# **MD Psychiatry - Curriculum**

#### (A) GOAL

The goal of the MD training programme is to provide the competencies so that after the training, the candidate is able to work as Senior Resident/ Assistant Professor in the specialty of Psychiatry

# (B) OBJECTIVES to be achieved by an individual at the end of 3 years of MD training

□ **Basic Sciences :** The candidates should be thoroughly familiar with basic and applied neuroanatomy, neurophysiology, sociology, neurochemistry, developmental and social psychology, anthropology & ethology.

□ □ General & Clinical Psychology : The candidates are expected to have a sound knowledge of general psychological principles in areas such as personality, learning, intelligence, memory, emotions, perceptions etc. They are expected to learn the theory and practical aspects of clinical psychology like psychometric assessment and psychological methods of treatment.

□ **Statistics and Research Methodology :** The candidates should have basic skills in statistics and research methodology so as to successfully interpret/conduct research.

□ □ **Clinical Psychiatry :** The candidates should attain a high degree of clinical proficiency in history taking, conducting and reporting psychiatric examination, diagnosis and the treatment of the common psychiatric disorders.

 $\Box$  **Child and adolescent Psychiatry :** The candidates should acquire a sound knowledge of principles and practice of child & adolescent psychiatry including learning disability, mental retardation and other emotional & behavioural disorders.

 $\square$  **Psychopharmacology :** Residents should be thoroughly familiar with basic principles of psychopharmacology and should have sound knowledge of all aspects of psychopharmacological practice.

 $\square$  **Psychodynamics & Psychotherapies :** Candidates should have a proper understanding of the various schools of psychodynamic thing and their applications to psychiatry. The should also become familiar with theoretical framework and techniques of Psychoeducation, individual as well as group psychotherapy, behaviour therapy and should be able to conduct such therapies.

 $\Box$  **Psychosomatic Disorders & Liaison psychiatry :** The candidates should develop skills in understanding and managing psychosomatic disorders and liaison psychiatry. They should also be aware of the psychosocial aspects of various medical and surgical disorders.

**Emergency Psychiatry :** The candidate should become familiar with psychiatric emergencies and their management.

#### (C) SKILLS

-Applying scientific thinking and evidence based approach

-Maintaining a critical and analytical perspective

-Demonstrating cultural sensitivity in clinical situations

-Establishing a therapeutic Doctor-Patient relationship

-Identifying significant problem/need of patient

-Collecting relevant information including personality and psychologic issues that results in a diagnostic formulation

-Formulating a comprehensive differential diagnoses including medical causes

-Writing a management plan taking iinto consideration safety and biopsychosocial aspects

-Appropriately documenting the decision making process and written justification for the professional judgment

-Communicating effectively with patients, relatives, colleagues and subordinates

#### (D)COURSE CONTENTS

### THEORY SYLLABUS

#### Semester I.

**Basic Sciences as applied to psychiatry, Neuroanatomy, Neurochemistry, Neurophysiology** 

□ □ Neurotransmitters & Neuropeptides

□ □ Second Messenger Systems and Beyond

□ □ Basic and applied Electrophysiology

□ □ Neuoimaging and Implications for Psychiatry

 $\Box$   $\Box$  Consciousness

□ □ Sleep and Dreaming

Chronobiology

□ □ Social & Transcultural Psychiatry

□□Ethology

□ □ Anthropology

□ □ Statistics & Research

□ □ Aggression: Psychology and Biology

□□Intelligence

□ □ Learning Theories

□ □ Personality, Emotions, Motivations

□ □ Information Processing: Brain Models of Mind

General psychology including abnormal psychology, social psychology and psychometry

 $\Box$   $\Box$  Clinical and developmental psychology

#### Semester II

#### **Clinical Psychiatry**

(a) Approach for diagnosis and classification of Psychiatric disorders. (b) Concept, Typology, etiology, clinical features, course, outcome & prognosis of organic mental disorders □ □ Alcohol & Drug dependence □ □ Schizophrenia & related psychiatric diseases □ □ Mood disorders

□ □ Personality disorders

(c)Experimental Diagnostic Research methodology and Implications for Mental disorders

□ □ Psychiatric History taking, Examinations, Psychopathology Phenomenology

□ □ Communications and interviewing skill.

#### Semester III

#### Clinical Psychiatry Concepts, Typology, etiology, Clinical features, outcome prognosis of:

□ □ Anxiety disorders: clinical psychiatry

□ □ Stress induced disorders and somatoform disorders

 $\square$   $\square$  Non organic disorders

□ □ Eating disorders

□ □ Psychosexual disorders

□ □ Habit and impulse disorders

 $\square$   $\square$  Psychiatry emergencies

#### **Semester IV**

#### Therapies

(a) Psychopharamacology : General principles, classifications, indications, adverse effect

(b) Psychotherapies : General principles, classifications, indications, adverse effect

(c) Behaviour therapies : General principles, classifications, indications, adverse effect

(d) ECT : General principles, classifications, indications, adverse effect

#### Semester V

#### Neuropsychiatry and Medicine as related to psychiatry

Dementia : Differential Diagnosis and Management

Delirium : Differential Diagnosis and Management

□ □ Psychiatric Syndromes with Epilepsy

□ □ Neuro-psychiatric Sequel of HIV Infection

□ □ Consultation-Liaison Psychiatry

□ □ Psychological Aspects of Cardio-vascular Disorders

 $\Box$   $\Box$  Psychological Aspects of Gastro-intestinal Disorders

□□Obesity

□ □ Psychoendocrinology,Psychooncology,Psychodermatology, Psychoimmunology

□ □ Concept and Assessment of Disability & Quality of Life

□ □ Neuro-Psychologic Assessment and its Relevance to Psychiatric

Diagnosis and Management

□ □ Psychological Aspects of Organ Transplantation

#### Semester VI

#### **Psychiatry specialities**

(a) Ethics and NDPSA, CPA, Indian Disability Act & other related laws Indian Mental Health Act

(b) Geriatric psychiatry

Epidemiology and management of Geriatric Psychiatric disorders with special emphasis to India

(c) Community psychiatry

General principles, NMHP and other community based programmes

(d) Forensic Psychiatry

(e) Child and adolescent psychiatry

□ □ Epidemiology, classifications, etiology, clinical features, progression, course and management

#### **THESIS**

#### **Rules for submission of Thesis / Dissertation**

Every candidate pursuing P.G degree course is required to carry out work on a selected research project under the guidance of recognized post Graduate teacher. The results of such work should be submitted in the form of a dissertation.

Dissertation is aimed to train the post graduate student in methods and

Technique of research methodology. It includes identification of a problem formulation of hypothesis, search and review of literature, acquaintanace with recent advances, designing of a research study collection of data, critical analysis, comparison of results and drawing conclusion.

Every candidate shall submit to The Principal in the prescribed proforma, a synopsis containing particulars of proposed dissertation work with in three months from the date of commencement of the course. The synopsis should be sent through proper channel.

Such synopsis will be reviewed and cleared by the Ethics Committee and the registered by the University. No change in the dissertation topic or guide can be made without prior approval of the university.

The dissertation should be written under the following headings

1.Introduction

2. Aims or objectives of the study

3. Review of literature

4. Materials and Methods

5.Results, Tables and observations

6.Discussion

7.Coclusion

- 8. References
- 9.Annexures

#### **Dissertation shall be**

1. Typed in double line spacing in single side of A4 size paper

(8.27 inches (width) x 11.69 inches (length)

2. Shall not be less than 50 pages and should not exceed 150 pages excluding References , tables and Annexure.

3.Spiral binding should not be done.

Four copies of the dissertation along with a soft copy on a CD shall be submitted to the Principal for evaluation three months before Final Examination.

The Examiners appointed by the University shall value the dissertation. Approval of dissertation work is essential pre- condition for a candidate to pass the University Examination. GUIDE: The academic qualification and teaching experience require for recognition by this University as a Guide for dissertation work is as per Medical Council of India Minimum Qualification for Teachers in Medical Institutions Regulations 1998. Teachers in a Medical college having a total of eight years teaching experience as Lecturer or Assistant professor gained after obtaining Post Graduate Degree shall be recognized as post graduate Teachers.

A Co- Guide may be included provided the work requires substantial contribution from a sister department. The co-guide shall be a recognized postgraduate teacher.

CHANGE OF GUIDE: In the event of a registered guide leaving the Institution for any reason, the Guide may be changed with prior permission from the university.

#### **Guidelines for writing** Thesis / Dissertation

The thesis may be normally restricted to the size to 150 pages. To achieve this, following points may be kept in view;

(i) Only contemporary and relevant literature may be reviewed.

(ii) The techniques may not be described in detail unless any

modification/innovations of the standard techniques are used and

reference may be given.

(iii) Illustrative material may be restricted.

(iv) Since most of the difficulties faced by the residents relate to the work in clinical subject or clinically oriented laboratory subjects the following steps are suggested:

 $\Box$  For prospective study, as far as possible, the number of cases should be such that adequate material, judged from the hospital attendance, will be available and the candidate will be able to collect the case material within a period of 6-12 months so that he/she is in a position to complete the work within the stipulated time.

 $\Box$   $\Box$  The objectives of the study should be well defined.

 $\Box$   $\Box$  As far as possible, only clinical or laboratory data of investigations of patients or such other material easily accessible in the existing facilities should be used for the study.

□ Technical assistance, wherever necessary, may be provided by the department concerned. The resident of one speciality taking up some problem related to some other speciality should have some basic knowledge about the subject and he/she should be able to perform the investigations independently, wherever some specialised laboratory investigations are required a co-guide may be coopted from the concerned investigative department, the quantum of laboratory work to be carried out by the candidate should be decided by the guide and coguide by mutual consultation.

□ □ The Clinical residents may not ordinarily be expected to undertake experimental work or clinical work involving new techniques, not hitherto perfected or the use of chemicals or radio isotopes not readily available. They should however, be free to enlarge the scope of their studies or undertake experimental work on their

own initiative but all such studies should be feasible within the existing facilities.  $\Box$   $\Box$  The residents should be able to use freely the surgical pathology/autopsy data if it is restricted to diagnosis only, if however, detailed historic data are required the resident will have to study the cases himself with the help of the guide/co-guide. The same will apply in case of clinical data.

#### (E) METHODS OF TRAINING

#### a. <u>Year-wise structure of Training Programme</u>

Each trainee will be given clinical responsibility of various areas in rotation. The general schedule of clinical posting should bear follows: Ward/OPD/Emergency- 18months Neurology- 03 month Internal Medicine- 03month Clinical Psychology- 03 month Drug De-addiction- 03 months Child & Adolescent Psychiatry/Forensic Psychiatry- 04 months Community Psychiatry- 02 months The DPM candidates would be given full responsibility for the patient care and the record keeping under the supervision of the Senior Resident and Consultants

#### b. Rotation and Posting in other departments

Neurology 03 month Internal Medicine 03 month Clinical Psychology 03 month Community Psychiatry 02 month

#### c. Teaching and Learning activities like Seminar, Symposium etc.

1. Seminars: There should be weekly seminar in which the DPM candidates should present material on assigned topics in rotation. It should be followed by discussion in which all trainees are supposed to participate.Generally the topics covered should be those that supplement the formal teaching programme.

2. Case Conference: A case conference should be held every week where a trainee prepares and presents a case of academic interest by rotation and it is attended by all the members of the Department.

3. Journal Club : There should be atleast once in a month Journal Club in which the critical evaluation of a research paper from a journal.

4. Psychosomatic Rounds. This is a presentation of a case of psychosomatic illness, or a medical illness with pronounced psychiatric problems. It should be held weekly in collaboration with various departments and attended by the faculty and the trainees and the staff from the concerned department.

5. Case presentation: All new in-patients and outpatients cases should be routinely reviewed with one of the Consultants. In addition, the candidate is required to present case material at routine rounds and other case conferences.

6. Psychotherapy tutorials: These should be held in small groups supervised by a consultant in which a case is presented by a trainee and psychotherapeutic management discussed.

7. Attendance at special clinics/unit as applicable e.g. Child and Adolescent Psychiatry Clinic, Marital and Psychosexual Clinic, Community Outreach Clinics, Drug-de-addiction unit etc.

8. Training in ECT administration.

9. Extra-mural activities : The candidates should be encouraged to attend certain academic/semi-academic activities in the allied subjects outside, e.g. seminars/lectures held at Departments of Sociology, Psychology, Neurology etc.

#### (F)SCHEME OF EXAMINATION

#### **Theory**

(i) No. of Papers- 4
(ii) Maximum Marks- 400
Each theory paper will comprise of TWO ESSAYS 20 MARKS EACH & 10 SHORT NOTES
6 MARKS EACH. Maximum marks for each paper will be 100.

Paper I: Neuro anatomy and Neurophysiology (including Genetics & Biochemistry) Psychosocial Basis of Human Behaviour (including General Psychology, abnormal Psychology, Social Psychology, Psychometry and Biostatistics)

Paper II: Clinical Psychiatry including recent advances

**Paper III: Psychiatric Specialities** 

Paper IV: Neurology & general medicine related to psychiatry

#### Practical examination-

Long case, Short cases, Spots, Ward round, Viva voce, OSCE(5 minutes each station of clinical cases -regarding history, clinical findings and management, photographs of cases, Radiological investigations, instruments etc.)

#### <u>Total Marks</u>

Maximum marks	Theory	Practical	Viva	Grand Total
	400	200	100	700

# **MODEL QUESTION PAPERS**

**Paper I** – BASIC SCIENCES AS RELATED TO PSYCHIATRY (NEURO-ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY, BIOSTATICS, GENERA PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL PSYCHOLOGY, PSYCHOMETRY AND GENETICS)

#### Time : Three hours Maximum : 100 marks Draw suitable diagram wherever necessary. Answer ALL questions.

(2 X 20 = 40)

I. Essay questions :1. Describe the Neurophysiology of sleep.

2. Discuss the role of GABA in CNS neurotransmission and its relevance for psychiatric disorder.

MD Psychiatry

Page 8

- II. Write short notes on :
- 1. Nonparametric statistics.
- 2. Systematic desensitization.
- 3. Corpus Callosum.
- 4. p300 Event related potential.
- 5. Contributions of Dr. A. Venkoba Rao.
- 6. Functional Magnetic Resonance Imaging.
- 7. Rorschach and its relevance.
- 8. Genetic counseling in Psychiatry.
- 9. Cognitive Behaviour Therapy in Depression.

10. Excitatory Neurotransmitters.

#### Paper II – CLINICAL PSYCHIATRY INCLUDING RECENT ADVANCES

Time : Three hours Maximum : 100 marks Draw suitable diagram wherever necessary. Answer ALL questions.

#### I. Essay questions :

#### (2 X 20 = 40)

(10 X 6 = 60)

1. Discuss the course and treatment of depression (including treatment resistant depression).

2. Describe the classification of male sexual dysfunctions. Discuss the approach to their evaluation and management

#### II. Write short notes on :

- 1. Cognitive Remediation in Schizophrenia.
- 2. Group therapy in Alcohol dependence.
- 3. Determinants of outcomes of severe mental disorders (DOSMED) study.
- 4. Psychiatric management of pain.
- 5. Transcranial magnetic stimulation therapy and its principle.
- 6. Therapeutic drug monitoring in Psychiatry.
- 7. Anesthetic modification in ECT.
- 8. Cognitive behaviour therapy for delusions
- 9. Behavioural therapy to obsessive compulsive disorder.
- 10. Soft neurological signs in schizophrenia.

(10 X 6 = 60)

## Paper III – PSYCHIATRY SPECIALITIES

Time : Three hours Maximum : 100 marks Draw suitable diagram wherever necessary. Answer ALL questions.

#### **Essay Questions :**

(2 X 20 = 40)1. Discuss the clinical features and management of Attention Deficit Hyperactivity Disorder (ADHD)

2. Management of psychosis in the elderly

#### II. Write short notes on: $(10 \times 6 = 60)$

- b. Binet Kamat Test
- c. Early onset schizophrenia
- d. Inhalant use in adolescents
- e. Behaviour therapy in the management of Conduct disorder
- f. McNaughten's rule
- g. Testamentary capacity
- h. IPC section 377 and psychiatry
- i. Memantine
- j. Admission procedures in Mental Health Act, 1987
- k. District mental heath programme

#### Paper IV- GENERAL MEDICINE AND NEUROLOGY RELATED TO PSYCHIATRY

Time : Three hours Maximum : 100 marks Draw suitable diagram wherever necessary. Answer ALL questions.

#### I. Essay questions :

#### (2 X 20 = 40)

- 1. Discuss neuropsychiatric complications of thyroid disorders.
- 2. Discuss the clinical approach to young onset dementia.

#### **II.** Write short notes on : (10 X 6 = 60)

- 1. Metabolic syndrome with antipsychotics.
- 2. Neuroendocrinolgy of depression.
- 3. Genetic counseling in fragile-x syndrome.
- 4. Post-concussion syndrome.

- 5. Newer antiepileptic drugs.
- 6. AIDS dementia.
- 7. Prophylaxis of Migraine.
- 8. Psychosocial support to terminally ill.
- 9. Psychiatric presentations in Parkinson disease.
- 10. Monitoring seizure in ECT.

#### FORMAT FOR LOG BOOK

It is essential that the trainee maintains a detailed account of the work done by him. The record book will in addition remind the trainee of what he should observe, learn and perform in a programmed and phased manner during the course of training. It is hoped that this record will stimulate the trainee towards greater effort in areas where he is below par and also record his progress. It forms the basis for assessment and evaluation of the trainees progress. Some of the possible criteria on the basis of which a trainee could be evaluated are - soundness of knowledge, application & judgment, keenness to learn, punctuality and promptness, initiative, reliability, clinical skill, behavior with patients, attitudes towards patient's relatives, colleagues, seniors and other staff, ability to express etc.

Depending on the qualities and the level of attainments a candidates could be considered for appraisal, on the basis, for example, of the following 5 letter grading system.

A Excellent Above 75%, B Good 60% - 65%, C Satisfactory 50% - 60%, D Poor 30% - 50%, E Bad Below 30%

Besides the grading as indicated above, each student would also be given a formal feed back on his/her weak points and how to overcome his/her deficiencies.

#### **RECOMMENDED BOOKS**

#### Must Read

□ □ Kaplan HI, Saddock BJ, Comprehensive text book of Psychiatry, Williams & Williams, Baltimore, USA.

□Kaplan and Saddock, Synopsis of psychiatry

□ □ Fish's Clinical Psychopathology

□ □ Sims A, Symptoms in the Mind, Saunders, Philadelphia, Pennysylvania

Atkinson and Hilgard, Introduction to psychology.

□ □ Kuppuswamy, Social Psychology

 $\square$   $\square$  Morgan and King, Introduction to Psychology  $\square$   $\square$ 

#### <u>Must Refer</u>

Gelder M, Gath D, Mayou R, Oxford Textbook of Psychiatry, Oxford University press, Oxford, UK.

□ □ Hales RE, Yudofsky SC, American Textbook of Neuro-psychiatric, American Psychiatry press, Washington, USA.

□ □ American Psychiatric Association, Practice guidelines for the treatment of psychiatric disorders, APA, Washington, USA.

□ □ Talbott JA, Hales RE, Yudofsky, Textbook of Psychiatry, American Psychiatric Press, Washington, USA.

□ □ Hamiltaon M, Fish.s Clinical Psychiatry, John Wright, Bristol.

□ □ Sims A, Symptoms in mind, Saunders, Philadelphia, Pennsylvania.

□ □ Lishman WA, Organic Psychiatry-the Psychological consequences of cerebral disorders, Blackwell, Oxford, UK.

□ □ Tasman A, Kay J, Liebermann JA, Psychiatry, Panther Publications Pvt. Ltd. Bangalore, India.

□ American Psychiatric Association, Diagnostic and statistical manual of mental disorders, APA, Washington, USA.

□ □ Indian Psychiatric society, Guidelines for treatment of Psychiatric disorders, Indian Psychiatric Society, India.

#### LIST OF JOURNALS

□ □ Indian Journal of psychiatry

□ □ American Journal of Psychiatry

 $\square$   $\square$  British journal of psychiatry

 $\Box$   $\Box$  Archives of general Psychiatry

□ □ Journal of clinical Psychiatry

□ □ Acta Psychiatrica Scandinavica

□ □ Biological Psychiatry

□ □ Journal of Psychiatry and Clinical Neuroscience

□ □ Psychiatric Clinics of North America