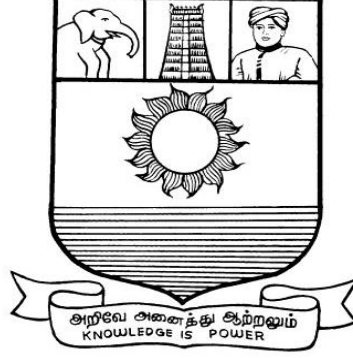


மனோன்மணியம் சுந்தரனார் பல்கலைக்கழகம்  
திருநெல்வேலி – 627 012

**Manonmaniam Sundaranar University**  
**Thirunelveli – 627 012.**



கல்விசார் நிலைக்குழுக் கூட்டம்

**MEETING OF THE STANDING COMMITTEE ON  
ACADEMIC AFFAIRS HELD ON FRIDAY  
THE 27<sup>th</sup> OCTOBER 2017.**

**Syllabus for Diploma in Physical Rehabilitation Course offered  
through Directorate of Vocational Education  
(Community Colleges and Extension Learning Programme)  
from 2017 – 2018**

**DIPLOMA IN PHYSICAL REHABILITATION**  
**SCHEME OF EXAMINATION**

| Subject Code       | Title of the Paper                         | Credit | Hours | Passing Minimum |
|--------------------|--|--------|-------|-----------------|
| <b>Semester I</b>  |  |        |       |                 |
| C17PR11/E17PR01    | Anatomy and Physiology                     | 6      | 90    | 40/100          |
| C17PR12/E17PR02    | Exercise Therapy and Massage               | 6      | 90    | 40/100          |
| C17PR13/E17PR03    | Electro Therapy                            | 6      | 90    | 40/100          |
| C17CE10/E17CE10    | Communicative English                      | 6      | 90    | 40/100          |
| C17PRP1/E17PRP1    | Practical – I Procedures                   | 4      | 60    | 40/100          |
| <b>Semester II</b> |  |        |       |                 |
| C17PR21/E17PR04    | Rehabilitation                             | 6      | 90    | 40/100          |
| C17PR22/E17PR05    | Community and Psychological Rehabilitation | 4      | 60    | 40/100          |
| C17LS23/E17LS05    | Life Skill                                 | 6      | 90    | 40/100          |
| C17PRP2/E17PRP2    | Practical – II Procedures                  | 4      | 60    | 40/100          |
| C17PRPW/E17PRPW    | Project/Internship                         | 12     | 120   | 40/100          |

**Eligibility for admission:** Pass in 12th 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 paper is 40%. Classification will be done on the basis of percentage marks of the total marks obtained in all the papers and as given below:

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

**Syllabus**

**First Semester**

Paper-I                        : Anatomy and Physiology  
Paper-II                        : Exercise Therapy and Massage  
Paper-III                       : Electro Therapy  
Paper-IV                       : Communicative English  
Paper-V                        : Practical – I Procedures

**Second Semester**

Paper-VI                       : Rehabilitation  
Paper-VII                      : Community and Psychological Rehabilitation  
Paper-VIII                     : Life Skill  
Paper-IX                       : Practical – II Procedures  
Paper-X                        : Project/Internship

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

## SEMESTER I

### (C17PR11/E17PR01)PAPER I – ANATOMY AND PHYSIOLOGY

#### **UNIT-I**

**Muscular system:** Muscles of upper limb, thorax abdomen, pelvic, head and neck.

#### **UNIT-II**

**Nervous system:** Central nervous system, peripheral nervous system.

#### **UNIT-III**

**Skeletal system:** bone and joints.

#### **UNIT-IV**

**Physiology:** introduction of cardiovascular system, respiratory system, cells tissue.

#### **UNIT-V**

**Blood and body fluids-** Rbc And Hb,Wbc And Platelets,Blood Groups.

#### **Reference books:**

Foundation of Anatomy and Physiology – ROSS AND WILSON

Human Physiology - SARADA SUBRAMANIYAM

### (C17PR12/E17PR02)PAPER II – EXERCISE THERAPY AND MASSAGE

#### **UNIT –I**

Starting position.

#### **UNIT – II**

**Movements:** Active movements, Passive movements, Progressive restricted exercise.

#### **UNIT –III**

Muscle grading, re-education of muscle joint mobility, goniometry, crush walking, relaxation- suspension therapy, hydro therapy- bed rest complications.

#### **UNIT-IV**

Breathing exercise, types of breathing exercise, postural drainage

Massage: history of massage, the various manipulation technique, uses and Contra indications.

#### **UNIT-V**

Massages for upper limb, massages for lower limb,massage for back, massage for the face.

#### **Reference books:**

Manual of massage and measurements - EDITH M PROSSER

Principles of exercise therapy - DENAGARELINER

Practical exercise therapy - HOLLIS

Exercise therapy - DENACARDINER

Massage - Manual of massage and measurements

## **(C17PR13/E17PR03)PAPER III – ELECTRO THERAPY**

### **UNIT – I**

**Introductory Physics** -Electricity, static electricity, current electricity, Magnetism, moving coil galvanometer.

### **UNIT –II**

Voltmeter, transformer, chokes, electric valves or thermionic valves, metal valve rectifiers' ionization.

### **UNIT –III**

Low & High Frequency -Interrupted galvanic current, Effects of Interruptes galvanic current on innervated and denervated muscles, characteristic stimulating current.

### **UNIT –IV**

Tens –definition, basic indications and contra indications.Traction – ICT, IPT. Paraffin wax and moist heat – method, indications and contra indications.

### **UNIT –V**

Cryo therapy and Hydrotherapy – physiological effects and uses, techniques of applications, methods, indications and contra indications.

Reference book: Electrotherapy – CLAYTONS

## **(C17CE10/E17CE10)Paper IV Communicative English**

### **Unit I: Learning context**

Concept of learning – Learning style –Grammatical framework – sentence framing – paragraph and texts

### **Unit II: Reading**

Basic concept – Purposes of reading-Decoding-Reading materials – Barriers of reading

### **Unit III: Writing**

Basic concept-Writing style-Terminology-stages-English spelling and punctuation – Written texts

### **Unit IV: Speaking**

Language functions-Conversation- Features of spoken English – Types of English course: functional English, English literature, advance English – Phonetic

### **Unit V: Developing Communication Skills**

Meaning –Classroom presence- Features of developing learning process- Practical skills and Listening- uses of communicative English

## Reference Books:

1. Raman,m.&S.Sharma (2011) communication skills,OUP,New Delhi: India
2. Lata,P.&S.Kumar(2011) communication skills,OUP,New Delhi: India,
- 3.Leech,G&J.Svartvik(2002) A communicative grammar of English,Pearson,India,
4. Sethi,J. and P.V. Dharmija (2007) A course in Phonetics and spoken English.Second edition, Prentice hall: New Delhi

## (C17PRP1/E17PRP1)PAPER V- PRACTICAL -I PROCEDURES

### UNIT -I

**RECEIVING THE PATIENT:** Good morning sir, please be seated. You have come to the Electrotherapy Department. I am the physiotherapist who is going to treat you. Please wait sir until I go through you case sheet.

### UNIT -II

**GOING THROUGH THE CASE SHEET:** 1.Name 2. Sex 3.Age 4. Cause of illness 5. Duration of illness 6.Any previous treatment 7.Any improvement due to the previous treatment 8. Present condition on admission 9.Side to be treated.

### UNIT -III

**COLLECTION OF MATERIALS:** i.Skin resistance lowering tray

a) Tray b) Bowl with water and cotton swabs c) Soap d) Mackintosh e) Kidney tray f) Towel

ii. Treatment tray

1. Tray b) Bowl with water and cotton swabs c) Salt d) Petroleum jelly e) Leads

f) Lint pads g) Electrode and straps h) Jageonet piece i) Mackintosh j) Towel k) pillows as per to necessary l) Other miscellaneous

### UNIT - IV

9% of saline solution is prepared by adding a pinch salt to the bowl of water. Wetting the treatment site using saline provides it would have been loss while lowering the skin resistance.

### UNIT -V

1. Knobs are tuned to zero.
2. Plugs and wires are checked for any break of insulations.
3. Check whether the cables are adherent.

### UNIT - VI

#### **SKIN RESISTANCE THERAPIST:**

The therapist should position himself in such a way that is free to reach the machine and the patient and should take care that doesn't get enlarged among wires.

## **UNIT – VII**

### **SKIN RESISTANCE LOWERING:**

The part to be treated is wiped with soap and it is water wiped with towel. Before washing, the mackintosh and a towel is unrolled the part to be treated.

This is done because:

Dirty and oily substance such as sebum which off resistance to the flow of current are removed by the action of soap.

Electricity is conducted at minimum intensity.

## **UNIT-VIII**

### **INSTRUCTING THE PATIENT:**

I am going to start the treatment, tell me when you feel the current. You will feel a prickling sensation, when current passes. Inform me immediately whenever

There is a burning sensation

Please don't touch me or anything around you

Don't pull out the lead or shake the past.

These instructions are given to the patients.

To avoid electrolytic burns

To avoid electric shocks

## **SEMESTER II**

### **(C17PR21/E17PR04)PAPER VI – REHABILITATION**

#### **UNIT – I**

Rehabilitation – definition, rehabilitation team, impairment, disability and handicap.

#### **UNIT –II**

Therapeutic exercise technique.

#### **UNIT –III**

Orthotics, Amputation and Prosthetics.

#### **UNIT –IV**

Mobility aids, activities of daily living, pain path ways.

#### **UNIT –V**

Rehabilitation of burns, fractures, common pain syndromes.

Reference book: Textbook Of Rehabilitation – SUNDER.

**(C17PR22/E17PR05) PAPER VII – COMMUNITY AND  
PSYCHOLOGICAL REHABILITATION**

**UNIT – I**

CBR, IBR – characters, advantages and disadvantages.

**UNIT – II**

Role of rehabilitation professional, models of CBR.

**UNIT – III**

**Rehabilitation Psychology** – definition, scope and methods.

**UNIT – IV**

Role of psychologist in disability rehabilitation.

**UNIT – V**

Personality and life span development of persons with disabilities, personality traits and coping styles.

**Reference books:**

Current Topics in Rehabilitation Psychology: Grune&Straton  
Textbook Of Rehabilitation – SUNDER.

**(C17LS23/E17LS05) PAPER VIII- LIFE SKILL**

**(Common to All Courses)**

**UNIT-I ATTITUDE** : Positive thinking – Goal setting – Problem Solving and Decision making – Leadership and Team Work.

**UNIT-II COMMUNICATION SKILLS:** Oral communication: Concept of English language – Fluency – Verbal communication in official and public situations.

**UNIT-III COMMUNICATION SKILLS:** Written Communication: Comprehension – Writing a formal letter like application for Job, enquiry, reply, complaint and such others – preparation of Resume, Curriculum Vitae.

**UNIT-IV COMPUTING SKILLS – 1:** Introduction to Computers, its various components and their respective functions – Memory storage devices – Microsoft (MS) Office – MS Word.

**UNIT-V COMPUTING SKILLS – 2** Internet Basics – Origin of Internet – MODEM – ISP – Upload – Download – e-mail – Origin of worldwide web (www) Browsers – Search engines.

**Reference books:**

Life skill, Manonmaniam Sundaranar University Publications Division  
(2011)

**(C17PRP2/E17PRP2) PAPER IX- PRACTICAL -II PROCEDURES**

**UNIT-I**

**POSTION OF PATIENT:**

The patient is made to lie supine on the wooden couch, the limb to be treated is kept elevated using pillows. So gravity assists draining oedema.

**UNIT-II**

**USE OF CURB BANDAGE:**

Curb bandage is tied over the entire limb, with decreasing pressure from the foot to the high. Curb bandaging machine draining the oedematous fluid.

**UNIT-III**

**PULSE:**

Triangular.

**UNIT-IV**

**PLACING OF THE ELECTODES:**

In difference :As sacral plexus

Active :At head of fibula where the lateral popliteal nerve

Places above the medial condyle over tibial nerve, low frequency.

Electrotherapy:

Stimulation for all muscles in the anterior & posterior aspect of both upper and lower limb.

Facial stimulation

S D curver

Faiadic foot bath

Fardism under pressure

IFT (inter/Fertinal therapy)

TENS

Exercise therapy

1) Massage – both upper and lower limb, back massage, facial massage.

2) Stretching -T.A stretching

-Adductor stretching

-Biceps stretching

-Triceps stretching

-Hamstring stretching

Passive movement for both upper & lower limbs.

**(C17PRPW/E17PRPW )Paper X PROJECT/INTERNSHIP**

Need compulsory internship/projects related to the course.