MD Psychiatry Curriculum: AIIMS Nagpur

1. Preamble:

The training programme is an endeavour to create psychiatrists with necessary knowledge and skill, to provide evidence-based quality mental healthcare. The post graduate programme is aimed at advancement of the cause of science through research and training. The purpose of this document is to illustrate the guidelines to achieve defined outcomes through training and assessment.

2. Goal:

The main goal of the training program is to develop psychiatrists with the necessary knowledge, skill and attitude, to diagnose and manage a wide range of mental and behavioural disorders as seen in the community or in secondary/tertiary care settings.

Acquiring the clinical skills and empathic attitude is given utmost importance. As a result of training in psychiatry, the post-graduate doctor should become competent in psychiatric interview techniques, psychotherapies as well as biological therapies for psychiatric disorders. The psychiatrist thus trained should be able to identify the mental health care needs of the community and take preventive as well as curative steps to address those. The post-graduate at the end of training should acquire basic skills in teaching of medical/para-medical students and are expected to know the principles of research methodology.

3. Programme outcomes:

At the end of 3 years of postgraduate training, the candidate should be able to:

1) Understand the importance of mental health with respect to healthcare needs of the community and country.
2) Function as a competent psychiatrist – a physician specialized in the diagnosis, treatment and rehabilitation of psychiatric disorders (including psychiatric sub-specialities and psychiatric emergencies) and practice evidence-based psychiatry.
3) Have the knowledge and understanding of the biological, psychological, social aspects of psychiatric illnesses including possible preventive and rehabilitative measures and be updated with the recent advances and developments in diagnostics and therapeutics.

4) Carry out detailed psychiatric assessments/ clinical examination including appropriate investigations wherever indicated and to interpret the investigative reports correctly.
5) Prescribe psychotropic medication rationally, administer physical treatments such as electroconvulsive therapy and be able to monitor and manage side-effects, if ever they arise.
6) Should have the basic knowledge of psychology and be capable of providing psychotherapy and counselling for common psychiatric illnesses.
7) Acquire a spirit of scientific enquiry, have the basic concept/knowledge of the principles of research methodology and epidemiology, conduct research and be able to interpret research findings for clinical use.
8) Lead and work efficiently in a multidisciplinary mental health team comprising of other mental health professionals including psychologists, social workers, psychiatric nursing professionals etc.
9) Provide consultation to other medical and surgical specialities and sub-specialities.
10) Be aware and handle the ethical, legal aspects of psychiatric illness and rights of persons with mental and behavioural disorders.
11) Teach under-graduate students, nursing and students of allied sciences.
12) Updated/aware of the national mental health programs/policies and related laws, as well as implement and abide by it.

Subject specific competencies:

By the end of the course, the student should have acquired knowledge (cognitive domain), professionalism (affective domain) and skills (psychomotor domain) as specified in the syllabus. The candidate, at the end of the postgraduate training course is expected to have competencies in the following areas:

Cognitive domain:

By the end of the course the student should be able to demonstrate the knowledge of

1) Aetiology, classification, assessment, management and prognosis of various psychiatric disorders and psychiatric sub-specialities.
2) Basic sciences as applied to psychiatry to be able to correctly diagnose and manage.
3) Diagnosis, assessment and management of psychiatric co-morbidities among common general medical condition.
4) Identification, assessment and management of psychiatric emergencies.

5) Pharmacological effects of psychotropic medications (pharmacokinetics and pharmacodynamics), the side-effects, interactions with the other drugs, alteration of their metabolism in different clinical situations, including that in the special population e.g. elderly, pregnant women.
6) Mechanism and use of non-pharmacological biological therapies.
7) Rehabilitation of psychiatric patients.
8) Recent advances and latest diagnostics and therapeutics in psychiatry.
9) National/state policies, programmes and laws related to psychiatric practice in India (e.g. NMHP, MHCA, RPWD, NDPSA, etc.).
10) Principles of research methodology and epidemiology.

Affective domain:

By the end of the course the student should be able to

1) Demonstrate understanding of effective communication skills.
2) Demonstrate understanding of the general and ethical considerations as pertaining to medical and psychiatric practice.
3) Demonstrate skill to work cohesively in a team, and maintain healthy professional/working relationship with superiors, colleagues and sub-ordinates.
4) Demonstrate skill and competence to deal/interact with every patient and their relatives with respect, dignity, and empathy.
5) Demonstrate respect for the rights of persons with mental illness.

Psychomotor domain:

By the end of the course the student should acquire the following clinical skills and be able to

1) Obtain a proper history, perform through mental state examination, physical examination.
2) Arrive at diagnosis, identify aetiopathogenesis, order relevant/appropriate investigations in patients with mental and behavioural disorders.
3) Present a comprehensive and evidence-based management plan including psychotherapy, pharmacotherapy and other biological treatment for mental and behavioural disorders.
4) Independently assess and manage mental and behavioural disorders.
5) Prescribe pharmacotherapy for mental and behavioural disorders.
6) Administer physical treatment, e.g., modified electroconvulsive therapy.

7) Administer psychotherapy e.g., cognitive behaviour therapy, supportive psychotherapy, behaviour therapy.
8) Psycho-educate the patients and their care givers.
9) Identify psychiatric emergency, manage effectively and take sound decisions regarding hospitalization, or timely referral to other consultants of various medical sub-specialities wherever deemed essential and necessary.
10) Perform crisis intervention.
11) Consult to other medical and surgical specialities and sub-specialities, whenever needed.
12) Function effectively in varied clinical settings, namely, out-patient clinic, in-patient wards, or emergency/critical care.

4. Duration of programme:

The period of certified study and training for the post-graduate md psychiatry shall be three academic years (six academic terms). The academic terms shall mean six months training period. The students will take up their final examination after completion of 3 years/36 months and clearing the formative assessment as specified. If a student fails to appear for final examination due to some reason or does not clear it, he/she will be allowed to reappear after 6 months, in the next term.

5. Eligibility:

The candidates will be admitted through INI CET for postgraduate courses.

Commencement of academic session: January & July. Admission for MD Psychiatry would be done twice a year.

6. Syllabus:

Neural and basic sciences:

1) Functional Neuroanatomy
2) Neural development and Neurogenesis
3) Neurophysiology and Neurochemistry
4) Psycho-neuroendocrinology

5) Neurogenetics, functional genomics, Epigenetics
6) Applied electrophysiology
7) Chronobiology
8) Epidemiology, Statistics and Research methodology
9) Evidence based Psychiatry
10) Genetic Counselling and Psychiatric Conditions.
11) Sociocultural Sciences- Socio-biology, Ethology
12) Animal models of Psychiatry
13) Brain Imaging techniques and findings in neuro-psychiatric disorders.

Behavioural Sciences:

1) Normality and mental health
2) Growth and development – Developmental process in childhood and adolescence
3) Basic science of self, sleep and appetite
4) Intelligence and Aptitude – Theories and measurements
5) Sensation, Perception and Cognition
6) Theories of Motivation, Needs and frustration of Needs
7) Theories of Personality and its assessment
8) Feelings, emotions and Stress
9) Thinking and Language
10) Principles of learning and memory
11) Psychodynamics and Defence Mechanisms
12) Personality – Theories of personal– Intelligence and Neuro Psychiatric functions
13) Aggression: Psychology and Biology
14) Sociology and Psychiatry
15) Anthropology and Psychiatry.

Clinical psychiatry

1) Historical aspects of psychiatry
2) Patient doctor relationship
3) Diagnosis and Psychiatry: Examination of Psychiatric patient. Signs and symptoms of psychiatric disorders – psychiatric interview, history and mental state examination
4) Classification in Psychiatry, Psychiatric rating scales, Laboratory testing in psychiatry, Clinical neuropsychology, psychiatry report, medical record and medical error

5) Schizophrenia, paranoid symptoms and syndromes – epidemiology, aetiology, biochemical and endocrinological aspects, genetic factors, clinical features, somatic and psychosocial treatment, psychotherapeutic aspects
6) Delusional disorders, other disorders like schizo-affective disorders, schizophreniform disorders, brief reactive psychosis and culture and bound syndromes
7) Mood disorders- historical introduction, epidemiology, Genetics, clinical features, neurobiology, and management
8) Anxiety disorders- Generalized anxiety disorders, panic disorders and phobias
9) Obsessive -compulsive and related disorders– aetiological factors, clinical signs and symptoms, biological aspects and management
10) Reactions to stressful experiences, posttraumatic stress disorder, somatoform disorders and dissociative disorders – conceptual issues, clinical features and management
11) Impulse control disorders – intermittent explosive disorder, kleptomania, pyromania, pathological gambling, behavioural addictions, etc
12) Personality disorders – classification, clinical description and management of various personality disorders
13) Normal sexuality and sexual disorders – gender identity disorders – paraphilias, sexual dysfunctions
14) Women mental health – premenstrual dysphoric disorder, post-partum psychiatric disorders, etc
15) Geriatric psychiatry – psychosocial aspects of aging, psychiatric examination of elderly patients, psychiatric disorders of late life
16) Other psychiatric disorders including sleep disorders, feeding and eating disorders, factitious disorders, adjustment disorders, impulse control disorder etc
17) Psychiatric emergencies including suicide, Para suicide and violence
18) Biological therapies in psychiatry – pharmacotherapy – electroconvulsive therapy, psycho surgery
19) Psychotherapies – including various forms of analytical therapies, behaviour therapy, cognitive therapy, group therapy, family therapy, marital therapy, brief psychotherapies – crisis intervention – evaluation of psychotherapy
20) Recent advances in Psychiatry
21) Miscellaneous: Non-compliance, Malingering, Antisocial behaviour, Bereavement (Including death) etc.

Child and adolescent psychiatry:

1) Introduction, psychiatric examination of children and adolescents, clinical profile of various disorders specific to childhood and adolescence
2) Intellectual disability
3) Specific developmental disorders of scholastic skills
4) Specific developmental disorders of speech and language
5) Pervasive developmental disorder
6) Hyperkinetic disorders
7) Conduct disorders
8) Tic disorders
9) Mental and behavioural disorders specific to childhood.

Addiction psychiatry:

1) Introduction and overview of substance use disorder
2) Alcohol related disorders
3) Opioid related disorders
4) Cannabis related disorders
5) Tobacco related disorders
6) Caffeine related disorders
7) Sedative-hypnotic use related disorders
8) Stimulant related disorders
9) Hallucinogen related disorders
10) Other substance related disorders.

Community psychiatry:

1) Conceptual issues of Community Psychiatry
2) Prevention of mental disorders
3) Mental health care service system
4) Integration of mental health into Primary care
5) Policy of international & national programmes related to psychiatry
6) Care of chronically mentally ill
7) Psychiatric education
8) Managed care, Quality of life, Balanced care
9) Public attitudes and the problem of stigma

10) Psychiatry and the media
11) Transcultural Psychiatry, Cultural Bound Syndromes.

Forensic psychiatry:

1) Ethics. confidentiality and legal issues in psychiatry
2) Legislations and acts related to psychiatry including Mental Health Act, Persons with Disability Act, Narcotic drugs and Psychotropic Substances Act
3) Human rights of psychiatric patients
4) Testamentary capacity
5) Certifications related to psychiatry.

Neuropsychiatry:

1) Neuro-psychiatric approach to the patient. - History taking: Clinical neurological examination, localization of lesions (including disorders of Cranial nerves)
2) Special methods of examination: Lumbar puncture, fundoscopy; tests of VIII cranial nerve function; clinical electroencephalography, clinical electromyography and nerve conduction velocity and neuroradiology
3) Psycho-somatic Medicine. - Cardio-vascular, Gastrointestinal, Obesity, Respiratory disorders, Diabetes, Endocrine and Metabolic disorders, Psycho-oncology, psycho-cutaneous disorders
4) Neurocognitive disorders including Dementia and Delirium
5) Neuro-psychiatric approach to Traumatic Brain Injury
6) Neuro-psychiatric aspects of Headache
7) Neuro-psychiatric aspects of Neuro-muscular and De-myelinating disorders
8) Neuro-psychiatric aspects of brain tumours and infections (meningitis, encephalitis, HIV/AIDS, neurosyphilis)
9) Neuropsychiatry of neurometabolic and neuro-endocrine disorders (Porphyria, Wilson ‘s disease, Phenylketonuria, Galactosemia and other Aminoaciduria etc.)
6) Organic mental syndromes – signs and symptoms – aetiology, differential diagnosis and management
7) Miscellaneous- Parkinsonian syndromes, involuntary movements, spinocerebellar degenerations; normal pressure hydrocephalus, progressive cerebral degeneration of infancy and childhood, Movement disorders including medication – induced movement disorders.

7. Teaching-Learning activities

Post graduate training is to be skilled and performance oriented, and essentially self-directed. Primary focus will be on learning through clinical work in outpatient clinic, ward and clinical rotations (special clinics / units), under the able guidance of faculty.

Practical demonstrations will be done for the teaching of Psychotherapy sessions, administration of ECT, tDCS, rTMS, recording & interpretation of EEG, neuro-imaging and psychodiagnostic tests / tools.

Formal teaching sessions will endeavour to supplement this core effort. They shall be scheduled as follows:

Sr. No.	Activity	Frequency
1.	Didactic lectures (Introduction to history taking, mental status examination, etc.)	Initial 6 months of training
2.	Research methodology workshop	Within first 6 months of training
3.	Grand rounds	Once a week
4.	Case conference	Once a week
5.	Tutorials	Once a week
6.	Seminars	Once in 15 days
7.	Psychotherapy meets	Once a month
8.	Journal club	Once a month
9.	Interdepartmental meets (Presentation & discussion of a case integrated with other departments / specialities, e.g., General medicine, neurology, paediatrics, radiology, etc.)	Once in 3 months
10.	Interinstitutional meets (Presentation of a case / topic)	Once in 3 months
11.	Research forum & departmental review board	Once in 6 months
12.	Quiz / Debates	Once in a year

In addition, conducting clinics & tutorials for undergraduate students will develop and harness the post graduate's teaching skills.

8. Rotation postings:

The junior residents in psychiatry will undergo the following rotation-training during their 3 years' course towards MD psychiatry:

Academic year	Posting	Duration
Second year	General medicine	01 month
	Neurology	02 months
	Community psychiatry	01 month
	Mental hospital	01 month
	Clinical psychology	01 month

Objective of General medicine rotation: The student should be well versed with the diagnosis and management common medical conditions comorbid with mental and behavioural disorders. They should be able to identify and manage psychosomatic illness. The students should understand medical diagnostic work ups and interpret investigation reports.

Objective of Neurology rotation: The student should be well versed with the diagnosis and management of common neurological and neuropsychiatric conditions like epilepsy, movement disorders, neurodegenerative disorders. The students should understand and interpret neurological investigations like EEG, Neuroimaging, NCV, EMG.

Objective of Community psychiatry rotation: The student should be able to understand the psychosocial causality and impact of mental and behavioural disorders. The student should demonstrate the ability to address the stigma associated with mental health and take up the social awareness in the community settings.

Objective of mental hospital rotation: The student should be aware of the working pattern of state funded mental hospital and psychiatry and history of psychiatry in India from the asylum to the hospitals. The students should be well versed with management and rehabilitation of destitute with mental illness and forensic psychiatry.

Objectives of clinical psychology rotation: The student should be well versed in use of rating scales in psychiatry. They should be able to interpret the results of psychological tests including assessment of intelligence, projective tests and inventories for clinical correlation.

9. Dissertation timeline:

Postgraduate students at the AIIMS Nagpur are required to submit a dissertation based on a research protocol developed by them with the help of one or more members of the faculty of the Department of Psychiatry. Objective of the dissertation is to provide training to the post graduate in basic technique of research methodology and generalizability of research finding to clinical settings.

Junior Residents who join the department will be assigned a faculty member as guide to mentor him/her for the dissertation. Dissertation reviews will be conducted on regular basis to monitor the progress of project and give valuable suggestions to the student. Completion of dissertation is mandatory as a part of fulfilment of MD course.

Synopsis submission and approval: Process to be completed within six months of admission to MS / MD program.

<table>
<tr><th>Activity</th><th>July admission</th><th>January admission</th></tr>
<tr><td>Topic selection in consultation with PG Guide</td><td rowspan="2">September/ October</td><td rowspan="2">March / April</td></tr>
<tr><td>Approval by Department PG Committee</td></tr>
<tr><td>Institute Scientific Committee approval</td><td rowspan="2">November/ December</td><td rowspan="2">May / June</td></tr>
<tr><td>Institute Ethics Committee approval</td></tr>
<tr><td>Final approval letter by Academics Section</td><td>31st December</td><td>30th June</td></tr>
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10. Assessment

Evaluation of residents for their knowledge and acquisition of attitudes, skills and competencies is a continuous process throughout their three-year period of training. Evaluation of certain attributes such as interpersonal relationships, professional responsibility, sensitivity to patient's need for comfort, ethical behaviour etc. is closely observed by the teaching faculty during the day-to-day clinical work of the resident.

At the end of each clinical posting in each unit and the subspecialties mentioned above, the residents are assessed in a formal format given in the logbook by the faculty staff of the concerned unit/department. This formative assessment of the candidates is taken into account at the time of the professional MD examination held at the end of the three-year term.

A) Attendance:

All students joining the postgraduate training program shall work as full-time residents during the period of training, attending not less than 80% (eighty percent) of the training during each calendar year, and will be given full time responsibility, assignments and participation in all facets of the educational process.

B) Log book:

1) The performance of the Postgraduate student during the training period would be monitored throughout the course and duly recorded in the log books as evidence of the ability and daily work of the student.
2) Every Post-graduate student shall maintain a record of skills he has acquired during the three-year training period certified by the various heads of department/units in which he had undergone training.
3) The students should also be required to participate in the teaching and training programme of undergraduate students and interns.
4) The students should make entries of all their activities: Academic as well as extracurricular in the logbook.
5) The head of the department shall scrutinize the log book once in every three months.
6) At the end of the course, the student should summarize the contents and get the log book certified by the head of the department.
7) The log book should be submitted at the time of practical examination for the scrutiny of the Board of Examiners.
8) Students should also participate in extracurricular activities and community outreach programs and will be given points in logbook for their participation.

C) Workplace-based assessment:

At least once in every clinical posting, a workplace-based assessment will be conducted by the faculty of the unit using Mini Clinical Evaluation Exercise (Mini – CEX) with the following descriptors:

1) Medical interviewing skills
2) Physical examination skills
3) Humanistic qualities / professionalism
4) Clinical judgement

5) Counselling skills
6) Organization / efficiency
7) Overall clinical competence

Further, overall functioning of the resident shall also be graded on a Likert scale for the following:

1) Regularity of attendance
2) Punctuality
3) Interaction with colleagues and supportive staff
4) Maintenance of case records
5) Overall quality of ward work
6) Resourcefulness and creativity

This shall be recorded in the logbook and is to be endorsed by the head of the unit.

D) Six monthly progress reports:

Every six months, the performance of the students will be assessed and they would be required to submit a six-monthly progress report. It would also be entered in the Logbook.

Report	**July Session**		**January session**	
	Period	**To be submitted**	**Period**	**To be submitted**
First	July to December	7th January	January to June	7th July
Second	January to June	7th July	July to December	7th January
Third	July to December	7th January	January to June	7th July
Fourth	January to June	7th July	July to December	7th January
Fifth	July to December	7th January	January to June	7th July
Sixth	January to June	10th June	July to December	10th December

Note: The first five reports will be taken into consideration to decide the eligibility of the student to appear for the Professional Examination.

E) Formative Assessment:

This assessment is held at regular intervals during the posting and at the end of posting of the Junior Resident in the psychiatry units as well as the subspecialties mentioned earlier.

(A) Theory: Formative

Schedule	**Marks**
At end of First year	100 (1 Paper)
At end of Second year	100 (1 Paper)
Pre-professional	400 (4 Papers of 100 marks each)
Total	**600 Marks**

(B) Practical:

Schedule	**Marks**
At end of First year	100
At end of Second year	100
Pre-professional	400 (Practical 300 + Viva 100)
Total	**600 Marks**

Candidate should secure a minimum of 50% marks in Theory and Practical separately, in order to be eligible to appear for Professional Examination.

The examination format for assessment during First and Second Year:

a) **Theory:** One paper of 100 marks (10 semi long questions for 10 marks each)

b) **Practical:** Total marks-100**.** Distribution is as follows:

Long Cases -1	50 (50 X 1)
Short Cases -1	20 (20 X 1)
Spots	20(10 X 2)
Viva	10
Total	100

Examination pattern for pre-professional exam:

(a) Theory – 400 marks (Four 100 marks paper, 10 semi-long questions of 10 marks each)

Paper I – Basic and behavioural sciences as applied to Psychiatry, including Psychology

Paper II – Clinical psychiatry including general psychiatry, psychopharmacology and biological therapies in psychiatry

Paper III- Psychiatric subspecialities including child psychiatry, deaddiction psychiatry, community psychiatry and psychotherapies.

Paper IV- Neurology and medicine as related to psychiatry including neuropsychiatry, liaison psychiatry and recent advances in psychiatry.

(Minimum 40% marks in each paper and aggregate of 50% in order to be declared pass).

(b) Practical – 400 marks

Long Cases -2	200 (100 X 2)
Short Cases -2	50 (25 X 2)
Spots	50 (10 X 5)
Viva	100
Total	400

Eligibility criteria for appearing in professional MD exam:

- Minimum of 50% marks in Formative Assessment in Theory and Practical separately
- Minimum of four satisfactory six-monthly progress reports
- Minimum one scientific paper presentation at International / National /State Psychiatry Conference
- Minimum one scientific poster presentation at International / national /State Psychiatry Conference
- Minimum one research paper – published / accepted for publication / sent for publication in a peer-reviewed indexed scientific Journal
- Minimum 50% marks in Research Methodology examination
- Minimum 80% attendance in each year of training
- Approval of Dissertation

F) Summative: Professional MD Exam

Pattern for Theory papers and Practical exam would be same as pre-prof exam.

A	Theory	4 Papers each of 100 Marks = 400 Marks
B	Practical	Practical 300 + Viva 100 = 400 Marks

Final Result

(A) Theory – 400 Marks (Minimum 40% marks in each paper and aggregate of 50% in order to be declared pass).

(B) Practical – 400 Marks

Minimum 50% marks required in Theory & Practical separately, in order to be declared successful at MD/MS Examination.

11. Recommended books (latest edition):

1) Kaplan and Saddock's Comprehensive Text Book of Psychiatry
2) Kaplan and Saddock 's Synopsis of Psychiatry
3) Oxford Text Book of Psychiatry
4) Shorter Oxford Textbook of Psychiatry
5) Textbook of Postgraduate Psychiatry- Ahuja
6) Community Mental Health in India- BS Chavan
7) Sims' Symptoms in the Mind
8) Fish Clinical Psychopathology
9) Stahl Psychopharmacology
10) The Maudsley Prescribing Guidelines
11) Clinical Practice Guidelines of Psychiatric disorders in India: Indian Psychiatric Society
12) Lowinson et al -Substance Abuse-A Comprehensive Textbook
13) Galanter and Klebert-Textbook of Substance Use Treatment
14) Rutter's Child and Adolescent Psychiatry
15) Lishman's Organic Psychiatry: A Textbook of Neuropsychiatry
16) Neuropsychiatry and Behavioural Neuroscience- Cumming
17) Bickerstaff's Neurological Examination in Clinical Practice
18) Mental Health Care Act, Rights of Persons with Disability Act, Narcotic Drugs and Psychotropic Substance Act (India)
19) International Classification of Diseases (ICD)
20) Diagnostic and Statistical Manual of Mental Disorders (DSM)
21) Introduction to Psychology- Morgan

12. Recommended journals

1) Indian Journal of Psychiatry
2) Annals of Indian Psychiatry
3) Indian Journal of Psychological Medicine
4) British Journal of Psychiatry
5) American Journal of Psychiatry
6) Journal of Clinical Psychiatry
7) Psychiatry Clinics of North America
8) Journal of ECT
9) Psychosomatic medicine