

# GOVERNMENT OF JAMMU AND KASHMIR, SERVICES SELECTION BOARD, Zam Zam, Building, Rambagh, Srinagar. (www.jkssb.nic.in)

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# Physiotherapy syllabus for written test

Time= 2.30 Hours.
Total Marks=150

# **HUMAN ANATOMY**

15 Marks

# **General Anatomy**

- 1. Introduction various terminologies used, anatomical position etc.
- 2. Regions of Body, cavities and Systems outline.
- 3. Connective tissue & its modification, tendons, membranes, Special connective tissue.
- 4. Bone structure, blood spply, growth, ossification, and classification.
- 5. Muscle, Nerve, blood vessels & lymphatics structure, types & distribution
- 6. Joints classification, structures of joints, movements, range, limiting factors, stability, blood supply nerve supply, dislocations and applied anatomy.

# Thorax (In brief):

- 1. Thoracic cage
- 2. Pleural cavities & pleura
- 3. Lungs and respiratory tree
- 4. Mediastinum & pericardium
- 5. Heart and great vessels.
- 6. Diaphragm

# **Upper extremity:**

- 1. Bones & Joints.
- 2. Muscles origirunsertion, actions, nerve supply & blood supply.
- 3. Maor nerves course, branches and implications of nerve injuries.
- 4. Development of limb bones, muscles and anomalies.

# **Lower Extremity:**

- 1. Bones & joints
- 2. Muscles origin, insertion, actions, nerve supply & blo'od supply
- 3. Major nerves course, branches and implications of neVve injuries
- 4. Development of limb cones, muscles and anomalies

# **Spine:**

- 1. Back muscles Superficial layer, Deep muscles of back, their origin, insertion, action and nerve supply.
- 2. Vetebral column Structue & Development, Structure & Joints of vertebra
- 3. Applied anatomy & Developmental defects.

# **Abdomen and pelvis:**

- 1. Abdominal cavity divisions
- 2. Muscles of Abdominal wall, pelvic floor

- 3. Bony Pelvis
- 4. Digestive system (Liver & pancreas, Alimentary canal).
- 5. Urinary system. -= Kidney, Urter, bladder, urethra
- 6. Adrenal gland
- 7. Genital system male and' female

# Head and neck:

- 1. Cranium
- 2. Central nervous system disposition, parts and functions
- 3. Cerebrum (Brief Description)
- 4. Cerebellum (\Brief Description)
- 5. Midbrain & brain stem (Brief Description)
- 6. Blood supply & anatomy of strokes
- 7. Spinal cord-anatomy, blood supply, nerve pathways, applied significance
- 8. Pyramidal, extra pyramidal system
- 9. Thalamus, hypothalamus (Brief Description)
- 10. Ventricels of brain, CSF circulation (Brief Description).
- 11. Development of nervous system & defects (Brief Description)
- 12. Nerve plexuses.
- 13. Cranail nerves special emphasis on V, VII, X, XI, XII (course, distribution and palsies)
- 14. Sympathetic nervours system, its parts and components (Brief Description),
- 15. Parasympathetic nervours system (Brief Description).
- 1. Endocrine system Pituitary, Thyroid, parathyroid (Brief Description)
- 2. Special senses (Brief Description): Nerve receptors, Eye, Ear, Labyrinth
- 3. Embryology (Brief Description): General embrylolgy, placentra, fetal membranes, twining, and teratogenesis

# **HUMAN PHYSIOLOGY**

15 Marks

# 1. Genral Physiology (brief description only)

- 1. Structure of cell.
- 2. Functional morphology of tut cell
- 3. Intercellular communication
- 4. Homeostasis

# 2. Cardiovascular System (descriptive)

- 1. Anatomical, biophysical consideration of arterial, arteriolar & capillary venous level, Lymphatic circulation
- 2. Hemodynamics.
- 3. Origin and spread of cardiac excitation
- 4. Basic idea of Electrocardiogram
- 5. Cardiac cycle, Cardiac output, its regulation
- 6. Local & systemic regulatory mechanisms of CVS, humeral & neural
- 7. Cerebral, coronary, splachnic, skin, Placental & Fetal circulation

# 3. Respiratory System (descriptive)

- 1. Physiological anatomy of lungs, mechanics of respiration '
- 2. Pulmonary circulation, Ges exchange in lungs
- 3. Oxygen & Carbon dioxides transport 4'. Other

function of respiratory system

- 5. Neural & chemical control of breathing
- 6. Regulation of respiratory activity, non-chemical influences on respiratory activity
- 4. Car'dio respiratory adjustments in health & disease (descriptive)
- 1. Exercise, high altitude, deep sea diving
- 2. Hypoxia, hypercapnia, hypomania, oxygen treatment
- 3. Asthma, emphysema, artificial respiration

# 5. Blood (brief description only)

- 1. W.B.C., R.B.C. Platelets formation & functions
- 2. Plasma, Blood Groups
- 3. Homeostasis, Immunity

## 6. Digestive System & excretory System (In brief)

- 7. Nerve (descriptive)
- 1. Nerve General Concept
- 2. Nerve cell structure

- 3. Genesis of resting membrane potential & Action potential
- 4. Their ionic basis, All or None phenomenon
- 5. Ionic basis of nerve conduction
- 6. Classification & types of nerve fibre
- 7. Miaxed nerves & compound action potential
- **8.** Concept of nerve injury & wallerian degeneration
- 8. Muscle (descriptive)
- 1. Skeletal & cardiac muscle
- 2. Morphology, properties
- 3. Electric & Mechanical responses & their basis
- 4. Concept of isometric & isotonic muscle contraction
- 5. Pace maker tissues & their potential in cardiac muscle
- 6. Metabolism

## 9. Synaptic & Junction Transmission (brief description only)

- 1. Functional anatomy of sy6napses
- 2. Electrical events in postsynaptic neurons
- 3. Inhibition & facilitation at synapses
- 4. Chemical transmission of synaptic activity
- 5. Principal neurotransmitter system
- 6. Neuromuscular junction, structure & events occurring dring excitation
- 7. Concept of denervation hypersensitivity

# 10. Function of Nervous system 9descriptive)

- 1. Reflexes, monosynaptic, polysynaptic, withdrawal reflex
- 2. Properties of reflexes
- 3. Sense organ, receptors, electrical & chemical events in receptors
- 4. Ionic basis of excitation
- 5. Sensiroy pathways for touch, temperature, pain, proprioception, others
- 6. Control of tone & posture: integration at spinal, brain stem, cerebellar, basal ganlion levels, along with their functions & clinical aspects
- 11. Endocrinology (brief description only)
- 12. Male & female reprodi'^twe system (brief description only)
- 13. Autonomic nervous system (brief description only)
- 14. Hypothalamus (brief description only)
- 15. Higher functions of nervous system (brief description only)
- 1. Learning & memory, neocortex, limbic functions, sexual behavior, fear & range, motivation brief idea
- 16. Special senses (brief description only)
- 17. Arousal mechanisms & sleep (brief description only)

# BIOMECHANICS 05 MARKS

# **Definition of mechanics and Biomechanics**

Force - Definition, diagrammatic representation, classification of roces, concurrent, coplanar and co-linear forces, composition and resolution fo forces, angle of pulls of muscle. Momentum-principles and practical application Friction

Gravity: Definition, line of gravity, Centre of gravity. Equilibrium:

Supporting base, types, and stability of equilibrium. Energy work and

power: Energy (potential and kinetic) works and power.

Levers: Definition, function, classification and application of levers in physiotherapy & order of levers with example of lever in human body.

Pulleys; system of pulleys, types and application.

Elasticity: - Definition, stress, strain, HOOKE'S

Law

Springs - properties of springs, springs in series and parallel, elastic materials in use.

Aims and scope of varius biomechanical modalities: Shoulder wheel, shoulder ladder, shoulder pulleys, pronatorOsupinator instrument, static cycle, rowing machine, ankle exerciser, balancing board, springs, weights, etc.

**Hydrostatics and Hydrodynamics:** Specific gravity, Hydrostatic ressure, Archimedes, principle, Properties of water, and other liqids, Buoyancy-law of floatation, factors determining up-thrust, effectof buoyancy on movements performed in water. Equilibrium of a floating body, Bernolli's theorem.

**Suspension Therapy:** Principles of suspension, types, components of suspension apparatus, effects and uses of suspension therapy - their therapeutic application.

**Soft tissue manipulation**: History, definition, types and their rationale, general effects, local effects of individual manipulation (physiological effects) and uses, contra-indications and techniques of application.

**Hydrotherapy**: History and introduction, indication and contraindication dangers and precautions, hydrotherapy regimes of exercises, hydrotherapy exercise for all age groups, different types of pools and baths.

# **EXERCISE THERAPY**

20 Marks

Starting positions:
1.Description and muscle work
2.Importance of fundamental and derived types.

3. Effects and uses of individual positions.

Movements:

1. Anatomical definition and description

- 2. Movements and exercise as therapeutic modality and their effects
- 3. Physiological reaction of exercise

# Passive movements:

1.Definition

2. Relaxed, forced and stretching type.

3. Indications, contraindications, advantages and Techniques of various passive movements.

Muscle Stretching:

1. Special aphasis on stretching of: Pectoral major, biceps branii, triceps brachii, long flexors of fingers, Rectus Femoris, llio-tibial band, gastrocnemius-.soleus, hamstrings, hip abductors, ilio-psas. Stermocleidomstoid.

# Active movemens:

1.Free, assisted and resisted

2. Indication, contraindications, advantages and techniques of various types of active exercises.

3. Home programs of strengthening of various muscle group including

progressive resisted exercises.

4. Special emphasis on: Shoulder abductors & flexsors, Triceps brachii, Hip abductors & flexors, quadricps fmoris, Abdominal and back extensors.

Manual Muscle Testing:

1. Concept, introduction, significance and limitations.

2. Grade systems

3. Techniques of Muscle testing

4. Empahsis on skills to grade upper, lower limb, neck and trunk muscles including trick movements.

# Goniometry:

1. Measurement of various joints range in normal and disease condition.

2. Different techniques of goniometry.

3.Limb length

measurements.

# Relaxation

1.Description of fatigue and spasm & factors.
2.General causes, signs and symptoms of fatigue
3.Techniques of Relaxation - local and General with indication

4.Rationale of

relaxation Techniques.

# Joint Mobility:

1. Joint range, stiffness, range and limitations

2. Accessroy movements - glides, traction and approximation 3. Mobilization of peripheral joints in detail.

Re-education of muscles:

1. Concept, technique, spatial and temporal summation. 2. Various reduction techniques and facilitating methods.

3. Progressive strengthening of various muscle groups in Grade-I-Grade

4. Muscle strengthenng

technique-PNF Crutch

Waling:

1.Description of crutch - components, clasification

2. Good crutch, measurements
3. Crutch use - Preparation, Training, counseling.
4. Crutch gaits - types, & significance.
5. Crutch complications, Palsy, dependency etc.

Normal Posture:

- 1. Posture definition & description, static and dynamic.
- 2. Posture alignments of various joints, centre of gravity, planes & muscular moments
- 3. Analysis of posture.

# Normal Gait:

- 1. Normal gait definition & description, centre of gravity
- 2. Normal gait alignments of various joints, centre of gravity, planes & muscle acting mechanisms, pattern, characteristics.
- 3. Normal gait cycle, time & distance parameters, & determinants of Gait.

# Co-ordinations:

- 1.Balance static and Dynamic
- 2. Discoordination: LMNL & UMNL, cerebellar lesion, loss of kinesthetic sense ((TabesOdorsalis, leprosy, syringomyelia)

3.Reeductiona of balance and coordination: PNF and Frenkel's exercise.

Traction: Rationale, Technique, indication & contra- indications. Yogasenas and Pranayma: Physiology and therapeutic principles of yoga, Yogasana for physical culture, relaxation and medication. Application of yogasana in physical fitness, flexibility. Tehrapeutic application of yoga. Yoga a holistic approach.

# **ELECTROTHERAPY**

20 Marks

# A.Low Frequency Currents:

- 1. Nerve Muscle Physiology: brief outline
- 2. Faradic current.
  - 1. Indications, contraindications, Techniques, parameters, Gruop muscle stimulation.

2. Faradic footbath, Faradism under pressure and muscle reeducation.

**3.**Dosimetry

- Galvanic current.
  - 1. Indications, contraindication, precautions and therapeutic effects of stimulation
  - 2. Techniques, parameters, Dosimetry

# **Electro-Diagnosis:**

- 1.S. D. Curve, Reaction of degeneration, chronaxie & Rheobase 2.Outline of EMG & Nerve conduction velocity
- 5. **Iontophoresis**:
  - 1. Definition and principles & factors

2. indications, effects, techniques, contraindications, precautions and Potetial harmful effects.

# TENS therapy:

1. Principle of therapy, Parameters and therapeutic uses. 2. Theories of pain and pain control.

**3.**Indications and contra-indications, Dosimetry.

# B.Infrared Therapy.

1. Therapeutic effects and uses, Techniques of application.

2. Theories of pain and pain control.

3. Indications and contra-indications, Dosimetry.

### C. **Heating Modalities:**

1. Therapeutic effects and uses, Techniques and applications 2. Indications, contraindications, precautions and Potential harmful effects of various heat modalities: Paraffin wax bath therapy, Hydro collator packs, Whirlpool and moist heat Heating pads, hot air chambers.

#### D. Cold-therapy:

1. Indications, contraindications and therapeutic effects.

2. Technique, precautions and Potential harmful effects of treatment, Dosimetry.

#### Ε. Medium frequency currents:

Definitions, effects, indications, techniques of application, contraindications. Interferential

# therapy:

1. Physiological, therapeutic effects & dangers, Indications & contra indications.

2. Technique and method of applications, Dosimetry.

#### F. High Fréquency currents:

Short wave Diathermy: Continuous & Pulsed

1. Indications, contraindications and therapeutic effects.

2. Methods of application-capacitor and induction electrode, precautions and Potential harmful effects of treatment, Dosimetry.

Microwave Diathermy:

1. Characteristics and therapeutic effects.

2. Application teachniques, indications, contraindications, precautions andpotential harmful effects, Dosimetry.

#### G. Ultrasonic Therapy:

1. Physiological and therapeutic effects & potential harmful effects. 2. Indications, contraindication:-., methods of application and

precautions, Dosimetry.

#### Η. Laser

1. Introduction, effects and potential harmful effects.

2. Indication, contraindications, recautions, method of application, dosimetry.

#### H. Ultraviolet therapy:

1. Physiological and therapeutic effects - photosensitization

2. Indications and contraindications and Ptotential harmful effects. 3. Methods of application, Sensitizes, Filters, Dosage, wavelength, penstration. Tolerance, Treatment /

Application condition wise

4. Comparison between UVR & IR Therapy.

#### Advanced electrotherapy: I.

1. Computerization of modalities

2. Programming of parameter.

3. Selection and combination of parameters,

- 4. Combined therapy-U.S.+TENS-Principles, uses, indications etc.
- 5. Principles of Bio-feed back, indications & uses.

## J. Traction instruments:

Rationale, technique, indications, contraindications, precautions of electric traction equipments.

# <u>PSYCHOLOGY</u> & SCIOLOGY

05 Marks

# PART- A PSYCHOLOGY

- 1. Definition and Fields of application of psychology.
- 2. The influences heredity and environment on the individual.
- 3. Development and growth of behavior in infancy and childhood.
- 4. Intelligence, theories of intelligence and Intelligence testing. Intelligence and occupation.
- 5. Motivation, theories of Motivation. Primary and Secondary motives. Frustration and confict.
- 6. Emotions, theories of Emotions and emotional development.
- 7. Personality, theories of personality, factors influencing personality, personality Assessment.
- 8. Memory, Forgetting, theories of memory and foregtting, thinking, methods to improve memory.
- 9. Learning: theories, methods of learning, interest and motivation in learning.
- 10. Sensation, perception-depth, form, brightness. (In brief)
- 11. Social psychology, influence, individual or groups have on behavior of others, 1. Leadership, and group psychology.
- 12. Behavior: normal and abnormal. Paadigms in psychopathology and therapy. Behavioral assessment.
- 13. Emotional and behavioral disorders of childhood and adolescence (In brief)
  - 1.Disorders of under and over controlled behavior
  - 2. Eating disorders
- 14. Maturation with special reference to learning.
- 15. Cmmuniation: Types and development, Effective communication
- 16. Counseling: Defiaition, Aims and principles
- 17. Compliance: nature and factors of compliance, Non-compliance, Improving complaince including factors
- 18. Psychological need of children and geriatric patients
  - 19. Mental deficiency (descriptive)
    - 1. Mental retardation.
    - 2. Learning disabilities
    - 3. Autistic behavior.
- 20. Anxiety Disorders (brief outline) 1. Phobias, panic disorder, Generalized Anxiety disorder, Obsessive Compulsive Disorder, Post traumatic Stress Disorder.
- 21. Somatoform and Dissociate Disorders. (Brief outline)
- 22. Conservation Disorder, Somatization Disorder, Dissociate Amnesia, Dissociate Fugue
- 23. Personality Disorder (definitions only)

# PART, B

# **SOCIOLOGY**

05 Marks

## A-Introduction

- 1. Definition and scope of Sociology
- 2. Its relation with Anthropology, Psychology, Social Psychology and ethics.
- 3. Methods of Sociology-case study, Social Survey, Questionnaire, interview and opinion poll methods.
- 4. Importance of its study with special reference to health care professionals.

# **B-Social Factors in health and Disease:**

- 1. The meaning of Social Factors.
- 2. The role of Social factors and

illness.

# **C-socialization:**

- 1. Concepts of social groups.
- 2. Influence of formal and informal groups on health and sickness.
- 3. The roll of primary groups and secondary groups in the hospital and rehabilitation setting.

# **E** - Family:

- 1. The family.
- 2. Meaning and definition.
- 3. Functions.
- 4. Changing family Patterns.
- 5. Influence of family on the individual health, family, and nutrition. The effects of sickness of family and psychosomatic disease and their importance to Physiotherapy.

# **F-Community:**

- 1. Rural community-Meaning and features-Health hazards of ruralities.
- 2. Urban community-meaning and features-Health hazards of urbanites.

## G-Culture and Health:

- 1. Concept of culture.
- 2. Cultures and Behaviour.
- 3. Cultural meaning of sickness.
- 4. Culture and health disorders.

# H-Social change:

- 1. Meaning of social changes & Factors of social changes
- 2. Human adaptation and social change.
- 3. Social change and stress.
- 4. Social and deviance.
- 5. Social change and health Program.
  - 6. The role of social planning in the improvement of health and in rehabilition.

# I-Social problems in disabled:

Consequences of the following social problems in relation to sickness and disability, remedies to prevent these problems.

- 1. Population explosion.
- 2. Poverty and unemployment.
- 3. Beggary.
- 4. Juvenile delinquency.
- 5. Prostitution.
- 6. Alcoholism.
- 7. Problems of women in employment.
- **J-Social security:** Social security and social legislation in relation to the Disabled.
- K-Social work: Meaning of social work; the role of a medical social worker.

# PHYSICAL THERAPY IN MEDICAL CONDITIONS 20 Marks

# A) PHYSICAL THERAPY IN NEUROLOGICAL CONDITIONS

- 1. Examination of Neurological disorder and principles of treatment.
- 2. Hemiplegia, paraplegia, cerebral palsy, Tabes dorsalism crebellar alaxia, extra pyramidal lessons.
- 3. Disseminated sclerosis muscular atrophy, amytrophic lateral schlerosis, progressive muscular atrophy, syringomyelia, sub acute combined degeneration of cord.
- 4. Peripheral Nerves lesions
- 5. Neuritis and Neuralgia Brachial sciatica and facial palsy.
- 6. Infections-Poliomyelitis, Meningitis, Encephalitis, Pllyneuritis Myopathies.
- 7. Paediatics and Geriatrics S

# I) Pathological conditions:

- 1. Review of pathological changes and principles of the treatment by physiotherapy of: Inflammation act acute chromic and suppurative.
- 2. Oedema Traumatic, Obstructive, Paralytic, Oedma due to poor muscle and laxity of the fascia.

# II) Arthritis and Allied conditions:

- 1. Osteo arthritis generalized, degenerative and traumatic, spondylosis and Osteo arthritis disorders
- 2. Rheumatiod arthritis, stills disease, infective arthritis
- 3. Spondylitis, Ankylosing spondylitis
- 4. Non articular Rheumatism Fibrositism, Myalgia, Bursits, Periathritis etc

# III) Diseases of the Preparatory System:

- 1. Mechanism of Respiration
- 2. Examination of chest of patient and principles of physiotherapy treatment.
- 3. Bronchitis, Asthama, Lung Abscess, Bronchiectasis, Emphsema
- 4. Pleurisy and Empyemam, Pneumonia
- 5. Bacterial Disease-Tuberculosis
- 6. Tumors

# IV) Common conditions of Skin:

Ane, Psoriasis, alopecia, Leucodema, Leprosy etc.

# V) Common Cardiac Discordrs:

Thrombosism, Embolism, Burger's disease, Arterisclerosis, Thrombophlebitis, Phlebitis, Gangrene, Congestive Cardiac failure, Hypertension, Rheumatic fever etc.

# VI) Deficiency Diseases:

Rickets, Osteomalacia etc.

# Physical Therapy in Surgical Conditions

20 Marks

# 1. Orthopaedic and fractures

- i. Fractures and dislocations
- ii. Types of displacement
- iii. Classification
- iv. Immediate, late signs and symptoms
- v. Changes at fracture site and its surrounding tissues
- vi. Reasons for union, non-union, delayed union
- vii. Healing of fractures and factors influencing it
- viii. Common fractures of upper and lower extremity and their complications
- ix. Methods of reduction and fixation.
- X. Corrective surgery
  - xi. Arthoplasty, Arthodesis, Osteotomy, Tendon,

Transplant, Soft Tissue release, Grafting.

XII. Phsiotherapy treatment as applicable to above conditions.

## 2. INJURIES

- i. Soft tissue injuries: synovitis, Capsulitis Volkmann's ischemic contracture etc
- ii. Crush injuries
- iii. Repair of injured tendon and nerves
- iv. Injuiiei of semilunar cartilage and cruicate ligaments knee: Physicala Therapy treatment as applicable to above conditions.

# 3. Deformities:

i. Congenital, torticollis, Cartilage and cruciate ligaments knee: Physicala Therapy Treatment as applicable to above conditions

- ii. Acquired: Scoliosis, Kyphosis, Lordosis, coxa vara, Genu Valgum, Genu varum and pervurvatum, Planus and other common deformities.
- iii. Other miscellaneous Orthopaedic conditions commonly treated by Physiotherapy.
- iv. Physical therapy treatment related to above conditions.

# 4. Amputations:

- 1. Traumatic, elective, common sites of amputation in Upper & Lower extremities Advantages and disadvantages physical Therapy treatment as applicable to care of prosthetic training with emphasis on Lower extremity.
- 2. Wounds, local infections, ulcers Surgical porocedures related to peripheral vascular disease.
- 3. Burns -Degree, Grafting of skin.
- 4. General abdominal surgery and obstertrics and Gyneaecology.

# a) Thoracis Surgery.

- Thoracis *incisions pre and post* operative treatment *and* later rehabilitation *of the patent*.
- 2 Lobectomy, pneumonectomy, Thoracotomy, Thoracoplasty
- 3 Operations on Chest Walls
- 4 Common complications with emphasis to altectasis Peneumothorax, bronchopulmonary fistula, pre *and* post operative physiotherapy related to Cardio thoracic *surgery*
- 5 Operations on Precardium and Heart, Chronic Constructive pericarditis, valvular in competence and Stasis, mitral, valvotomy, tetrology of Fallot.

# b) Ear. Nose and thorat conditions:

# c) Neuro surgery otitis simusites vaso motor, Rhimorrhoea, tonsillitis physiotherapy it above conditions.

- Cranial Surgery:
- ii. Head Injury, intra crania! abscess, Intracranial Tumours.
- iii. Surgery of spinal Cord and Couda Equina, spina Bifida and its complications, infections of the spine, Epidural Abscess, Tuberculosis, pre and post operative physiotherapy laminctomy, treatment related to above conditions.
- iv. Surgery of peripgheral Nerves, peripheral nerve injuries, pre and post operative physictherpy treatment related to above conditions.

# d) Pre and Post Operative Physiotherapy, related to Plastic Surgery:

i. Tendon transplantation in Leprosy, Polio etc. Pre and Post operative Physic therapy treatment related to above conditions.

# Disability prevention and rehabilitation

10 Marks

- 1 Introduction
- 2 Definition concerned in the phase of disability process
- 3 Definitions concerned with cause of impairment, factional limitation and disability
- 4 Rehabilitation and disability prevention
- 5 Present rehabilitations services
- 6 Reservation &'Legislation for rehabilitation services for the disabled
- 7 Community and Rehabilitation
- 8 Basic principles of Administration, Budget, Approach Personnel and Space etc.
- 9 Contribution of Social worker towards rehabilitation
- 10 Vocational evaluation and goals for disabled.
- 11 Rural rehabilitation in-corporated with PHC's
- 12 Principles of Orthotics & Prosthetics:
  - > Lower Extremity orthotics/Upper extremity; orthosis
  - > Spinal Orthotics
  - > Upper ectremity prosthetics
  - > Lower Ectrermity Prosthetics

# 13. Principle of Communication:

# **Impariment**

- > Speech Production
- > Communication disorders secondary to Brain damage
- > Aphasia and its treatment
- > Dysarthria and its treatment
- > Non- aphasic language disorders

# 14. Code and Conduct

# **15.** Ethics and Management:

- a) Principles in Management of Social Problems:
  - > Social needs of the patient
  - > Rehabilitation centre Environment
  - > The Social worker as a Member of the Rehabilitation Team
  - > Community Resources

# b) Principles in Management of Vocational Problems:

- > Vocational Evaluation
- > Vocational goals for the disabled

# **Mental Subnormality:**

- > Identification and assessment of the mentally subnormal
- > Classification of the Mentally subnormal
- > Common characteristics of different categories of the mentally subnormal
- > Training of the mentally subnormal
- 17) Definition Scope and importance of A. D. L.
- **18)** Goals of Self Help Devices
- 19) Teaching A. D. L. in the following areas:
  - > Wheel Chair Activities
  - > Bed Activities
  - > Self Care Activites
  - > Toilet, Eating Dressing, Miscellaneous Hand Activities.
- 20) Principles of design materials used
- **21) A. D.L Form**
- **22) A. D. L. Room**
- 23) Relationship of ADL to occupational Therapy and Physiotherapy
- 24) National Health Programmes
- **25)** Bio-Medical Waste

# **MEDICINE**

# 08 Marks

# **General Medicine including Respiratory Diseases**

- **I.** Infection and antibacterial agents.
- **II.** Infections and Diseases
- **III.** Poisons and Venoms
- **IV.** Chemical and Physical agents carrying diseases
- **V.** Diseases of Metabolism.
- **VI.** Deficiency Diseases
- **VII.** Diseases of Endocrine Glands.
- **VIII.** Diseases of Digestive System.
  - **IX.** Diseases of Lymphatic System
  - **X.** Diseases of Blood
  - XI. Diseases of Cardio- vascular system, Circulatory failure, Ischemic heart disease, Hypertension Pulmonary Heat Diseases, Congenital heart Disease, Peripheral vascular diseases, Embolism and Thrombosis, Collagen diseases.
- **XII.** Diseases of the Respiratory System-the trachea, the bronchi, the lungs, the disphragm, the pleura.
- **XIII.** Diseases of the Kidney

XIV. Diseases of the Shin sensory disorders, Pigmentary Anemelies, vasomotor, Disorders, Dermatitis, Coccal Infections, Fungus Infections, Cutaneous, Tuberculosis, Virus infection, Parastitic infections, Erythmatous conditions, Scleroderma of the Hand, Tropical skin diseases.

# **XV.** Psychiatry:

- Definition and introduction to Psychiatry in relation to OT & PT
- Concept of normal and abnormal
- ➤ Behavior disorders:- Causes & management
  - a) Psychonenrotic disorders
  - b) Psychotic disorders
  - c) Psychosomatic disorder
- > Techniques of Therapy

Psycho Therapy:

- a) Group Therapy
- b) Psychodrama
- c) Behaviour modification

SURGERY 07 Marks

# A) General surgery and cardio-vascular and thoracic surgery.

- **I.** Surgical wounds, haemorrhage, shock, water and Electrolyte Balances, Burns.
- **II.** Surgery of head and neck, alimentary systems and genitor-urinary system x
- III. Neuro Surgery
- **IV.** Cardio-Vascular and Thoracic surgery
- **V.** Gynaecology and obstetrics: pelvic inflammatory conditions, complications during and following pregnancy prolapsed uterus.
- VI. ENT

Secretary, J&K Services Selection Board, Srinagar.