

**Syllabus : Master in Occupational Therapy (Specialty)**  
**(2006-2007)**

**N.B.**--- Every candidate for the Degree of Master in Occupational Therapy (Specialty) shall be required to register himself/herself as a postgraduate student before admission to the course.

**O.** ----- Every candidate for the Degree of Master in Occupational Therapy (Specialty) must have taken the degree of Bachelor of Occupational Therapy of this university or a degree of another university recognized as equivalent thereto.

**O.** ----- The course of study for the Degree of Master in Occupational Therapy (Specialty) shall be a full-time course and its duration shall extend over a period of three academic years.

**O.** -----The examination for the Degree of Master in Occupational Therapy (Specialty) shall be held at the end of the course, i.e. at the end of the three academic years.

**O.** ----- The Degree of Master in Occupational Therapy (Specialty) shall not be conferred upon a candidate unless he /she has passed in all the written, clinical and viva-voce and the dissertation, if any, prescribed for the examination in accordance with provision of **R.** -----

**O.** ----- Every candidate presenting himself/herself for the examination in any particular specialty of M.O.Th. Program for the first time shall submit four typed copies of a dissertation of not less than 2500 words consisting of the results of his/her own study or important investigations carried out by himself/herself under the guidance of a recognized teacher together with a review of recent advances pertinent to that theme, three months prior to the M.O.Th (Specialty) examination.

The acceptance of dissertation by the examiners shall be a condition precedent to the admission of the candidate for the written and clinical examinations.

**O.** -----A candidate who has submitted his/her dissertation once will not be required to submit a fresh dissertation if he/she re-appears for the examination in the same specialty on a subsequent occasion, provided that the dissertation has been accepted by the examiners.

**R**

. ---- The candidate will be examined in the following subjects: -

### ***Written***

(Each paper will be of 3 hours duration)

**Paper I:** Occupational therapy process and practice *I*.

**Paper II:** Occupational therapy process and practice *II*.

**Paper III:** Occupational therapy in Specialty Area.

**Paper IV:** Occupational therapy in Specialty Area.

Any one specialty to be chosen by the candidate from the following for paper III and IV: -

1. Master of Occupational Therapy in Musculoskeletal Sciences  
-----M.O.Th (MSK)
2. Master of Occupational Therapy in Cardio-vascular and Respiratory Sciences-----M.O.Th (CVR)
3. Master of Occupational Therapy in Developmental disabilities-----M.O.Th (DEV)
4. Master of Occupational Therapy in Neurosciences  
-----M.O.Th (NEURO)
5. Master of Occupational Therapy in Mental Health Sciences  
-----M.O.Th (MEH)
6. Master of Occupational Therapy in Community Medical Sciences.....  
....M.O.Th (CBR)

### ***Clinical and Viva-voce***

- I) There shall be One clinical presentation based on clinical topics of the Paper I and II
- II) And (III) there shall be two clinical presentations based on respective specialty subject.
- IV) Viva shall be based on teaching technology, investigative procedures and dissertation

**R. -----** The syllabus for the paper I and II is as under: -

### **COMMON OBJECTIVES FOR ALL SPECIALTIES**

The M.O.Th. (Sp.) Course is intended to prepare candidates for assumption of responsibilities in position of leadership as –

1. Specialized Practitioners.
2. Researchers.
3. Teachers.
4. Administrators.
5. Supervisors.
6. Consultants.

## **Paper I: Occupational Therapy Process and Practice I**

**COURSE OBJECTIVES:** The objectives of this course are to provide the candidate with the knowledge and skills to deal with the common clinical conditions mentioned in the contents. The candidate should be able to apply general principles of practice in therapy and appreciate their applications in enhancement of occupational therapy process. The candidate should be able to understand application of research methodology for formulating occupational therapy instruments and evaluation. They should be able to appreciate significance of clinical epidemiology, research ethics and advances in computer applications.

### **COURSE CONTENTS:**

#### **(A) Practice issues in Occupational Therapy:**

- 1) Management functions and strategies.
- 2) Administration and leadership.
- 3) Documentation.
- 4) Fiscal management
- 5) Code of ethics.
- 6) Quality assurance.
- 7) Teaching technology.
- 8) Ergonomic approaches and application.
- 9) Socio-cultural and spiritual influences in O.T.
- 10) Recent investigative and evaluative procedures.
- 11) Disability evaluation, applicability of law & legislation.
- 12) Clinical reasoning.
- 13) Alternate practice models.
- 14) Role of O.T. as consultant.
- 15) Current basis of therapy.
- 16) Advances in computer applications in O.T.

#### **(B) Treatment Context:**

- 1) Model of evidence based practice for occupational therapy.
- 2) Prevention of injury and physical dysfunction.
- 3) Infection control and safety issues in health care settings.
- 4) Clinical intervention to promote occupational function in the following:
  - a) General conditions: -
    1. Geriatrics.
    2. Infections in adults.
    3. Wellness program.
    4. Hospice-care.
    5. Psychosocial aspects of women and child health.
    6. Community based rehabilitation.
  - b) Musculoskeletal disorders related to following:
    1. Rheumatology.
    2. Orthopedics conditions.
    3. Hand rehabilitation.
    4. Application of ergonomic principles.
    5. Trauma-care.

6. Prostheses and orthoses.
  7. Burns
- (C) Applications of research:
1. Bio-statistics and research methods.
  2. Quantitative research.
  3. Qualitative research.
  4. Ethics in research.
  5. Guidelines for development, refinement, evaluation and use of assessment tools in occupational therapy. Scoring, administering tests and critiquing tools.

## **Paper II: Occupational Therapy Process and Practice II**

**COURSE OBJECTIVES:** The objectives of this course are to provide the candidate with the knowledge and skills to deal with the common clinical conditions in the field of cardio-respiratory conditions, neurosciences, developmental disabilities and mental health. The candidate should be able to understand clinical manifestations in each of aforementioned areas and apply suitable models of treatment based on recent trends.

### **COURSE CONTENTS:**

Treatment Context- Clinical intervention to promote occupational function in the following:

- A) Cardio-respiratory rehabilitation related to:
  1. Cardiac and pulmonary conditions.
  2. Industrial health.
  3. Strength training and work fitness in athletics.
  4. Energy conservation work hardening.
  
- B) Neurosciences related to:
  1. Cognitive rehabilitation.
  2. Neuropath logical conditions.
  3. Neurodegenerative disorders.
  
- C) Developmental Disabilities-
  1. Neonatology.
  2. Genetic conditions.
  3. Pediatric neurological conditions.
  4. Contemporary treatment approaches in pediatrics.
  
- D) Mental Health-
  1. Preventive and current practices in psychosocial conditions.
  2. Therapeutic media and methods.
  3. Intervention in common psychiatric conditions.

## **PAPER III AND IV OCCUPATIONAL THERAPY IN SPECIALTY AREA**

### **1. MASTER IN OCCUPATIONAL THERAPY IN MUSCULOSKELETAL SCIENCES (MSK):**

#### **COURSE OBJECTIVES:**

The objectives of this course are to provide the candidate with expertise in LE, UE & Spine rehabilitation in industrial, traumatic and pathological conditions using preventive, curative and rehabilitative model. The candidate should be able to practice therapy using biomechanical kinesiotherapeutic and rehabilitative frames of reference as well as physiological approaches. The candidate should be able to know and practice recent trends in investigative methods and intervention strategies in the field of occupational therapy related to conditions under this branch or specialty.

#### **COURSE CONTENTS**

- Evaluation of musculo-skeletal system in correlation to biomechanics.
- Knowledge and practice skills of using various standardized evaluation scales and recent investigative procedures used in musculoskeletal disorders of spine, upper and lower limbs.
- Research and practice in occupational therapy using biomechanical and rehabilitative frames of reference as well as kinesio-therapeutic and physiological approaches in management of traumatic, pathological, metabolic, degenerative and congenital disorders and sports injuries in musculoskeletal system including hand.
- In depth knowledge of recent trends in prescription Designing, fabrication, fitting and training of various orthoses, prostheses, assistive devices for spine, and upper and lower limbs.
- Application of biomechanics and bioengineering.
- Vocational fitness program and job analysis based on ergonomic principles.
- Disability evaluation, functional analysis indices and Workmen's Compensation Act as per the prevalent legislation.

### **2. MASTER IN OCCUPATIONAL THERAPY IN CARDIOVASCULAR-RESPIRATORY SCIENCES (CVR)**

#### **COURSE OBJECTIVES:**

The objectives of this course are to provide the candidate with expertise in understanding and interpreting clinical findings as related to different diagnosis, planning and implementing rehabilitation programs suited to individual patient's needs, formulating preventive protocols for progressive conditions, facilitating back-to-work process, providing advanced knowledge of occupational therapy in relation to the investigative and interventional strategies of patients with cardiovascular-pulmonary conditions.

The candidate is trained in the use and interpretation of standardized equipments, methods, media, modalities, for assessment, functional training, work fitness, and monitoring of patients with cardiovascular and pulmonary deficiencies in the intensive care unit and late phase of illness.

## **COURSE CONTENTS:**

- Overview of the cardiopulmonary systems- Applications of work physiology principles to cardiac rehabilitation.
- Current perspectives in cardiac rehabilitation- An integrated approach, clinical implications and improvement in 'Quality Of Life' in the frame of cardiac rehabilitation.
- Exercise prescription in cardiac rehabilitation in relation to the diagnosis- Exercise monitoring, development and prescription, exercise stress testing and interpretation, perspectives of exercise formulation and prescription, applications of exercise to work, activities, sports and leisure, applications of exercise in different manifestations.
- Clinical consideration for- early intervention in the intensive care phase, convalescent phase and late phase of the diseases, research, rehabilitation of the complex cardiac group, rehabilitation of the associated medical conditions.
- Genetic and drug related bleeding tendencies-hemophilia etc.
- Preventive cardiac rehabilitation- Risk factors and life-style modification, stress management.
- Management of patients with anxiety and depression in cardiovascular and pulmonary illness.
- Program implementation and functions- Program models.
- Newer technology in cardio-respiratory rehabilitation.
- Energy conservation techniques and work, ADL and recreation.
- Work simulation and work hardening.
- Disability evaluation and work fitness in cardio-respiratory conditions.

## **3. MASTER IN OCCUPATIONAL THERAPY IN DEVELOPMENTAL DISABILITIES (DEV)**

### **COURSE OBJECTIVES:**

The objectives of this course are to provide the candidate with expertise in the field of developmental disabilities. The training would provide advanced knowledge in developmental and psychometric assessment and application of neurophysiological and functional intervention modalities in neonatology & pediatric conditions in hospital, community and school settings. It would impart preciseness in correlating clinical presentation with therapeutic application.

### **COURSE CONTENTS:**

- Human development: Neuroanatomy, neurophysiological principles of development, Knowledge of normal and abnormal human growth and development.
- Advances and research in: Neurodevelopmental approaches, sensory integrative approaches, psychosocial, acquisitional and occupational performances as applied to developmental disabilities.
- Occupational therapy assessment in pediatric population: Application and /or interpretation using relevant tools, techniques, and scales.
- Therapeutic intervention: Methods, media, modalities used in the treatment of developmental disabilities.

- Management of clinical conditions: Congenital neurological defects, developmental and acquired paediatric abnormalities.
- Neonatal care and early intervention: Assessment, preventive care and early intervention, management in NICU, community and school based practice.

#### **4. MASTER IN OCCUPATIONAL THERAPY IN NEUROSCIENCES (NEURO):**

##### **COURSE OBJECTIVES:**

The objectives of this course are to provide the candidate with expertise in advanced knowledge with respect to the investigations and intervention strategies for neurological conditions based on neurophysiological and functional neuro-anatomical foundation. The candidate should be able to acquire knowledge and practice recent trends using preventive, curative and rehabilitative models. A special emphasis is given on disability evaluation so as to integrate patient in his home, community and work environment.

##### **COURSE CONTENTS:**

- Functional neuroanatomy.
- Theories of neurorehabilitation.
- Advances in sensory integrative therapy and cognitive rehabilitation
- Normal neurodevelopment and its deviation.
- Advances in neuro-developmental therapy for congenital and pathological developmental conditions.
- Clinical application of neurosciences: To relate principles of neurophysiology, neuropathology and neuropsychology to the assessment and therapeutic management of various neurological disorders. Modern approaches in neuro-occupational therapy.
- Geri care: Structural and behavioral implications of older adulthood.
- Biological theories of aging.
- Functional and preventive approaches in central nervous system degeneration.
- Prognostic and diagnostic occupational therapy assessment tools and other investigative procedures.
- Psychosocial aspect of adaptation and adjustment during management of disability.
- Disability evaluation and certification in neurological conditions.

#### **6. MASTER IN OCCUPATIONAL THERAPY IN MENTAL HEALTH SCIENCES (MEH):**

##### **COURSE OBJECTIVES:**

The objectives of this course are to provide the candidate with expertise in the use of preventive, curative and rehabilitation models for integration of persons with psychosocial problems in their homes, community and place of work. The candidate will acquire knowledge and skills for practicing recent trends based on current theoretical and philosophical issues and strategies of intervention in mental health.

## **COURSE CONTENTS:**

- Applied psychology and biological basis of psychiatry.
- Normal development and its deviations.
- Current philosophical, theoretical basis and frames of reference in occupational therapy in mental health.
- Diagnostic and prognostic assessment and evaluation tools and other investigative procedures. Use of standardized rating scales, indices, tests, procedures, and methods. Signs and symptoms, classification of mental illness.
- Intervention: Media and methods, principles, planning goals, approaches, individual and group, implementation and design of treatment in management of children, adolescents, adults and elderly individuals with psychosocial dysfunction.
- Alternate practice settings: Day care centers, school setting, geropsychiatric set-up, community integration, forensic psychiatry, preventive model and return to work program.
- Rehabilitation: Principles, process, approaches, goals, personnel, problems and constraints in rehabilitation and long term care.
- Evidence base practice, qualitative & quantitative research in mental health.
- Disability evaluation and job certification in psychiatric conditions.

## **MASTER IN OCCUPATIONAL THERAPY IN COMMUNITY MEDICAL SCIENCES (CBR)**

### **COURSE OBJECTIVES:**

The objectives of this course are to provide the candidate with the educational experience to emphasize on the health & community orientation instead of only disease & hospital orientation. The candidate should recognize 'Health For All' as a national goal & Health-rights' of all citizens & to promote wellness in the society. Developing sustainability should be long-term goal of his/here community based rehabilitation planning. This should cover school-setting, place of work, urban & rural communities. The candidate should be able to provide occupational therapy services using community resources and effectively participate in disaster management programs.

### **COURSE CONTENTS:**

- Epidemiology: Basic principles, study of distribution of disease & search for the determinants of that observed distribution. Statistical applications.
- National health care delivery system & occupational therapy contributions to it.
- Multicultural psychology & its influence on psychosocial rehabilitation.
- Community mental health.
- Industrial health
- Model of disaster management
- Disability evaluation and Social legislation
- Geri care
- Community practice in rehabilitation.

- Preventive Occupational therapy at wellness community programs, school settings, & place of work. Various models of community based rehabilitation & their appropriate application.
- Appropriate technology.
- Skill transfer.
- Sustainability.
- Disability evaluation, concessions available to persons with disability.
- Application of & environmental modification techniques to improve quality of life.

Research in community based rehabilitation

### **Standards of passing for Examination**

The examinations shall be organized on the basis of marking system to evaluate and to certify candidates level of knowledge, Skill and competence at the end of the training. Obtaining a minimum of 50% marks in theory as well as practical including clinical and viva voce separately shall be mandatory for passing examination as a whole.

### **SCHEME OF EXAMINATION**

Paper I: Occupational therapy process and practice I

Paper II: Occupational therapy process and practice II

Paper III: Occupational therapy in specialty Area.

Paper IV: Occupational therapy in specialty Area

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### **LIST OF MOTH BOOKS:**

#### **1. MASTERS IN OCCUPATIONAL THERAPY IN MUSCULOSKELETAL SCIENCES:**

- a. Clinical Orthopedic Rehabilitation: S. Brent Brotzman. C.V.Mosby Company.
- b. Orthotics in Rehabilitation: Pat McKee. Jaypee Brothers.
- c. Treatment and Rehabilitation of fractures: Stanley Hoppenfeld. Lippincott Williams and Wilkins.
- d. Therapeutic Exercise: Moving towards function: Carrie M. Hall & Lori Thein Broody. Lippincott Williams and Wilkins.
- e. Atlas of limb prostheses-Surgical, Prosthesis and Rehabilitation Principles: J. H. Bowker, J. W. Michael. Mosby yearbook.
- f. Introduction to splinting: Brenda Coppard, Helene Lohman. Mosby.
- g. Functional Fracture Bracing: Augustus Sarmiento. Springer
- h. Rehabilitation of Hand. Volume I & II. James Hunter. C.V. Mosby.
- i. Rehabilitation of the Hand: C. B. Wynn Parry. Butterworths.
- j. Spinal Cord Injury: Vickie Nixon. William Heinemann.

#### **2. MASTERS IN OCCUPATIONAL THERAPY IN CARDIOVASCULAR & RESPIRATORY SCIENCES:**

- a. Occupational Therapy and Physical Dysfunction: Principles, skills and practice: Ann Turner. Churchill Livingstone.
- b. Clinical Cardiac Rehabilitation. Frederick Pashkow. Williams and Wilkins.
- c. Heart Disease and Rehabilitation. Michael Pollock, Donald Schmidt. Human Kinetics.
- d. Progress in Cardiac Rehabilitation. Lenore Zohman, Raymond Phillips. International Medical Book Company.
- e. Stress Testing: Principles and Practice. Myryn Ellestad. Jaypee Brothers.

#### **3. MASTERS IN OCCUPATIONAL THERAPY IN DEVELOPMENTAL DISABILITIES:**

- a. Handling the young child with cerebral palsy at home. Nancie R. Finnie. Butter worth & Heinemann.
- b. Treatment of cerebral palsy and motor delay. Sophie Levitt. Blackwell.
- c. Occupational Therapy for children. Jane Case Smith. Mosby.
- d. Frames of reference for pediatric occupational therapy. Paula Kramer, Jim Hinojosa. Lippincott Williams & Wilkins.
- e. Sensory Integration: Theory and Practice. Anita Bundy. F. A. Davis.
- f. A Therapist's Guide to Pediatric Assessment. Linda King Thomas, Bonnie J. Hacker. Little Brown & Company.

#### 4. MASTERS IN OCCUPATIONAL THERAPY IN NEUROSCIENCES:

- a. Cognitive and Perceptual dysfunction: A clinical reasoning approach to evaluation and intervention. Carolyn Unsworth. Lippincott Williams and Wilkins.
- b. Neuroscience: Fundamentals for Rehabilitation. Laurie Lundy Ekman. W. B. Saunders.
- c. Motor control: Therapy and Practical Applications. Anne Shumway Woollacott. Lippincott Williams and Wilkins.
- d. Neurological Rehabilitation. Darcy Ann Umphred. Mosby.
- e. Neuropsychiatry. Fogel & Schiffs. Williams & Wilkins.

#### 5. MASTERS IN OCCUPATIONAL THERAPY IN MENTAL HEALTH SCIENCES:

- a. Group dynamics in Occupational Therapy. Marilyn B. Cole. Slack.
- b. Occupational Therapy in short term psychiatry. Moya Wilson. Churchill Livingstone.
- c. Occupational Therapy: Configuration of a profession. Anne Cronin Mosey. Raven Press.
- d. Activities Therapy. Anne Cronin Mosey. Raven Press.
- e. Psychosocial components of Occupational Therapy. Anne Cronin Mosey. Raven Press.

#### 6. MASTERS IN OCCUPATIONAL THERAPY IN COMMUNITY MEDICAL SCIENCES:

- a. Community Based Rehabilitation. Malcolm Peat. W.B. Saunders.
- b. Best Practice Occupational Therapy in Community Service with Children and families. Winnie Dunn. Slack Incorporated.
- c. Group Wellness programs for chronic pain and disease management. Carolyn A. McManus. Butter worth Heinemann.
- d. Park's Textbook of Preventive and Social Medicine. K. Park. M/s Banarasidas Bhanot Publishers.
- e. Ergonomics, Work and Health. Stephen Pheasant. Aspen publishers.
- f. Ergonomics for therapists. Karen Jacobs. Butter worth Heinemann.
- g. Rehabilitation Medicine: Principles and Practice. Joel A. DeLisa. Lippincott Williams & Wilkins.
- h. Krusen's Handbook of Physical Medicine and Rehabilitation. Frederic Kottke, Justus F. Lehmann. W. B. Saunders.
- i. Occupational Therapy with Elders. Sue Byres, Connon Helene, L. Lohman. Elsevier Mosby.