influence personality development

**Unit III**

**18 Hrs**

Emotion – positive emotion – negative emotion – stress – management of stress – frustration – conflicts – adjustment.

**Unit IV**

**18 Hrs**

Normal and abnormal behaviour – causes for abnormal behaviour – observation of behaviour change – prevention of mal adjustment – prevention of mental illness – defense mechanism.

**Unit V**

**18 Hrs**

Psychosomatic illness – Neurotic illness – psychotic illness – mental retardation – types of treatments for mental illness.

## **Subject XII**

### **Microbiology**

#### **Objectives**

- To discuss the characteristics of micro organisms including bacterial, viral and fungal infections
- To discuss the measures to control the spread of micro organisms

#### **Unit I**

**18 Hrs**

Micro organism – classification of micro organism and their characteristics – pathogenic micro organism – paths of infection – portal of entry – portal of exit.

#### **Unit II**

**18 Hrs**

Disinfection – methods of disinfection – sterilization – methods of sterilization – natural agents - physical agents – chemical agents.

#### **Unit III**

**18 Hrs**

collection specimen – blood, urine, stool, sputum, discharges.

#### **Unit IV**

**18 Hrs**

Immunity – types of immunity – Immunoglobulin, vaccines, types of vaccines, national immunization schedule.

#### **Unit V**

**18 Hrs**

Food poisoning – blood borne infection – microscope – types of microscope – uses of microscope.

**18Hrs**

**Subject XIII**  
**Sociology**

**Objectives**

- The student gain knowledge about basic social values
- To gain information about social norms and problems

**Unit I**

**18 Hrs**

Understanding and learning about community-groups-the family-structure and activities-urban and rural administrative pattern- corporation-panchayats and co-operatives

**Unit II**

**18 Hrs**

Social processes-co-operation and competition –conflict, assimilation and adjustment-the individual and the process of socialisation

**Unit III**

**18 Hrs**

Social controls- traditions- customs- habits- folk ways- mores- laws- social problems –anti social practices

**Unit IV**

**18 Hrs**

Social stratification and leadership patterns in the community-

Caste-class-mobility-status and patterns of leadership-regionalism

**Unit V**

**18 Hrs**

The community and factor affecting its health and development-rural community-urban community-social and economic changes in community-

## **Subject XIV**

### **Practical III-Internship in Hospital**

- Care of Patient With
- Dengue Fever
- Fever
- Pre Operative Preparation
- Any Nutritional Deficiency

## **Subject XV**

### **Practical IV**

#### **Health Education –Cause, Spread, Prevention, Treatment of Communicable Diseases-10**

- Tuberculosis
- Diarrhoea
- Diphtheria
- Tetanus
- HIV

**Semester IV**  
**Subject XVI**  
**Child Health**

**Objectives**

- The student gain knowledge about care of children
- To gain information about national nutritional problems about childrens.

**Unit I**

**18 Hrs**

Growth and development of a child – factors affecting growth and development – stages of child life and basic needs – assessment of growth and development – weight checking – height checking – milestones.

**Unit II**

**18 Hrs**

Observation and assessment of a baby – examination of the baby – care of premature baby at home – care of a new born baby – management of minor disorders – apgar score - Condition of new born needing the referral.

**Unit III**

**18 Hrs**

Breast feeding – artificial feeding – weaning – cleanliness of the food – improving the child nutrition

**Unit IV**

**18 Hrs**

Respiratory infection – eye infection – ear infection – communicable disease – diarrhea – vomiting and dehydration – constipation – indigestion – mal nutrition

**Unit V**

**18 Hrs**

Childhood accidents – in the home outside the home – assessment of a baby by history taking and physical examination – well baby clinic child guidance clinic – school health services and feeding programs – re habitation centre for handicapped children – legal provision for protection of children.



## **Subject XVII**

### **Maternal Health**

#### **Objectives**

- The student gain knowledge about mentally illness.
- The student able to take care of mentally illness patients.

#### **Unit I**

**18 Hrs**

Reproductive system structure of female – male reproductive system – female pelvis – difference between male and female pelvis- external and internal female organs menstruation – menstrual cycle

#### **Unit II**

**18 Hrs**

Placenta – types of placenta – uses of placenta – abnormal placenta – amniotic fluid – normal amount color uses poly hydramnios - oligo hydramnios – umbilical cord – normal and abnormal cord

#### **Unit III**

**18 Hrs**

Pregnancy – physiology of pregnancy – diagnosis of pregnancy – signs and symptom of pregnancy – antenatal intra natal care - postnatal care – general examination – history taking – palpation – auscultation –urine examination blood examination – identification of high risk cases – immunization – advice regarding diet rest – breast care – family planning methods after delivery

#### **Unit IV**

**18 Hrs**

Labour – stages of labour – sign and symptom of labour – care during 1st 2nd 3rd stages of labour at hospital and home – immediate care of new born – cord care examination of new born

#### **Unit V**

**18 Hrs**

Normal puerperium – changes in postnatal period – involution of uterus – lochia – breast feeding – examination of breast – diet – exercise – puperalinfection – minor disorders – delayed haemorrhage – family planning methods – temporary and permanent methods

## **Subject XVIII**

### **Perioperative Care**

#### **Objectives**

- The student gain knowledge about preparation for surgery.
- The student able to understand perioperative care- check list- Types of surgery.

#### **Unit I**

**18 Hrs**

Preoperative care-information to operating room-skin preparation-blood arrangements-lab investigations-Assessment, planning, implementation and evaluation of care.

#### **Unit II**

**18 Hrs**

Assessment, planning, implementation and evaluation of care on the day of surgery-informed consent-Patient identification –safe surgery check list –allergy- any infectious disease-pre op medications

#### **Unit III**

**18 Hrs**

General surgical procedures- –orthopaedics-paediatric –gynaecological-obstetrical-eye-ENT-thoracic surgery- Instruments in emergency trolley.

#### **Unit IV**

**18 Hrs**

Common surgical terminologies-ectomy, otomy, ostomy Types of anaesthesia-.general-local-spinal-types of surgery- Elective surgery –Emergency-minor-major-reconstructive surgery

#### **Unit V**

**18 Hrs**

Post operative care- immediate and special care-Prevention of post operative complications --shock-Bleeding  
Wound infection-Deep vein thrombosis-Pulmonary embolism-.Urinary retention-Reaction to anaesthesia.

## **Subject XIX**

### **Practical V- Maternal Child Health**

1. Antenatal Examination
2. Baby Care
3. Normal delivery
4. Post natal assessment
5. National immunization schedule
6. Family planning education

## **Subject XX**

### **Major Project/Internship**

#### **Maternal Child Health**

- Antenatal care
- Intra natal care
- Post natal care
- Immediate new born care
- Post operative care

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