

SRI BALAJI VIDYAPEETH

(Deemed - to be - University u/s 3 of UGC Act, 1956)

Pillaiyarkuppam, Puducherry - 607 402

Mahatma Gandhi Medical College and Research Institute



COMPETENCY BASED POSTGRADUATE MEDICAL CURRICULUM

M.D. PSYCHIATRY

(2020 Onwards)

(As approved at the 30th Academic Council Meeting held on 28th September 2020)

Preface

Following the promulgation of the much awaited Competency Based Medical Education (CBME) for post graduate by the Medical Council of India (MCI) (superseded by the Board of Governors), adoption of CBME for implementing post-graduate programs is a welcome move. Sri Balaji Vidyapeeth (SBV), Puducherry, Deemed to be University, declared u/s 3 of the UGC Act. and accredited by the NAAC with A grade, takes immense privilege in preparing such an unique document in a comprehensive manner and most importantly the onus is on the Indian setting for the first time, with regard to the Competency Based Medical Education for post graduate programs that are being offered in the broad specialty departments. SBV is committed to making cardinal contributions that would be realised by exploring newer vistas. Thus, post graduate medical education in the country could be made to scale greater heights and SBV is poised to show the way in this direction.

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Preface

Following roll out of much awaited Competency-Based Medical Education (CBME) for undergraduate by the Medical Council of India (MCI)(superseded by the Board of Governors) , adoption of CBME for post-graduate by it is welcome move.

The MCI has laid down the syllabus course wise, listing competency to some extent, teaching learning methods and the assessment methods as well. The MCI describes competencies in three domains (knowledge, skill, and attitude). However, the most significant problem in competency-based training is the development of appropriate assessment tools.

The salient feature of this document is defining the program educational objectives (PEO) for its postgraduate program as a whole, defining program outcomes (PO) based on the competencies to be practiced by the specialist, course outcomes (CO) and program specific sub-competencies and their progression in the form of milestones. The compilation of the milestone description leads to the formation of the required syllabus. This allows the mentors to monitor the progress in sub-competency milestone levels. It also defines milestone in five levels, for each sub-competency. Although MCI has described three domains of competencies, the domain 'Attitude' is elaborated into 4 more competencies for ease of assessment. The six competency model (ACGME) for residency education: Medical Knowledge, Patient Care, Practice Based Learning and Improvement, Systems Based Practice, Professionalism, Inter personal and Communication Skills gives better clarity and in-depth explanation. The sub-competency and their milestone levels are mapped into the entrustable professional activities (EPA) that are specific to the individual postgraduate program. To make the program more relevant, PEO, PO, CO and EPAs are mapped with each other. EPA's which are activity based are used for formative assessment and graded. EPA assessment is based on workplace based assessment (WPBA), multisource feedback (MSF) and e-portfolio. A great emphasis is given on monitoring the progress in acquisition of knowledge, skill and attitude through various appraisal forms including e-portfolios during three years of residency period.



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Foreword

Following the strides of the Medical Council of India (MCI) in promulgating a competency-based curriculum, a new and revised postgraduate curriculum document has been developed. Sri Balaji Vidyapeeth introduced “Competency-Based Learning and Training program (CoBaLT)” as early as 2017. The changes effected by the MCI in developing competency-based curricula for all specialty programs have been reflected in the new revised curriculum document.

The curriculum of the MD Psychiatry program is anchored on the domains of competencies (Medical Knowledge, Patient Care, System Based Practice, Practice Based Learning and improvement, Interpersonal Communication skills, and Professionalism). We have added an additional domain namely “Research Methodology and Scientific Communication” keeping in mind the increasing importance of conduct and scientific reporting of research. The domains of competencies are broken down to 24 sub-competencies, which form the core units of MD Psychiatry postgraduate learning experience. The achievement of these sub-competencies is the intended outcomes of the entire training program. The progress with regard to achievement of these sub-competencies will be assessed by preset developmental outcomes, called as the “milestones”, which will be assessed for each individual post-graduate during his/her program period. Another aspect we have incorporated in the curriculum is the “Entrustable Professional Activities”, which are individual units of professional practice, designed to link competencies to clinical practice and make them feasible, measurable, and of course, entrustable in a postgraduate.

We have attempted to create a meaningful harmonization between these facets of curriculum and those listed in the MCI MD Psychiatry curriculum, which would be evident in some of the mapping tables depicted in the revised curriculum document. The task of such a magnitude would not have been possible but for the inputs from many contributors from the department. We would like to wholeheartedly thank the members of departments of Psychiatry at MGMCRI and SSMCRI. The document would have not been complete without the valuable inputs from our respected external faculty Prof Asok Kumar and Dr Vikas Menon. We certainly need to mention and are thankful for the valuable inputs provided by Prof Ravishankar (Dean, MGMCRI) and Prof. Seetesh Ghose (VP Curriculum, MGMCRI).

We wish our post-graduates to benefit the most out of their MD Psychiatry program.

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2 PROLOGUE

This curriculum document named “Postgraduate program - MD Psychiatry” has been prepared in accordance with the document notified by the Board of Governors in supersession of Medical Council of India (<https://www.mciindia.org/CMS/information-desk/for-colleges/pg-curricula-2>). This document has been prepared by the Department of Psychiatry, Mahatma Gandhi Medical College & Research Institute (MGMCRI), Puducherry, ratified by the Board of Studies on 18-05-2020, and approved by the Academic Council of Sri Balaji Vidyapeeth, Puducherry, a Deemed-to-be-University.

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4 PREAMBLE

The purpose of postgraduate education in Psychiatry is to create specialists who would provide high quality mental health care and advance the cause of science through research & training. A postgraduate specialist having undergone the required training in Psychiatry should be able to recognize the mental health needs of the community, should be competent to handle psychiatric problems effectively and should be aware of the recent advances pertaining to Psychiatry. The postgraduate student should acquire the basic skills in teaching of medical/para-medical students. She/he is also expected to know the principles of research methodology and modes of searching for scientific research literature. The purpose of this document is to provide teachers and learners guidelines to achieve defined outcomes through learning and assessment.

Postgraduate training in Psychiatry is designed to enable the acquisition of knowledge, skills and attitudes required for the competent and ethical practice of evidence-based psychiatry in a variety of service settings. The training program will include exposure to basic and allied sciences, general psychiatry, various psychiatric sub-specialities, and neurology. The curriculum incorporates training in educational principles and research methodology. Postgraduate training in Psychiatry will be imparted through a competency-based curriculum. The candidate is required to complete three years of postgraduate training and pass the qualifying examination, to become eligible for the conferment of Doctor of Medicine (MD) degree in Psychiatry.

5 PROGRAM EDUCATIONAL OBJECTIVES

The overall objective of postgraduate training in psychiatry is to create a professional with competencies ranging from the clinical management of complex mental disorders to managing a population-based integrated mental health care plan.

Program Educational Objectives are broad statements that describe what graduates are expected to attain within few years of completing their program. These are based on the needs of the society as analysed and outlined by the regulatory body.

As defined by Medical Council of India (MCI), the PEO for MD Psychiatry are listed below. At the end of the program, the candidate should be able to perform the following roles:

1. A **specialist / clinician** who can provide comprehensive care related to Psychiatry, over and above the physician of firstcontact.
2. A **leader** and a **team member** who understands the health care system and provides safe patient care with accountability andresponsibility.
3. A **communicator** possessing adequate communication skills to convey required information in an appropriate manner in various health caresettings.
4. A **lifelong learner** keen on updating oneself regarding the advancements in the healthcare field, and able to perform the role of researcher andteacher.
5. A **professional** who understands and follows the principles of bioethics / ethics related to the health caresystem.

The program will focus on problem-based learning, safe, scientific, and evidence-based clinical practice, and development of skills applicable to diverse settings.

6 PROGRAM OUTCOMES

Program outcomes are broad statements that incorporate many areas of inter-related knowledge and skills, developed over the duration of the program, through a wide range of courses and experiences. They represent the big picture and describe broad aspects of knowledge, skill, and attitude development. They encompass multiple learning experiences.

By the end of the period of training (3 years), the PG resident should be able to perform the following activities:

1. Assess & manage a patient presenting with history suggestive of a mental disorder, across diverse practice settings, including outpatient, inpatient & emergency settings.
2. Assess & manage mental/behavioural symptoms in a patient with physical illness, in collaboration with other medical/surgical specialists, incorporating the principles of liaison psychiatry
3. Conduct mental health screening in non-psychiatric settings, including appropriate follow-up action
4. Administer electroconvulsive therapy (ECT) in accordance with standard operating procedure
5. Develop and implement a safe & comprehensive discharge plan for psychiatric inpatients
6. Plan & implement clinical audit, to improve patient care and outcomes
7. Provide basic education regarding the mind, mental health & mental illness to a lay audience
8. Provide counselling about stress management, mental health promotion & prevention of mental illness
9. Deliver didactic psychiatry lectures for undergraduate medical students
10. Conduct clinical training sessions for undergraduate medical students
11. Develop & execute a protocol for a scientific research project & analyse the data.
12. Prepare a manuscript based on original research & submit it to a scientific journal for publication.
13. Present a research paper / case report / case series, in the form of an oral presentation, at a scientific conference.
14. Present a research paper / case report / case series, in the form of a poster, at a scientific conference.

Program outcomes 1 to 10 are related to patient care, health promotion & teaching; program outcomes 11 to 14 are related to research & scientific communication.

7 COURSES AND COURSE OUTCOMES

Course outcomes describe the learning that will take place across the curriculum through concise statements, made in specific and measurable terms, of what students will know and / or be able to do after successful completion of each course.

There are 4 courses in the MD Psychiatry program:

- Course 1 - Basic sciences related to Psychiatry
- Course 2 - General Psychiatry
- Course 3 - Psychiatric specialities
- Course 4 - Psychosomatic Medicine and Consultation-Liaison Psychiatry; Neuropsychiatry and Behavioural Neurology

All courses run concurrently for 3 years, with summative assessment at the end of the period of training.

7.1. Definitions of course outcomes

Note: The abbreviations mentioned at the end of each of the following statements are explained in the section on competencies & sub-competencies.

7.1.1. Course 1 - Basic sciences related to Psychiatry

- CO 1.1** : By the end of the period of training, the PG resident should demonstrate knowledge of human development, in terms of neural, cognitive & social development through the life cycle, knowledge of pathological and environmental influences on development, & demonstrate this understanding in the context of patient care. (MK1)
- CO 1.2** : By the end of the period of training, the PG resident should demonstrate knowledge required to identify and treat mental disorders across all age groups (symptoms & signs, diagnostic criteria, epidemiology, pathophysiology, course of illness, comorbidities), knowledge to assess risk and determine level of care, & knowledge at the interface of psychiatry and the rest of medicine. Knowledge about risk assessment should include an in-depth understanding of the methods of evaluation of risk of violence / aggression, & the risk of suicide.(MK2)
- CO 1.3** : By the end of the period of training, the PG resident should demonstrate knowledge pertaining to clinical neuroscience, which includes knowledge about neurobiology & neurogenetics with reference to mental disorders, knowledge about neuroimaging, neurophysiological and neuropsychological testing, & knowledge about neuropsychiatry. (MK3)
- CO 1.4** : By the end of the period of training, the PG resident should demonstrate compassion, integrity, respect for others, sensitivity to diverse patient populations, & adherence to ethical principles. (PROF1)
- CO 1.5** : By the end of the period of training, the PG resident should demonstrate (a) the ability to manage fatigue, preserve personal health & well-being; (b) the ability to maintain an optimal work- life balance; (c) professional behaviour and participation in the professional community; and (d) ownership of patient care, & responsibility towards ensuring that patients receive the best possible care. (PROF2)
- CO 1.6** : By the end of the period of training, the PG resident should demonstrate the ability to perform the following research-related activities: Develop a research idea, conduct a literature search,

manage references using electronic reference management software, write a literature review, design a study, develop a research protocol, manage ethical issues in research, collect data, analyse data using statistical tests, interpret & discuss the results. (RMSC1)

CO 1.7 : By the end of the period of training, the PG resident should demonstrate the ability to perform the following research-related activities: Disseminate / report original research findings through standard channels such as journals, oral presentations & poster presentations. (RMSC2)

7.1.2 Course 2 - General Psychiatry

CO 2.1 : By the end of the period of training, the PG resident should demonstrate the ability to perform an adequate psychiatric evaluation, across all age groups, across diverse practice settings, including outpatient, inpatient & emergency settings, by employing appropriate interview skills, collateral information gathering, & including safety / risk assessment. (PC1)

CO 2.2 : By the end of the period of training, the PG resident should demonstrate the ability to summarize clinical data yielded by psychiatric evaluation, generate differential diagnosis, & create a case formulation. (PC2)

CO 2.3 : By the end of the period of training, the PG resident should demonstrate the ability to identify suitable treatment options for patients with mental disorders, across all age groups, set treatment goals, create an appropriate treatment plan that incorporates practice guidelines / treatment algorithms & a consideration of physical comorbidities, monitor progress & ADR, & revise treatment when indicated. This sub-competency should be demonstrated across diverse practice settings, including outpatient, inpatient & emergency settings. (PC3)

CO 2.4 : By the end of the period of training, the PG resident should demonstrate the ability to plan & deliver cognitive behavioral therapy & supportive psychotherapy. (PC4)

CO 2.5 : By the end of the period of training, the PG resident should demonstrate the ability to prescribe psychopharmacologic agents & employ electroconvulsive therapy in accordance with standard prescribing guidelines & the concept of evidence-based medicine, educate patient & key caregivers about the treatment, monitor patient response and adjust the regimen accordingly. (PC5)

CO 2.6 : By the end of the period of training, the PG resident should demonstrate knowledge regarding: (a) individual psychotherapies, including psychodynamic, cognitive-behavioral, and supportive therapies; (b) couples, family, and group therapies; and, (c) integrating psychotherapy and psychopharmacology. (MK4)

CO 2.7 : By the end of the period of training, the PG resident should demonstrate knowledge of somatic therapies, including psychopharmacology, electroconvulsive therapy (ECT), and other brain stimulation methods. (MK5)

CO 2.8 : By the end of the period of training, the PG resident should demonstrate knowledge about ethics in psychiatric practice, knowledge about regulatory compliance & legal aspects of psychiatric practice, & knowledge about professional standards & development. (MK6)

CO 2.9 : By the end of the period of training, the PG resident should demonstrate (a) an ability to develop & maintain optimal relationships with patients, families, colleagues, and all members of the health care team; and (b) an ability to appropriately manage conflict that may arise in the context of patient care & while functioning as part of a healthcare team. (ICS1)

CO 2.10 : By the end of the period of training, the PG resident should demonstrate (a) Accurate and

effective communication with all members of the health care team, in various clinical settings & through all appropriate channels - oral, written & electronic; (b) Effective communication with patients & their relatives; (c) an ability to maintain professional boundaries in communication; and (d) knowledge of factors which compromise communication. (ICS2)

7.1.3 Course 3 - Psychiatric specialities

CO 3.1 : By the end of the period of training, the PG resident should demonstrate an understanding of costs of care and resource management, with regard to diagnostics, medications, level of care, other treatment providers, & access to community-based care, & apply this understanding in psychiatric practice.(SBP2)

CO 3.2 : By the end of the period of training, the PG resident should demonstrate knowledge about community mental health care, national & district mental health programs, role of self-help groups & social networks in mental health care, preventive psychiatry & mental health promotion, psychiatric rehabilitation, & should demonstrate the ability to appropriately apply this knowledge in routine psychiatric practice.(SBP3)

7.1.4 Course 4 - Psychosomatic Medicine and Consultation-Liaison Psychiatry; Neuropsychiatry and Behavioural Neurology

CO 4.1 : By the end of the period of training, the PG resident should demonstrate knowledge about consultation-liaison psychiatry, knowledge about providing consultation to non-medical systems, & should demonstrate the ability to apply this knowledge in various practice settings. (SBP4)

CO 4.2 : By the end of the period of training, the PG resident should demonstrate (a) knowledge, skills & attitudes required for prevention, early detection & analysis of medical errors, & promotion of patient safety; (b) an understanding of the role of communication & teamwork in the prevention of medical errors & promotion of patient safety, & the ability to apply this understanding in psychiatric practice; (c) the ability to employ a systems-based approach in the context of medical errors & patient safety.(SBP1)

CO 4.3 : By the end of the period of training, the PG resident should demonstrate the ability to perform self-evaluation and self-improvement, receive & act upon feedback. And, by the end of the period of training, the PG resident should demonstrate the ability to perform critical evaluation of research and clinical evidence & apply this information to improve clinical care. (PBLI1)

CO 4.4 : By the end of the period of training, the PG resident should demonstrate knowledge & skills pertaining to planning, implementation & evaluation of a quality improvement project related to clinical care. (PBLI2)

CO 4.5 : By the end of the period of training, the PG resident should demonstrate observable teaching & presentation skills in various settings (classroom, CMEs / conferences, community etc.). (PBLI3)

All courses run concurrently for 3 years with summative assessment at the end of 3 years. The program is competency based and the competencies, sub-competencies and milestones are elaborated in this document. These are mapped to the Entrustable professional activities (EPA) identified as essential to function as a specialist. Formative assessment is carried out on a regular basis using appropriate tools, for identifying eligibility for transfer of trust using EPAs.

7.2 Mapping of Program educational objectives (PEO), Program outcomes (PO) & Course outcomes(CO)

Program mapping facilitates the alignment of course-level outcomes with program outcomes. It allows the faculty to create a visual map of a program. It is also used to explore how students are meeting program-level outcomes at the course level. Outcomes mapping focuses on student learning also.

Course	Course outcomes	PEO	PO
C1	CO 1.1	PEO 1	3,7,8,9,10
C1	CO 1.2	PEO 1	1,2,3,7,9,10
C1	CO 1.3	PEO 1	2,3,4,8,9,10
C1	CO 1.4	PEO 5	1,2
C1	CO 1.5	PEO 5	1,2
C1	CO 1.6	PEO 4	11,12
C1	CO 1.7	PEO 4	13,14
C2	CO 2.1	PEO 1	1,2,3,7,8
C2	CO 2.2	PEO 1	1,2,3
C2	CO 2.3	PEO 1	1,2,3,5
C2	CO 2.4	PEO 1	2,3,8
C2	CO 2.5	PEO 1	1,2,4
C2	CO 2.6	PEO 1	2,8,9,10
C2	CO 2.7	PEO 1	2,4,9,10
C2	CO 2.8	PEO 1	2,3,10
C2	CO 2.9	PEO 3	1,2,7,8,9,10
C2	CO 2.10	PEO 3	1,2,5,7,8,9,10
C3	CO 3.1	PEO 2	6
C3	CO 3.2	PEO 2	3,7,8
C4	CO 1.2	PEO 1	1,2,3,7,9,10
C4	CO 4.1	PEO 2	3,8
C4	CO 4.2	PEO 2	1,2,4,6
C4	CO 4.3	PEO 4	9
C4	CO 4.4	PEO 4	6
C4	CO 4.5	PEO 4	9,10

8 COMPETENCIES, SUB-COMPETENCIES AND MILESTONES

The postgraduate program is competency-based, consisting of seven domains of competencies (core competencies). Sub-competencies under these domains, specific to the speciality, have been mentioned in general terms. Progression through the curriculum is detailed in sub-competency milestone levels, that directs the prescribed syllabus. These sub-competency milestones are mapped to Entrustable Professional Activities (EPAs), identified as essential for a specialist. EPAs are described in an exclusive section. Formative assessment leads to EPA rating, which is done out every 6 months, for identifying eligibility for transfer of trust, to the resident.

A competency is an observable ability of a health professional, integrating multiple components such as knowledge, skills, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition (Englander, 2013).

8.1 Basic competencies(“entry-level”)

1. Gather a history and perform a physical examination
2. Prioritize a differential diagnosis following a clinical encounter
3. Recommend and interpret common diagnostic and screening tests
4. Enter and discuss orders and prescriptions
5. Document a clinical encounter in the patient record
6. Provide an oral presentation of a clinical encounter
7. Form clinical questions and retrieve evidence to advance patient care
8. Give or receive a patient handover to transition care responsibility
9. Collaborate as a member of an inter-professional team
10. Recognize a patient requiring urgent or emergent care and initiate evaluation and management
11. Obtain informed consent for tests and/or procedures
12. Perform general procedures of a physician
13. Identify system failures and contribute to a culture of safety and improvement

These are considered to be the outcomes of undergraduate medical training. Thus, the PG resident is expected to possess these competencies & perform these activities / tasks at entry into residency. Further training with regard to these competencies is also included within the framework of postgraduate training in Psychiatry.

8.2 List of core competencies (domains of competencies)

The candidate, at the end of the postgraduate training program, is expected to have competencies in the following broad areas:

- Medical Knowledge (MK) (= PEO1: Specialist /Clinician)
- Patient care (PC) (= PEO1: Specialist /Clinician)
- Systems-based Practice (SBP) (= PEO2: Leader and teammember)
- Practice-based Learning and Improvement (PBLI) (= PEO4: Lifelong learner, Researcher, Teacher)
- Professionalism (PROF) (= PEO5:Professional)
- Interpersonal and Communication Skills (ICS) (= PEO3:Communicator)

8.3 Definitions of core competencies (domains of competencies)

8.3.1 Medical Knowledge

Residents must be able to demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

8.3.2 Patient Care

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

8.3.3 Systems-Based Practice

Residents must be able to demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

8.3.4 Practice-Based Learning and Improvement

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.

8.3.5 Professionalism

Residents must be able to demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

8.3.6 Interpersonal and Communication Skills

Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teamwork / collaboration with patients, patients' families, and all members of the healthcare team.

8.3.7 Research Methodology and Scientific Communication

Residents must be able to demonstrate the ability to plan & conduct scientific research in an ethical manner & disseminate / report original research findings through standard methods such as journals, oral presentations & poster presentations.

8.4 List of sub-competencies

The objectives will be the acquisition of the sub-competencies listed below.

8.4.1 Medical Knowledge (MK) sub-competencies

- MK1 - Development through the lifecycle
- MK2 - Psychopathology
- MK3 - Clinical neuroscience
- MK4 - Psychotherapy
- MK5 - Somatic therapies
- MK6 - Practice of Psychiatry

8.4.2 Patient care (PC) sub-competencies

- PC1 - Psychiatric evaluation
- PC2 - Psychiatric formulation and differential diagnosis
- PC3 - Treatment planning and management
- PC4 - Psychotherapy
- PC5 - Somatic therapies

8.4.3 Systems-based Practice (SBP) sub-competencies

- SBP1 - Patient safety and the health care team
- SBP2 - Resource management
- SBP3 - Community-based care
- SBP4 - Consultation to non-psychiatric medical providers and non-medical systems

8.4.4 Practice-based Learning and Improvement (PBLI) sub-competencies

- PBLI1 - Development and execution of lifelong learning through constant self-evaluation, including critical evaluation of research and clinical evidence
- PBLI2 - Formal practice-based quality improvement based on established and accepted methodologies
- PBLI3 –Teaching

8.4.5 Professionalism (PROF) sub-competencies

- PROF1 - Compassion, integrity, respect for others, sensitivity to diverse patient populations, adherence to ethical principles
- PROF2 - Accountability to self, patients, colleagues, and the profession

8.4.6 Interpersonal and Communication Skills (ICS) sub-competencies

- ICS1 - Relationship development and conflict management with patients, families, colleagues, and members of the health care team
- ICS2 - Information sharing and record keeping

8.4.7 Research Methodology and Scientific Communication (RMSC)sub-competencies

- RMSC1 - Planning & conducting research
- RMSC2 - Reporting research

8.5 Training outcomes grouped by domains of competencies**8.5.1 Outcomes related to Medical Knowledge (MK) sub-competencies****8.5.1.1 Development through the life cycle(MK1):**

By the end of the period of training, the PG resident should demonstrate knowledge of human development, in terms of neural, cognitive & social development through the life cycle, knowledge of pathological and environmental influences on development, & demonstrate this understanding in the context of patient care. (CO1.1)

8.5.1.2 Psychopathology (MK2) :

By the end of the period of training, the PG resident should demonstrate knowledge required to identify

and treat mental disorders across all age groups (symptoms & signs, diagnostic criteria, epidemiology, pathophysiology, course of illness, comorbidities), knowledge to assess risk and determine level of care, & knowledge at the interface of psychiatry and the rest of medicine. Knowledge about risk assessment should include an in-depth understanding of the methods of evaluation of risk of violence / aggression, & the risk of suicide. (CO 1.2)

8.5.1.3 Clinical neuroscience(MK3) :

By the end of the period of training, the PG resident should demonstrate knowledge pertaining to clinical neuroscience, which includes knowledge about neurobiology & neurogenetics with reference to mental disorders, knowledge about neuroimaging, neurophysiological and neuropsychological testing, & knowledge about neuropsychiatry. (CO 1.3)

8.5.1.4 Psychotherapy(MK4):

By the end of the period of training, the PG resident should demonstrate knowledge regarding: (a) individual psychotherapies, including psychodynamic, cognitive-behavioral, and supportive therapies; (b) couples, family, and group therapies; and, (c) integrating psychotherapy and psychopharmacology. (CO2.6)

8.5.1.5 Somatic therapies(MK5):

By the end of the period of training, the PG resident should demonstrate knowledge of somatic therapies, including psychopharmacology, electroconvulsive therapy (ECT), and other brain stimulation methods. (CO 2.7)

8.5.1.6 Practice of Psychiatry(MK6):

By the end of the period of training, the PG resident should demonstrate knowledge about ethics in psychiatric practice, knowledge about regulatory compliance & legal aspects of psychiatric practice, & knowledge about professional standards & development. (CO 2.8)

8.5.2 Outcomes related to Patient Care (PC)sub-competencies

8.5.2.1 Psychiatric evaluation(PC1):

By the end of the period of training, the PG resident should demonstrate the ability to perform an adequate psychiatric evaluation, across all age groups, across diverse practice settings, including outpatient, inpatient & emergency settings, by employing appropriate interview skills, collateral information gathering, & including safety / risk assessment. (CO 2.1)

8.5.2.2 Psychiatric formulation and differential diagnosis(PC2):

By the end of the period of training, the PG resident should demonstrate the ability to summarize clinical data yielded by psychiatric evaluation, generate differential diagnosis, & create a case formulation. (CO 2.2)

8.5.2.3 Treatment planning and management(PC3):

By the end of the period of training, the PG resident should demonstrate the ability to identify suitable treatment options for patients with mental disorders across all age groups, set treatment goals, create an appropriate treatment plan that incorporates practice guidelines / treatment algorithms & a consideration of physical comorbidities, monitor progress & ADR, & revise treatment when indicated. This sub-competency should be demonstrated across diverse practice settings, including outpatient, inpatient & emergency settings. (CO 2.3)

8.5.2.4 Psychotherapy(PC4):

By the end of the period of training, the PG resident should demonstrate the ability to plan & deliver cognitive behavioral therapy & supportive psychotherapy. (CO 2.4)

8.5.2.5 Somatic therapies(PC5):

By the end of the period of training, the PG resident should demonstrate the ability to prescribe psychopharmacologic agents & employ electroconvulsive therapy in accordance with standard prescribing guidelines & the concept of evidence-based medicine, educate patient & key caregivers about the treatment, monitor patient response and adjust the regimen accordingly. (CO 2.5)

8.5.3 Outcomes related to Systems-Based Practice (SBP) sub-competencies

8.5.3.1 Patient safety and the health care team (SBP1):

By the end of the period of training, the PG resident should demonstrate (a) knowledge, skills & attitudes required for prevention, early detection & analysis of medical errors, & promotion of patient safety; (b) an understanding of the role of communication & teamwork in the prevention of medical errors & promotion of patient safety, & the ability to apply this understanding in psychiatric practice; (c) the ability to employ a systems-based approach in the context of medical errors & patient safety. (CO 4.2)

8.5.3.2 Resource management (SBP2):

By the end of the period of training, the PG resident should demonstrate an understanding of costs of care and resource management, with regard to diagnostics, medications, level of care, other treatment providers, & access to community-based care, & apply this understanding in psychiatric practice. (CO3.1)

8.5.3.3 Community-based care (SBP3):

By the end of the period of training, the PG resident should demonstrate knowledge about community mental health care, national & district mental health programs, role of self-help groups & social networks in mental health care, preventive psychiatry & mental health promotion, psychiatric rehabilitation, & should demonstrate the ability to appropriately apply this knowledge in routine psychiatric practice. (CO3.2)

8.5.3.4 Consultation to non-psychiatric medical providers and non-medical systems (SBP4):

By the end of the period of training, the PG resident should demonstrate knowledge about consultation-liaison psychiatry, knowledge about providing consultation to non-medical systems, & should demonstrate the ability to apply this knowledge in various practice settings. (CO 4.1)

8.5.4 Outcomes related to Practice-based Learning and Improvement (PBLI) sub-competencies

8.5.4.1 Development and execution of lifelong learning through constant self-evaluation, including critical evaluation of research and clinical evidence (PBLI1):

By the end of the period of training, the PG resident should demonstrate the ability to perform self-evaluation and self-improvement, receive & act upon feedback. And, by the end of the period of training, the PG resident should demonstrate the ability to perform critical evaluation of research and clinical evidence & apply this information to improve clinical care. (CO4.3)

8.5.4.2 Formal practice-based quality improvement based on established and accepted methodologies (PBLI2) :

By the end of the period of training, the PG resident should demonstrate knowledge & skills pertaining to planning, implementation & evaluation of a quality improvement project related to clinical care. (CO 4.4)

8.5.4.3 Teaching (PBLI3):

By the end of the period of training, the PG resident should demonstrate observable teaching & presentation skills in various settings (classroom, CMEs / conferences, community etc.). (CO 4.5)

8.5.5 Outcomes related to Professionalism (PROF)sub-competencies

8.5.5.1 *Compassion, integrity, respect for others, sensitivity to diverse patient populations, adherence to ethical principles(PROF1):*

By the end of the period of training, the PG resident should demonstrate compassion, integrity, respect for others, sensitivity to diverse patient populations, & adherence to ethical principles. (CO 1.4)

8.5.5.2 *Accountability to self, patients, colleagues, and the profession(PROF2):*

By the end of the period of training, the PG resident should demonstrate (a) the ability to manage fatigue, preserve personal health & well-being; (b) the ability to maintain an optimal work-life balance; (c) professional behaviour and participation in the professional community; and (d) ownership of patient care, & responsibility towards ensuring that patients receive the best possible care. (CO 1.5)

8.5.6 Outcomes related to Interpersonal and Communication Skills (ICS)sub-competencies

8.5.6.1 *Relationship development and conflict management with patients, families, colleagues, and members of the health care team(ICS1):*

By the end of the period of training, the PG resident should demonstrate (a) an ability to develop & maintain optimal relationships with patients, families, colleagues, and all members of the health care team; and (b) an ability to appropriately manage conflict that may arise in the context of patient care & while functioning as part of a healthcare team. (CO2.9)

8.5.6.2 *Information sharing and record keeping(ICS2):*

By the end of the period of training, the PG resident should demonstrate (a) Accurate and effective communication with all members of the health care team, in various clinical settings & through all appropriate channels - oral, written & electronic; (b) Effective communication with patients & their relatives; (c) an ability to maintain professional boundaries in communication; and (d) knowledge of factors which compromise communication. (CO 2.10)

8.5.7 Outcomes related to Research Methodology and Scientific Communication (RMSC) sub-competencies

8.5.7.1 *Planning & conducting research(RMSC1):*

By the end of the period of training, the PG resident should demonstrate the ability to perform the following research-related activities: Develop a research idea, conduct a literature search, manage references using electronic reference management software, write a literature review, design a study, develop a research protocol, manage ethical issues in research, collect data, analyse data using statistical tests, interpret & discuss the results. (CO1.6)

8.5.7.2 *Reporting research (RMSC2):*

By the end of the period of training, the PG resident should demonstrate the ability to perform the following research-related activities: Disseminate / report original research findings through standard channels such as journals, oral presentations & poster presentations. (CO1.7)

8.6 Mapping of course outcomes & sub-competencies with MCI-stipulated learning objectives & competencies (listed in AnnexureB)

	Sub-competencies	Course outcomes	Learning objectives as per MCI	Competencies as per MCI
1	MK1	CO 1.1	3, 4	CD7
2	MK2	CO 1.2	6	CD2, CD10, PD1, PD2, PD4
3	MK3	CO 1.3	3	CD2, CD3, CD14

4	MK4	CO 2.6	-	PD10, OD2, OD3, OD21, OD24, OD25
5	MK5	CO 2.7	7, 8	CD6, CD14, PD9, OD4
6	MK6	CO 2.8	2, 18	AD2, AD3
7	PC1	CO 2.1	6	PD1
8	PC2	CO 2.2	5	PD2
9	PC3	CO 2.3	5, 7, 8, 9, 11	PD3, PD4
10	PC4	CO 2.4	-	PD10, OD2, OD3, OD21, OD24, OD25
11	PC5	CO 2.5	5, 9, 14, 17	PD9
12	SBP1	CO 4.2	13	AD4
13	SBP2	CO 3.1	-	-
14	SBP3	CO 3.2	1, 5, 10, 16	CD8
15	SBP4	CO 4.1	-	-
16	PBLI1	CO 4.3	15, 20	CD16
17	PBLI2	CO 4.4	-	-
18	PBLI3	CO 4.5	21	AD4
19	PROF1	CO 1.4	2, 12	AD2
20	PROF2	CO 1.5	-	-
21	ICS1	CO 2.9	12, 13	AD4
22	ICS2	CO 2.10	13	AD1, AD2, AD4
23	RMSC1	CO 1.6	15, 20	CD16
24	RMSC2	CO 1.7	-	-

CD = Cognitive domain

AD = Affective domain

PD = Psychomotor domain

OD = Other domain (other competencies)

8.7 Milestones levels for sub-competencies (related to patient care, health promotion & teaching)

Milestones are “competency-based developmental outcomes” (e.g., knowledge, skills, attitudes, and performance) that can be demonstrated progressively by residents from the beginning of their education through graduation to the unsupervised practice of their specialties. Milestones are knowledge, skills, attitudes, and other attributes for each of the core competencies organized in a developmental framework from less to more advanced. (ACGME)

8.7.1 Sub-competency MK1 - Development through the lifecycle

[including the impact of psychopathology on the trajectory of development and development on the expression of psychopathology]

Threads :

A: Knowledge of human development

B: Knowledge of pathological and environmental influences on development

C: Incorporation of developmental concepts in understanding

Level	Description of milestones
1	1.1/A Describes the basic stages of normal physical, social, and cognitive development through the life cycle
2	2.1/A Describes neural development across the life cycle 2.2/A Recognizes deviation from normal development, including arrests and regressions at a basic level 2.3/B Describes the effects of emotional and sexual abuse on the development of personality and psychiatric disorders in infancy, childhood, adolescence, and adulthood at a basic level 2.4/C Utilizes developmental concepts in case formulation
3	3.1/A Explains developmental tasks and transitions throughout the life cycle, utilizing multiple conceptual models 3.2/B Describes the influence of psychosocial factors (gender, ethnic, cultural, economic), general medical, and neurological illness on personality development 3.3/C Utilizes appropriate conceptual models of development in case formulation
4	4.1/B Describes the influence of acquisition and loss of specific capacities in the expression of psychopathology across the life cycle 4.2/B Gives examples of gene-environment interaction influences on development and psychopathology
5	5.1/A Incorporates new neuroscientific knowledge into his or her understanding of development

8.7.2 Sub-competency MK2 - Psychopathology

[Includes knowledge of diagnostic criteria, epidemiology, pathophysiology, course of illness, comorbidities, and differential diagnosis of psychiatric disorders, including substance use disorders and presentation of psychiatric disorders across the life cycle and in diverse patient populations (e.g., different cultures, families, genders, sexual orientation, ethnicity, etc.)]

Threads:

- A: Knowledge to identify and treat psychiatric conditions
- B: Knowledge to assess risk and determine level of care
- C: Knowledge at the interface of psychiatry and the rest of medicine

Level	Description of milestones
1	1.1/A Identifies the major psychiatric diagnostic systems 1.2/B Lists major risk and protective factors for danger to self and others 1.3/C Gives examples of interactions between medical and psychiatric symptoms and disorders
2	2.1/A Demonstrates sufficient knowledge to identify and treat common psychiatric conditions in adults in inpatient and emergency settings (e.g., depression, mania, psychosis) 2.2/B Demonstrates knowledge of, and ability to weigh risks and protective factors for, danger to self and/or others in emergency and inpatient settings 2.3/C Shows sufficient knowledge to perform an initial medical and neurological evaluation in psychiatric inpatients 2.4/C Demonstrates sufficient knowledge to identify common medical conditions (e.g., hypothyroidism, hyperlipidemia, diabetes) in psychiatric patients
3	3.1/A Demonstrates sufficient knowledge to identify and treat most psychiatric conditions throughout the life cycle and in a variety of settings 3.2/B Displays knowledge of, and the ability to weigh, risk and protective factors for, danger to self and/or others across the life cycle, as well as the ability to determine the need for acute psychiatric hospitalization 3.3/C Shows sufficient knowledge to identify and treat common psychiatric manifestations of medical illness (e.g., delirium, depression, steroid-induced syndromes) 3.4/C Demonstrates sufficient knowledge to include relevant medical and neurological conditions in the differential diagnoses of psychiatric patients
4	4.1/A Demonstrates sufficient knowledge to identify and treat atypical and complex psychiatric conditions throughout the life cycle and in a range of settings (inpatient, outpatient, emergency, consultation liaison) 4.2/B Displays knowledge sufficient to determine the appropriate level of care for patients expressing, or who may represent, danger to self and/or others, across the life cycle and in a full range of treatment settings 4.3/C Shows knowledge sufficient to identify and treat a wide range of psychiatric conditions in patients with medical disorders 4.4/C Demonstrates sufficient knowledge to systematically screen for, evaluate, and diagnose common medical conditions in psychiatric patients, and to ensure appropriate further management of these conditions in collaboration with other medical providers

5	<p>5.1/B Displays knowledge sufficient to teach assessment of risks and the appropriate level of care for patients who may represent a danger to self and/or others</p> <p>5.2/C Shows sufficient knowledge to identify and treat uncommon psychiatric conditions in patients with medical disorders</p> <p>5.3/C Demonstrates sufficient knowledge to detect and ensure appropriate treatment of uncommon medical conditions in patients with psychiatric disorders</p>
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8.7.3 Sub-competency MK3 - Clinical Neuroscience

[Includes knowledge of neurology, neuropsychiatry, neurodiagnostic testing, and relevant neuroscience and their application in clinical settings]

Threads:

- A: Neurodiagnostic testing
- B: Neuropsychological testing
- C: Neuropsychiatric co-morbidity
- D: Neurobiology
- E: Applied neuroscience

Level	Description of milestones
1	<p>1.1/A Knows commonly available neuroimaging and neurophysiologic diagnostic modalities and how to order them</p> <p>1.2/B Knows how to order neuropsychological testing</p>
2	<p>2.1/A Knows indications for structural neuroimaging (cranial computed tomography [CT] and magnetic resonance imaging [MRI]) and neurophysiological testing (electroencephalography [EEG], evoked potentials, sleep studies)</p> <p>2.2/B Describes common neuropsychological tests and their indications</p> <p>2.3/C Describes psychiatric disorders comorbid with common neurologic disorders and neurological disorders frequently seen in psychiatric patients</p> <p>2.4/E Identifies the brain areas thought to be important in social and emotional behaviour</p>
3	<p>3.1/A Recognizes the significance of abnormal findings in routine neurodiagnostic test reports in psychiatric patients</p> <p>3.2/B Knows indications for specific neuropsychological tests and understands meaning of common abnormal findings</p> <p>3.3/D Describes neurobiological and genetic hypotheses of common psychiatric disorders and their limitations</p>
4	<p>4.1/A Explains the significance of routine neuroimaging, neurophysiological, and neuropsychological testing abnormalities to patients</p> <p>4.2/A Knows clinical indications and limitations of functional neuroimaging</p> <p>4.3/C Describes psychiatric co-morbidities of less common neurologic disorders and less common neurological co-morbidities of psychiatric disorders</p> <p>4.4/D Explains neurobiological hypotheses and genetic risks of common psychiatric disorders to patients</p> <p>4.5/E Demonstrates sufficient knowledge to incorporate leading neuroscientific hypotheses of emotions and social behaviors into case formulation</p>

5	<p>5.1/A Integrates recent neurodiagnostic research into understanding of psycho pathology</p> <p>5.2/B Flexibly applies knowledge of neuropsychological findings to the differential diagnoses of complex patients</p> <p>5.3/D Explains neurobiological hypotheses and genetic risks of less common psychiatric disorders to patients</p> <p>5.4/D Integrates knowledge of neurobiology into advocacy for psychiatric patient care and stigma reduction</p>
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8.7.4 Sub-competency MK4 - Psychotherapy

[Refers to knowledge regarding: 1) individual psychotherapies, including but not limited to psychodynamic, cognitive- behavioral, and supportive therapies; 2) couples, family, and group therapies; and, 3) integrating psychotherapy and psychopharmacology]

Threads:

A: Knowledge of psychotherapy: Theories

B: Knowledge of psychotherapy: Practice

C: Knowledge of psychotherapy: Evidence base

Level	Description of milestones
1	1.1/A Identifies psycho-dynamic, cognitive-behavioral, and supportive therapies as major psychotherapeutic modalities
2	2.1/A Discusses common factors across psychotherapies 2.2/A Describes the historical and conceptual development of psychotherapeutic paradigms
3	3.1/A Describes differences among the three core individual therapies 3.2/A Describes the basic principles of each of the three core individual psychotherapy modalities 3.3/B Lists the basic indications, contraindications, benefits, and risks of supportive, psychodynamic, and cognitive behavioral psychotherapies 3.4/B Describes the basic principles, indications, contraindications, benefits, and risks of couples, group, and family therapies
4	4.1/B Describes the basic techniques of the three core individual therapies 4.2/C Summarizes the evidence base for each of the three core individual therapies
5	5.1/A Describes proposed mechanisms of therapeutic change 5.2/C Discusses the evidence base for combining different psychotherapies and psychopharmacology

8.7.5 Sub-competency MK5 - Somatic Therapies

[Medical Knowledge of somatic therapies, including psychopharmacology, ECT, and emerging somatic therapies, such as transcranial magnetic stimulation (TMS) and vagus nerve stimulation (VNS)]

Threads:

A: Knowledge of indications, metabolism, and mechanism of action for medications

B: Knowledge of ECT and other emerging somatic treatments

C: Knowledge of lab studies and measures in monitoring treatment

Level	Description of milestones
1	1.1/A Describes general indications and common side effects for commonly prescribed psychopharmacologic agents 1.2/B Describes indications for ECT
2	2.1/A Describes hypothesized mechanisms of action and metabolism for commonly prescribed psychopharmacologic agents 2.2/A Describes indications for second- and third-line pharmacologic agents 2.3/A Describes less frequent but potentially serious/dangerous adverse effects for commonly prescribed psychopharmacological agents 2.4/A Describes expected time course of response for commonly prescribed classes of psychotropic agents 2.5/B Describes length and frequency of ECT treatments, as well as relative contraindication 2.6/C Describes the physical and lab studies necessary to initiate treatment with commonly prescribed medications
3	3.1/A Demonstrates an understanding of pharmacokinetic and pharmacodynamic drug interactions 3.2/A Demonstrates an understanding of psychotropic selection based on current practice guidelines or treatment algorithms for common psychiatric disorders 3.3/B Describes specific techniques in ECT 3.4/B Lists emerging neuro-modulation therapies
4	4.1/A Describes the evidence supporting the use of multiple medications in certain treatment situations (e.g., polypharmacy and augmentation) 4.2/C Integrates knowledge of the titration and side effect management of multiple medications, monitoring the appropriate lab studies, and how emerging physical and laboratory findings impact somatic treatments
5	5.1/A Integrates emerging studies of somatic treatments into knowledge base 5.2/A Effectively teaches at a post-graduate level evidence-based or best somatic treatment practices

8.7.6 Sub-competency MK6 - Practice of Psychiatry

Threads:

A: Ethics

B: Regulatory compliance

C: Professional development and frameworks

Level	Description of milestones
1	1.1/A Lists common ethical issues in psychiatry 1.2/B Recognizes and describes institutional policies and procedures 1.3/C Lists the competencies to be acquired by the resident at the end of training program
2	2.1/A Lists and discusses sources of professional standards of ethical practice 2.2/A Lists situations that mandate reporting or breach of confidentiality 2.3/C Describes how to keep current on regulatory and practice management issues
3	3.1/A Discusses conflict of interest and management 3.2/B Describes applicable regulations for billing and reimbursement
4	4.1/B Describes the existence of state and regional variations regarding practice, involuntary treatment, health regulations, and psychiatric forensic evaluation 4.2/C Describes professional advocacy 4.3/C Describes how to seek out and integrate new information on the practice of psychiatry
5	5.1/B Describes international variations regarding practice, involuntary treatment, and health regulations 5.2/C Proposes advocacy activities, policy development, or scholarly contributions related to professional standards

8.7.7 Sub-competency PC1 - Psychiatric evaluation

Threads:

- A: General interview skills
- B: Collateral information gathering and use
- C: Safety assessment
- D: Use of clinician's emotional response

Level	Description of milestones
1	1.1/A Obtains general medical and psychiatric history and completes a mental status examination 1.2/B Obtains relevant collateral information from secondary sources 1.3/C Screens for patient safety, including suicidal and homicidal ideation
2	2.1/A Acquires efficient, accurate, and relevant history customized to the patient's complaints 2.2/A Performs a targeted examination, including neurological examination, relevant to the patient's complaints 2.3/B Obtains information that is sensitive and not readily offered by the patient 2.4/C Assesses patient safety, including suicidal and homicidal ideation 2.5/D Recognizes that the clinician's emotional responses have diagnostic value
3	3.1/A Consistently obtains complete, accurate, and relevant history 3.2/A Performs efficient interview and examination with flexibility appropriate to the clinical setting and workload demands 3.3/B Selects laboratory and diagnostic tests appropriate to the clinical presentation 3.4/B Uses hypothesis-driven information gathering techniques
4	4.1/A Routinely identifies subtle and unusual findings 4.2/B Follows clues to identify relevant historical findings in complex clinical situations and unfamiliar circumstances 4.3/D Begins to use the clinician's emotional responses to the patient as a diagnostic tool
5	5.1/A Serves as a role model for gathering subtle and reliable information from the patient 5.2/A, B Teaches and supervises other learners in clinical evaluation

8.7.8 Sub-competency PC2 - Psychiatric formulation and differential diagnosis

Threads:

A: Organizes and summarizes findings and generates differential diagnosis

B: Identifies contributing factors and contextual features and creates a formulation

Level	Description of milestones
1	1.1/A Organizes and accurately summarizes, reports, and presents to colleagues information obtained from the patient evaluation 1.2/A Develops a working diagnosis based on the patient evaluation
2	2.1/A Identifies patterns and recognizes phenomenology from the patient's presentation to generate a diagnostic hypothesis 2.2/A Develops a basic differential diagnosis for common syndromes and patient presentations 2.3/B Describes patients' symptoms and problems, precipitating stressors or events, predisposing life events or stressors, perpetuating and protective factors, and prognosis
3	3.1/A Develops a full differential diagnosis while avoiding premature closure 3.2/B Organizes formulation around comprehensive models of phenomenology that take etiology into account
4	4.1/A Incorporates subtle, unusual, or conflicting findings into hypotheses and formulations 4.2/B Efficiently synthesizes all information into a concise but comprehensive formulation
5	5.1/B Serves as a role model of efficient and accurate formulation 5.2/B Teaches formulation to advanced learners

8.7.9 Sub-competency PC3 - Treatment planning and management

Threads:

A: Creates treatment plan

B: Manages patient crises, recognizing need for supervision when indicated

C: Monitors and revises treatment when indicated

Level	Description of milestones
1	1.1/A Identifies potential treatment options 1.2/B Recognizes patient in crisis or acute presentation 1.3/C Recognizes patient readiness for treatment
2	2.1/A Sets treatment goals in collaboration with the patient 2.2/A Incorporates a clinical practice guideline or treatment algorithm when available 2.3/A Recognizes co-morbid conditions and side effects' impact on treatment 2.4/B Manages patient crises with supervision 2.5/C Monitors treatment adherence and response
3	3.1/A Incorporates manual-based treatment when appropriate 3.2/A Applies an understanding of psychiatric, neurologic, and medical comorbidities to treatment selection 3.3/A Links treatment to formulation 3.4/B Recognizes need for consultation and supervision for complicated or refractory cases 3.5/C Re-evaluates and revises treatment approach based on new information and or response to treatment
4	4.1/A Devises individualized treatment plan for complex presentations 4.2/A Integrates multiple modalities and providers in comprehensive approach 4.3/C Appropriately modifies treatment techniques and flexibly applies practice guidelines to fit patient need
5	5.1/A Supervises treatment planning of other learners and multidisciplinary providers 5.2/A Integrates emerging neurobiological and genetic knowledge

8.7.10 Sub-competency PC4 -Psychotherapy

[Refers to 1) The practice and delivery of fundamentals & common psychotherapies, including cognitive-behavioral and supportive therapies; 2) exposure to couples, family, and group therapies; and 3) integrating psychotherapy with psychopharmacology]

Threads:

A: Empathy and process

B: Boundaries

C: The alliance and provision of psychotherapies

Level	Description of milestones
1	1.1/A Accurately identifies patient emotions, particularly sadness, anger, and fear 1.2/B Maintains appropriate professional boundaries
2	2.1/A Identifies and reflects the core feeling and key issue for the patient during a session 2.2/B Maintains appropriate professional boundaries while being responsive to the patient 2.3/C Demonstrates a professional interest and curiosity in a patient's story
3	3.1/A Identifies and reflects the core feeling, key issue, and what the issue means to the patient 3.2/B Maintains appropriate professional boundaries in psychotherapeutic relationships while being responsive to the patient 3.3/C Establishes and maintains a therapeutic alliance with patients with uncomplicated problems 3.4/C Utilizes elements of supportive therapy in treatment of patients
4	4.1/B Recognizes and avoids potential boundary violations 4.2/C Establishes and maintains a therapeutic alliance with, and provides psychotherapies (at least supportive and cognitive-behavioral) to, patients with uncomplicated problems 4.3/C Manages the emotional content of, and feelings aroused during, sessions
5	5.1/C Selects a psychotherapeutic modality and tailors the selected psychotherapy to the patient on the basis of an appropriate case formulation 5.2/C Integrates the selected psychotherapy with other treatment modalities and other treatment providers

8.7.11 Sub-competency PC5 - Somatic therapies

[Somatic therapies including psychopharmacology, electroconvulsive therapy (ECT), and emerging neuromodulation therapies]

Threads:

- A: Using psychopharmacologic agents in treatment
- B: Education of patient about medications
- C: Monitoring of patient response to treatment and adjusting accordingly
- D: Other somatic treatments

Level	Description of milestones
1	1.1/A Lists commonly used psychopharmacologic agents and their indications to target specific psychiatric symptoms (e.g., depression, psychosis) 1.2/B Reviews with the patient/family general indications, dosing parameters, and common side effects for commonly prescribed psychopharmacologic agents
2	2.1/A Appropriately prescribes commonly used psychopharmacologic agents 2.2/B Incorporates basic knowledge of proposed mechanisms of action and metabolism of commonly prescribed psychopharmacologic agents in treatment selection, and explains rationale to patients/families 2.3/C Obtains basic physical exam and lab studies necessary to initiate treatment with commonly prescribed medications 2.4/D Seeks consultation and supervision regarding potential referral for ECT
3	3.1/A Manages pharmacokinetic and pharmacodynamic drug interactions when using multiple medications concurrently 3.2/C Monitors relevant lab studies throughout treatment, and incorporates emerging physical and laboratory findings into somatic treatment strategy 3.3/C Uses augmentation strategies, with supervision, when primary pharmacological interventions are only partially successful
4	4.1/A Titrates dosage and manages side effects of multiple medications 4.2/C Appropriately selects evidence-based somatic treatment options (including second- and third-line agents and other somatic treatments) for patients whose symptoms are partially responsive or not responsive to treatment
5	5.1/B Explains less common somatic treatment choices to patients/families in terms of proposed mechanisms of action 5.2/C Integrates emerging studies of somatic treatments into clinical practice

8.7.12 Sub-competency SBP1 - Patient safety and the health care team

Threads:

A: Medical errors and improvement activities

B: Communication and patient safety

C: Regulatory and educational activities related to patient safety

Level	Description of milestones
1	1.1/A Differentiates among medical errors, near misses, and sentinel events 1.2/B Recognizes failure in teamwork and communication as leading cause of preventable patient harm 1.3/C Follows institutional safety policies, including reporting of problematic behaviors and processes, errors, and near misses
2	2.1/A Describes the common system causes for errors 2.2/B Consistently uses structured communication tools to prevent adverse events (e.g., checklists, safe hand-off procedures, briefings) 2.3/C Actively participates in conferences focusing on systems-based errors in patient care
3	3.1/A Describes systems and procedures that promote patient safety
4	4.1/A Participates in formal analysis (e.g., root-cause analysis, failure mode effects analysis) of medical errors and sentinel events 4.2/C Develops content for and facilitates a patient safety presentation or conference focusing on systems-based errors in patient care (i.e., a morbidity and mortality conference)
5	5.1/A Leads multidisciplinary teams (e.g., human factors engineers, social scientists) to address patient safety issues 5.2/A, C Provides consultation to organizations to improve personal and patient safety

8.7.13 Sub-competency SBP2 - ResourceManagement

(may include diagnostics, medications, level of care, other treatment providers, access to community assistance)

Threads:

A: Costs of care and resource management

Level	Description of milestones
1	1.1/A Recognizes need for efficient and equitable use of resources
2	2.1/A Recognizes disparities in health care at individual and community levels 2.2/A Knows the relative cost of care (e.g., medication costs, diagnostic costs, level of care costs, procedure costs)
3	3.2/A Coordinates patient access to community and system resources
4	4.1/A Practices cost- effective, high-value clinical care, using evidence-based tools and information technologies to support decision making 4.2/A Balances the best interests of the patient with the availability of resources
5	5.1/A Designs measurement tools to monitor and provide feedback to providers/teams on resource consumption to facilitate improvement 5.2/A Advocates for improved access to and additional resources within systems of care

8.7.14 Sub-competency SBP3 - Community - based care

Threads:

A: Community-based programs

B: Self-help groups

C: Prevention

D: Recovery and rehabilitation

Level	Description of milestones
1	1.1/A Gives examples of community mental health systems of care 1.2/B Gives examples of self- help groups (Alcoholics Anonymous [AA], Narcotics Anonymous [NA]), other community resources (church, school) and social networks (e.g., family, friends, acquaintances)
2	2.1/A Coordinates care with community mental health agencies, including with case managers 2.2/B Recognizes role and explains importance of self- help groups and community resource groups (e.g., disorder-specific support and advocacy groups) 2.3/C Describes individual and population risk factors for mental illness
3	3.1/B Incorporates disorder-specific support and advocacy groups in clinical care 3.2/C Describes prevention measures: universal, selective and indicated 3.3/D Describes rehabilitation programs (vocational, brain injury, etc.) and the recovery model
4	4.1/B Routinely uses self- help groups, community resources, and social networks in treatment 4.2/C Employs prevention and risk reduction strategies in clinical care 4.3/D Appropriately refers to rehabilitation and recovery programs 4.4/D Uses principles of evidence-based practice and patient-centered care in management of chronically ill patients
5	5.1/A Participates in the administration of community-based treatment programs 5.2/A Participates in creating new community- based programs 5.3/D Practices effectively in a rehabilitation and/or recovery-based program

8.7.15 Sub-competency SBP4 - Consultation to non-psychiatric medical providers and non- medical systems

Threads:

A: Distinguishes care provider roles related to consultation

B: Provides care as a consultant and collaborator

C: Specific consultative activities

Level	Description of milestones
1	1.1/A Describes the difference between consultant and primary treatment provider
2	2.1/A Describes differences in providing consultation for the system or team versus the individual patient 2.2/B Provides consultation to other medical services 2.3/C Clarifies the consultation question 2.4/C Conducts and reports a basic decisional capacity evaluation
3	3.1/C Assists primary treatment care team in identifying unrecognized clinical care issues 3.2/C Identifies system issues in clinical care and provides recommendations 3.3/C Discusses methods for integrating mental health and medical care in treatment planning
4	4.1/B Provides integrated care for psychiatric patients through collaboration with other physicians 4.2/C Manages complicated and challenging consultation requests
5	5.1/B Provides psychiatric consultations to larger systems 5.2/B Leads a consultation team

8.7.16 Sub-competency PBLI1 - Development and execution of lifelong learning through constant self-evaluation, including critical evaluation of research and clinical evidence

Threads:

A: Self-Assessment and self-Improvement

B: Evidence in the clinical workflow

Level	Description of milestones
1	1.1/A Uses feedback from teachers, colleagues, and patients to assess own level of knowledge and expertise 1.2/A Recognizes limits of one's knowledge and skills and seeks supervision 1.3/B Describes and ranks levels of clinical evidence
2	2.1/A Regularly seeks and incorporates feedback to improve performance 2.2/A Identifies self-directed learning goals and periodically reviews them with supervisory guidance 2.3/B Formulates a searchable question from a clinical question
3	3.1/A Demonstrates a balanced and accurate self-assessment of competence, using clinical outcomes to identify areas for continued improvement 3.2/B Selects an appropriate, evidence-based information tool to meet self-identified learning goals 3.3/B Critically appraises different types of research, including randomized controlled trials (RCTs), systematic reviews, meta-analyses, and practice guidelines
4	4.1/A Demonstrates improvement in clinical practice based on continual self-assessment and evidence-based information 4.2/A Identifies and meets self-directed learning goals with little external guidance 4.3/A, B Demonstrates use of a system or process for keeping up with relevant changes in medicine 4.4/B Independently searches for and discriminates evidence relevant to clinical practice problems
5	5.1/A, B Sustains practice of self-assessment and keeping up with relevant changes in medicine, and makes informed, evidence-based clinical decisions 5.2/B Teaches others techniques to efficiently incorporate evidence gathering into clinical workflow 5.3/B Independently teaches appraisal of clinical evidence

8.7.17 Sub-competency PBLI2 - Formal practice-based quality improvement based on established and accepted methodologies

Threads:

A: Specific quality improvement project

B: Quality improvement didactic knowledge

Level	Description of milestones
1	1.1/A Recognizes potential gaps in quality of care and system-level inefficiencies 1.2/B Discusses with supervisors regarding possible quality gaps and problems with psychiatric care delivery
2	2.1/A Narrows problems within own clinical service(s) to a specific and achievable aim for a quality improvement (QI) project 2.2/B Outlines factors and causal chains contributing to quality gaps within own institution and practice
3	3.1/A Involves appropriate stakeholders in design of a QI project 3.2/B Lists common responses of teams and individuals to changes in clinical operations and describes strategies for managing same
4	4.1/A Substantially contributes to a supervised project to address specific quality deficit within own clinical service(s), and measures relevant outcomes 4.2/B Describes basic methods for implementation and evaluation of clinical QI projects
5	5.1/A Independently proposes and leads projects to enhance patient care 5.2/A Uses advanced quality measurement and “dashboard” tools 5.3/B Describes core concepts of advanced QI methodologies and business processes

8.7.18 Sub-competency PBLI3 -Teaching

Threads:

A: Development as a teacher

B: Observable teaching skills

Level	Description of milestones
1	1.1/A Recognizes role of physician as teacher
2	2.1/A Assumes a role in the clinical teaching of early learners 2.2/B Communicates goals and objectives for instruction of early learners 2.3/B Evaluates and provides feedback to early learners
3	3.1/A Participates in activities designed to develop and improve teaching skills 3.2/B Organizes content and methods for individual instruction for early learners
4	4.1/A Gives formal didactic presentation to groups (e.g., grand rounds, case conference, journal club) 4.2/B Effectively uses feedback on teaching to improve teaching methods and approaches
5	5.1/A Educates broader professional community and/or public (e.g., presents at regional or national meeting) 5.2/B Organizes and develops curriculum materials

8.7.19 Sub-competency PROF1 - Compassion, integrity, respect for others, sensitivity to diverse patient populations, adherence to ethical principles

Threads:

A: Compassion, reflection, sensitivity to diversity

B: Ethics

Level	Description of milestones
1	1.1/A Demonstrates behaviors that convey caring, honesty, genuine interest, and respect for patients and their families 1.2/A Recognizes that patient diversity affects patient care 1.3/B Displays familiarity with some basic ethical principles (e.g., confidentiality, informed consent, professional boundaries)
2	2.1/A Demonstrates capacity for self-reflection, empathy, and curiosity about and openness to different beliefs and points of view, and respect for diversity 2.2/A Provides examples of the importance of attention to diversity in psychiatric evaluation and treatment 2.3/B Recognizes ethical conflicts in practice and seeks supervision to manage them
3	3.1/A Elicits beliefs, values, and diverse practices of patients and their families, and understands their potential impact on patient care 3.2/A Routinely displays sensitivity to diversity in psychiatric evaluation and treatment 3.3/B Recognizes ethical issues in practice and is able to discuss, analyze, and manage these in common clinical situations
4	4.1/A Develops a mutually agreeable care plan in the context of conflicting physician and patient and/or family values and beliefs 4.2/A Discusses own cultural background and beliefs and the ways in which these affect interactions with patients
5	5.1/A Serves as a role model and teacher of compassion, integrity, respect for others, and sensitivity to diverse patient populations 5.2/B Leads resident case discussions regarding ethical issues 5.3/B Adapts to evolving ethical standards (i.e. can manage conflicting ethical standards and values and can apply these to practice) 5.4/B Systematically analyzes and manages ethical issues in complicated and challenging clinical situations

8.7.20 Sub-competency PROF2 - Accountability to self, patients, colleagues, and the profession

Threads:

A: Fatigue management and work balance

B: Professional behaviour and participation in professional community

C: Ownership of patient care

Level	Description of milestones
1	1.1/A Understands the need for sleep, and the impact of fatigue on work 1.2/A Lists ways to manage fatigue, and seeks back-up as needed to ensure good patient care 1.3/B Exhibits core professional behaviors 1.4/B Displays openness to feedback 1.5/C Introduces self as patient's physician
2	2.1/A Notifies team and enlists back-up when fatigued or ill, so as to ensure good patient care 2.2/B Follows institutional policies for physician conduct 2.3/C Accepts the role of the patient's physician and takes responsibility (under supervision) for ensuring that the patient receives the best possible care
3	3.1/A Identifies and manages situations in which maintaining personal emotional, physical, and mental health is challenged, and seeks assistance when needed 3.2/A Recognizes the tension between the needs of personal/family life and professional responsibilities, and its effect on medical care 3.3/B Recognizes the importance of participating in one's professional community 3.4/C Is recognized by self, patient, patient's family, and medical staff members as the patient's primary psychiatric provider
4	4.1/A Knows how to take steps to address impairment in self and in colleagues 4.2/A Prioritizes and balances conflicting interests of self, family, and others to optimize medical care and practice of profession 4.3/B Prepares for obtaining and maintaining board certification 4.4/C Displays increasing autonomy and leadership in taking responsibility for ensuring that patients receive the best possible care
5	5.1/A Develops physician wellness programs or interventions 5.2/B Develops organizational policies, programs, or curricula for physician professionalism 5.3/B Participates in the professional community (e.g., professional societies, patient advocacy groups, community service organizations) 5.4/C Serves as a role model in demonstrating responsibility for ensuring that patients receive the best possible care

8.7.21 Sub-competency ICS1 - Relationship development and conflict management with patients, families, colleagues, and members of the health care team

Threads:

A: Relationship with patients

B: Conflict management

C: Team-based care

Level	Description of milestones
1	1.1/A Cultivates positive relationships with patients, families, and team members 1.2/B Recognizes communication conflicts in work relationships 1.3/C Identifies team-based care as preferred treatment approach, and collaborates as a member of the team
2	2.1/A Develops a therapeutic relationship with patients in uncomplicated situations 2.2/A Develops working relationships across specialties and systems of care in uncomplicated situations 2.3/B Negotiates and manages simple patient/family-related conflicts 2.4/C Actively participates in team-based care; supports activities of other team members, and communicates their value to the patient and family
3	3.1/A Develops therapeutic relationships in complicated situations 3.2/B Sustains working relationships in the face of conflict 3.3/C Facilitates team-based activities in clinical and/or non-clinical situations (including on committees)
4	4.1/A Sustains therapeutic and working relationships during complex and challenging situations, including transitions of care 4.2/C Leads a multidisciplinary care team
5	5.1/A Sustains relationships across systems of care and with patients during long-term follow-up 5.2/A, B Develops models/approaches to managing difficult communications 5.3/B, C Manages treatment team conflicts as team leader 5.4/C Leads and facilitates meetings within the organization/system 5.4/C Serves as a role model in demonstrating responsibility for ensuring that patients receive the best possible care

8.7.22 Sub-competency ICS2 - Information sharing and record keeping

Threads:

- A: Accurate and effective communication with health care team
- B: Effective communications with patients
- C: Maintaining professional boundaries in communication
- D: Knowledge of factors which compromise communication

Level	Description of milestones
1	1.1/A Ensures transitions of care are accurately documented, and optimizes communication across systems and continuums of care 1.2/A Ensures that the written record (electronic medical record [EMR], personal health records [PHR]/patient portal, hand- offs, discharge summaries, etc.) are accurate and timely, with attention to preventing confusion and error, consistent with institutional policies 1.3/B Engages in active listening, “teach back,” and other strategies to ensure patient and family understanding 1.4/C Maintains appropriate boundaries in sharing information by electronic communication
2	2.1/A, B Organizes both written and oral information to be shared with patient, family, team, and others 2.2/B Consistently demonstrates communication strategies to ensure patient and family understanding 2.3/B Demonstrates appropriate face-to-face interaction while using EMR 2.4/C Understands issues raised by the use of social media by patients and providers 2.5/D Lists factors that affect information sharing (e.g., intended audience, purpose, need to know) 2.6/D Lists effects of computer use on accuracy of information gathering and recording and potential disruption of the physician/patient/family relationship
3	3.1/ A, B Uses easy-to- understand language in all phases of communication, including working with interpreters 3.2/B Consistently engages patients and families in shared decision making 3.3/D Gives examples of situations in which communication can be compromised (e.g., perceptual impairment, cultural differences, transference, limitations of electronic media)
4	4.1/A, B Demonstrates effective verbal communication with patients, families, colleagues, and other health care providers that is appropriate, efficient, concise, and pertinent 4.2/A, B Demonstrates written communication with patients, families, colleagues, and other health care providers that is appropriate, efficient, concise, and pertinent 4.3/C Uses discretion and judgment in the inclusion of sensitive patient material in the medical record 4.4/C Uses discretion and judgment in electronic communication with patients, families, and colleagues
5	5.1/A Models continuous improvement in record keeping 5.2/C Participates in the development of changes in rules, policies, and procedures related to technology

9 SYLLABUS

Course 1: Basic sciences related to Psychiatry

Course 2: General Psychiatry

Course 3: Psychiatric specialities

Course 4: Psychosomatic Medicine and Consultation-Liaison Psychiatry; Neuropsychiatry and Behavioural Neurology

Note: Postgraduate residents are expected to be acquainted with recent advances and current Indian and international research in various spheres of Psychiatry.

9.1 Course 1: Basic sciences related to Psychiatry

- Concepts of mind and mental health
- Human development throughout the life cycle
- Functional and behavioural neuroanatomy
 - Developmental and topographical neuroanatomy
 - Brain cytoarchitecture
 - Central, peripheral and autonomic nervous system and relevance in psychiatry
 - Applied neuroanatomy with reference to psychiatric disorders
- Neurochemistry
 - Basic understanding of neurotransmission, including receptor structure and function
 - Neurotransmitter pathways
 - Role of neurotransmitters in human emotion, motivation, thought, memory and behaviour
 - Neurotransmitters in psychiatric disorders (eg. Dopamine and psychiatric disorders, neuro-chemical basis of addictive disorders)
- Neurophysiology & electrophysiology
 - Basic cell structure and physiology
 - Physiology of thought, cognition, mood and motor functions
 - Neural connectivity, networks and circuitries
 - Synaptic-level and subcellular phenomena involved in learning and memory
 - Physiology of appetitive behaviours (e.g. hunger, sex)
 - Normal sleep and disorders of sleep
 - Methods of physiological investigations in psychiatric disorders (e.g. Electroencephalography, Evoked Potentials, NMS, etc.)
- Neuroimaging
 - Principles and techniques of brain imaging (Computed Tomography, Magnetic Resonance Imaging, Functional Magnetic Resonance Imaging, Positron Emission Tomography, etc.) and application of imaging studies in neuropsychiatry
- Psychoneuroendocrinology
- Psychoneuroimmunology
- Chronobiology
- Neurogenetics
 - Basic principles of genetics

- Patterns of inheritance
- Introduction to molecular genetics
- Genetic epidemiology
- Genetic studies in psychiatric disorders
- Endophenotypes in psychiatry
- Understanding of population genetics
- Genome-wide association studies
- Principles of clinical pharmacology
- Psychology
 - Background to psychology, including relevance to psychiatric practice
 - Psychological development, including cognitive, language and emotional development
 - Sensory processes
 - Perception
 - Consciousness
 - Learning & conditioning
 - Memory
 - Thought & language
 - Motivation
 - Emotion
 - Stress - Concepts, management and prevention
 - Social psychology
 - Attitudes
 - Intelligence
 - Personality theories and application in practice
 - Psychological assessment & testing - Rationale, conduct and interpretation
 - Abnormal psychology - Explanatory paradigms of psychopathology in common mental disorders
 - Methods of therapy
 - Positive mental health
 - Indian perspectives in understanding psychology
- Contributions of the sociocultural sciences
 - Sociology, socio-biology and ethology
 - Anthropology and cross-cultural Psychiatry
- Epidemiology, biostatistics, research methodology and evidence-based medicine
- History of Psychiatry and historical cases in Psychiatry
- Principles of medical education
- Role of information technology in medical practice

9.2 Course 2 : General Psychiatry

9.2.1 Psychiatric examination and diagnosis

- Communication, interpersonal skills & the patient-doctor relationship
- Signs and symptoms of mental disorders (Psychopathology)
- Psychiatric history

- Mental status examination
- Clinical neuropsychological and neuropsychiatric assessment
- Structured diagnostic interviews, questionnaires and psychiatric rating scales
- Medical assessment & laboratory testing in Psychiatry
- Classification in Psychiatry, including DSM-5 & ICD-11

9.2.2 Core disorders and syndromes

- Schizophrenia spectrum and other psychotic disorders
- Mood disorders (Bipolar & related disorders; Depressive disorders)
- Anxiety disorders
- Obsessive-compulsive & related disorders
- Trauma- & stressor-related disorders
- Dissociative disorders
- Feeding & eating disorders
- Sleep-wake disorders
- Sexual dysfunctions and paraphilic disorders
- Gender dysphoria
- Disruptive, impulse control, and conduct disorders
- Substance use and addictive disorders
- Personality disorders
- Suicide and deliberate self-harm
- Psychiatric emergencies in adults
- Relational problems
- Culture-bound syndromes

Note: The study of various psychiatric disorders has to be covered based on the following domains: Epidemiology (Indian and global research data), aetiology (biological, genetic and psychosocial factors), clinical features, diagnosis, course, outcome, prognosis, and treatment methods.

9.2.3 Additional issues that may be a focus of clinical attention

- Malingering
- Adult antisocial behavior, criminality and violence
- Borderline intellectual functioning and academic problems
- Occupational problems
- Acculturation problems
- Phase of life problems
- Noncompliance with treatment
- Age-related cognitive decline

9.2.4 Special and miscellaneous areas of interest

- Ethical issues in clinical psychiatry
- Premenstrual dysphoric disorder
- Genetic counselling in psychiatric practice
- End-of-life care and palliative medicine
- Death, dying, and bereavement
- Problems related to physical/sexual abuse or neglect

- Mental health issues in survivors of torture
- Mental health of military personnel
- Mental health issues in disasters
- Terrorism and mental health
- Assessment of disability
- Spirituality, religion and mental health
- Mental health of physicians and medical students
- Telepsychiatry

9.2.5 Treatment methods

- Clinical psychopharmacology: Pharmacokinetics, pharmacodynamics, approved indications, dosage regimens, practice guidelines and treatment algorithms, precautions & adverse effects, drug interactions, continuation treatment, maintenance treatment & prophylaxis
- Specific treatment algorithms for poor response & treatment resistance; Drug augmentation and combination strategies
- Psychopharmacology in special patient groups/populations: Pregnancy & lactation, medical comorbidity
- Psychotherapies: Cognitive therapy, behaviour therapy, interpersonal therapy, dialectical behaviour therapy, family therapy, couples therapy, group therapy and other psychotherapeutic techniques
- Rehabilitation
- Reproductive hormonal therapy
- Electroconvulsive therapy, repetitive transcranial magnetic stimulation (rTMS), and other brain stimulation methods
- Neurosurgical treatments in psychiatric practice
- Other pharmacological and biological therapies
- Complementary and alternative medicine in Psychiatry (Yoga, music therapy, etc.)

9.3 Course 3 : Psychiatric Specialities

9.3.1 Child Psychiatry

- Normal development during childhood and adolescence
- Psychiatric examination and psychological testing of children and adolescents
- Intellectual disability
- Communication disorders
- Autism spectrum disorder
- Attention-deficit / hyperactivity disorders
- Specific learning disorders
- Motor disorders
- Feeding and eating disorders of infancy or early childhood
- Elimination disorders
- Trauma- & stressor-related disorders in children
- Mood disorders and suicide in children and adolescents
- Anxiety disorders of infancy, childhood, and adolescence
- Obsessive-compulsive disorder in childhood & adolescence
- Early-onset schizophrenia

- Adolescent substance abuse
- Attenuated psychosis syndrome; Academic problem; Identity problem
- Forensic issues in child psychiatry
- Adoption & foster care
- Child maltreatment & neglect
- Impact of terrorism on children
- Psychiatric treatment of children and adolescents (Psychopharmacology and psychological treatments)

Note: The study of various psychiatric disorders of childhood and adolescence has to be covered based on the following domains: Epidemiology (Indian and global research data), aetiology (biological, genetic and psychosocial factors), clinical features, diagnosis, course, outcome, prognosis, and treatment methods.

9.3.2 Geriatric Psychiatry

- Normal ageing
- Epidemiology of psychiatric disorders in the elderly (Indian and global data)
- Clinical features and diagnosis of psychiatric disorders in the elderly
- Assessment of cognitive functions
- Psychopharmacology and psychotherapy in the elderly
- Holistic care of chronic and terminal illness
- Abuse and neglect of the elderly

9.3.3 Community Psychiatry

- Public health approach to mental health
- Mental health literacy, stigma, anti-stigma campaigns
- Mental health advocacy
- World mental health surveys; Burden of mental and behavioural disorders
- World mental health atlas, with special reference to India
- Pathways to psychiatric care
- Treatment gap; mental health gap action programme (WHO)
- National mental health programme, Government of India
- District mental health programme, Government of India
- Screening for common mental disorders in the community
- Primary prevention of mental disorders

9.3.4 Forensic Psychiatry

- Clinical-legal issues in Psychiatry
- Mental Health Care Act 2017, Narcotic Drugs and Psychotropic Substances Act (NDPSA), Protection of Children from Sexual Offences Act (POCSO), Persons With Disabilities Act
- Ethics in Psychiatry
- Correctional Psychiatry

9.4 Course 4: Psychosomatic Medicine and Consultation-Liaison Psychiatry; Neuropsychiatry and Behavioural Neurology

9.4.1 Psychosomatic medicine and consultation-liaison psychiatry: Fundamental aspects and overview

- Historical aspects; Mind-body dualism - Concept and limitations

- Brain-body medicine; Brain-body information transfer systems and mechanisms of mind- body interactions
 - Classification of psychological factors affecting physical / other medical conditions
 - Classification of mental disorders due to other medical conditions
 - Stress theory; Neurotransmitter responses to stress; Endocrine & immune responses to stress
 - Life events
 - Specific versus non-specific stress factors
 - Adjustment to illness and handicap
 - Health psychology: Behavioural factors influencing health; symptoms and illness behaviour; health care behaviour; treatment behaviour
 - Epidemiology and presentation of psychiatric disorders in medical settings
 - Overview of comorbidity of psychiatric disorders with medical conditions
 - Concept & scope of consultation-liaison psychiatry
 - Common consultation-liaison problems
 - Medically unexplained symptoms
 - General principles of treatment of psychosomatic disorders; Principles of management of psychiatric disorders in the medically ill; Psychopharmacology in the medically ill
 - Stress management and relaxation therapy
 - Organization of psychiatric services in medical settings
- 9.4.2 Somatic symptom & related disorders**
- Somatic symptom disorder / Undifferentiated somatoform disorder; Pain disorder
 - Illness anxiety disorder / Hypochondriacal disorder
 - Conversion disorder (Functional neurological symptom disorder)
 - Factitious disorder
- 9.4.3 Neurocognitive disorders**
- Delirium
 - Dementia (Major neurocognitive disorder)
 - Amnesic disorders (Major or minor neurocognitive disorders due to another medical condition)
- 9.4.4 Mental disorders due to other medical conditions**
- Mood disorder
 - Psychotic disorder
 - Anxiety disorder
 - Sleep disorder
 - Sexual dysfunction
 - Catatonia
 - Personality change
- 9.4.5 Substance / medication-induced mental disorders**
- 9.4.6 Neuropsychiatry and behavioural neurology; other specific physical conditions associated with psychiatric manifestations**
- Cardinal manifestations of neurologic disease
 - Approach to the patient with neurologic disease: Clinical history-taking, neurological

and neuropsychiatric examination, diagnosis, and localisation

- Special methods of investigation in neurology (EEG, CT, MRI, PET, fMRI, etc.)
- Neuropsychiatric aspects of cerebrovascular disorders
- Neuropsychiatric aspects of brain tumours
- Neuropsychiatric aspects of epilepsy
- Neuropsychiatric consequences of traumatic brain injury
- Neuropsychiatric aspects of movement disorders
- Neuropsychiatric aspects of multiple sclerosis and other demyelinating disorders
- Neuropsychiatric aspects of HIV infection and AIDS
- Neuropsychiatric aspects of other infectious diseases (non-HIV)
- Neuropsychiatric aspects of prion disease
- Neuropsychiatric aspects of headache
- Neuropsychiatric aspects of neuromuscular disease
- Psychiatric aspects of child neurology
- Neuropsychiatry of neurometabolic and neuroendocrine disorders
- Psychiatric aspects of immune disorders
- Psychiatric aspects of nutritional disorders
- Environmental toxins and mental health

9.4.7 Psychiatric issues in other specific medical/surgical scenarios

- Psychiatric aspects of respiratory disorders
- Psychiatric aspects of gastrointestinal disorders
- Psychiatric aspects of cardiovascular disorders
- Psychiatric aspects of surgery (plastic surgery, limb amputation, organ transplantation etc.)
- Psychiatric aspects of cancer (Psycho-oncology)
- Psychiatric aspects of skin disorders (Psychocutaneous disorders)
- Psychological (emotional and cognitive) factors influencing pain; Cerebral processing of pain; Psychiatric management of pain
- Psychiatric aspects of obesity
- Psychiatric aspects of diabetes
- Psychiatric aspects of musculoskeletal disorders
- Psychiatric issues in Obstetrics and Gynaecology - Infertility, pregnancy, parturition, post- partum period
- Psychiatric aspects of accidents, burns and other physical trauma
- Psychiatric issues in critical care units
- Psychiatric issues in haemodialysis units
- Psychiatric aspects of sensory disorders
- Psychiatric aspects of genetic counselling

9.4.8 Miscellany

- Chronic fatigue syndrome
- Fibromyalgia

10 TEACHING LEARNING METHODS

A standardized master list of academic programs has been prepared for the benefit of the postgraduate students. Each postgraduate resident needs to complete all these programs before the end of the course. This master list is the basis of the *PG program schedule* which is maintained in the form of an online calendar & is updated regularly & frequently. PG program updates are also disseminated electronically to all postgraduate students and faculty members of the department.

10.1 Seminars

Seminars shall be held at regular intervals. The seminars will be prepared and presented by the postgraduate trainee under the direct supervision of a faculty.

10.2 Written tests

Written tests will be conducted every month to ensure that the most important components of the course content are covered in a systematic manner during the training period.

10.3 Critical appraisal of published research (Journal club)

Research appraisal will be held at regular intervals. Relevant and suitable research articles from standard peer-reviewed journals will be selected and assigned to the postgraduate resident. The postgraduate resident will present detailed appraisals of research articles.

10.4 Case conferences

Case conferences will be conducted at regular intervals. Postgraduate residents will deliver exhaustive presentations of common and prototypical cases, in addition to unusual cases. These presentations will include comprehensive reports of psychopathology, differential diagnosis, prognosis and management.

10.5 Clinical training as a part of outpatient and inpatient services

Postgraduate residents will be trained in the practical delivery of routine outpatient and inpatient services under the close supervision of the faculty. Through active participation in these clinical services, the postgraduate student will acquire a wide range of competencies as specified in this curriculum document. The postgraduate student will receive hands-on training in the delivery of optimal clinical care, implementation of the treatment plan, and follow-up care. The postgraduate student shall be assigned full-time clinical responsibilities under the supervision of senior residents and consultants.

10.6 Training in clinical psychology

Each postgraduate resident will receive supervised training and practice in psychological assessment methods (administration of psychological tests). In addition, PGs will receive supervised training and practice in psychotherapy, employing one or more psychotherapeutics techniques/models. Special emphasis will be placed on training in cognitive-behavioural therapy, supportive psychotherapy & relaxation therapies.

PG students are required to prepare & submit reports of cases wherein they have performed psychological assessment and/or psychotherapy, under the supervision of Psychology faculty. A minimum of 5 such Psychology case records must be submitted by the PG student, before completion of the training period. Of these 5, a minimum of 2 case records must include a psychological assessment report, & a minimum of 3 case records must include a psychotherapy report.

10.7 Practical demonstration

Skills pertaining to electroencephalography, clinical neuropsychological assessment and interpretation of neuroimaging will be imparted through practical demonstration.

10.8 Electroconvulsive therapy

The postgraduate resident will receive practical training in the administration of modified electroconvulsive therapy, under the supervision of a faculty member.

10.9 Training in Emergency Psychiatry & Emergency Medicine

Postgraduate residents will be on call, by rotation, and will play an active role in the delivery of emergency psychiatry services under the supervision of a faculty member.

In addition, PG students will be posted in the Department of Emergency Medicine (Casualty) for a period of 1 month. PG students will be required to participate in mandatory workshops on Basic Life Support (BLS) & Advanced Cardiovascular Life Support (ACLS) conducted by the institution.

10.10 Community mental health services

The postgraduate student is required to participate in community mental health programs and outreach services organized by the department and the institute.

10.11 Undergraduate teaching assignments (Theory / Clinics)

From the second year of residency, postgraduate students will start receiving training in teaching undergraduate medical and nursing students, under the supervision of the faculty.

10.12 Integrated interdepartmental and institutional programs

Postgraduate residents will participate in special case conferences held in collaboration with other departments such as General Medicine and Neurology. In addition, postgraduate residents will be required to attend clinico-pathological conferences, clinico-radiological conferences, medical audit meetings, guest lectures and other scientific programs held by the institution.

10.13 Extramural activities

Postgraduate students will be encouraged to attend extramural academic/scientific events such as workshops, seminars, conferences, and postgraduate CME programs.

10.14 Schedule of postings / rotations

Postgraduate residents will receive intra-departmental training in Clinical Psychology, Child Psychiatry & Geriatric Psychiatry on a daily basis, as part of routine outpatient and inpatient clinical services, throughout the period of training over 3 years.

Postgraduate residents will receive intra-departmental training in Consultation-Liaison Psychiatry on a daily basis, as part of routine & emergency clinical services, throughout the period of training over 3 years.

Postgraduate residents will maintain a digital / online log of cases seen in these categories, to facilitate formative assessment. To supplement this training, special additional intramural and extramural postings will be organized, based on the framework given below.

Name of posting	Period	Year	Where
Community Psychiatry	3 months	2	Rural health centre attached to MGMCRI. (Posting once a week, for 3 months)

Addiction Psychiatry	3 months	2	Department of Psychiatry, MGMCRI.(Posting in weekly Substance Use Disorders Clinic & Smoking Cessation Clinic, in addition to training during routine clinical & emergency services, throughout the period of residency over 3 years
Emergency Medicine / General Medicine	4 weeks	1	Department of Emergency Medicine (Casualty), MGMCRI.
Neurology & Neuroradiology	8 weeks	2	Departments of Neurology & Radiodiagnosis, MGMCRI. (Posting for 7 weeks in Neurology & 1 week in Neuroradiology)
Child and Adolescent Psychiatry	4 weeks	2	NIMHANS, Bangalore.
Forensic Psychiatry	2 weeks	2	Institute of Mental Health, Chennai.

10.15 Training in research methodology & scientific communication

The dissertation is a compulsory research project that must be completed by the MD postgraduate student to be eligible to appear for the final university examination. This will be done under the guidance of a faculty member. Dissertation workshops will be conducted by the institute to train the postgraduate students in basic research methods.

Preparation of the dissertation under the supervision of a qualified guide will provide the postgraduate student hands-on training in various domains of research methodology such as *literature search, electronic reference management, study design, ethical issues in research, writing and implementing a research protocol, and the use of statistical tests for analysis of data*. The dissertation will also facilitate the acquisition of skills pertaining to *scientific written communication*. The protocol of the dissertation should be submitted to the university within six months of joining the course. Due care should be exercised while selecting a topic for the dissertation, especially with reference to feasibility and practicability. The postgraduate student is required to ensure that a need to change the topic will not arise later. The student is required to pay special attention to ethical issues while planning the dissertation. Approval of the dissertation topic should be obtained from the Postgraduate Training Committee and the Human Ethics Committee of the institute. The dissertation must be completed and submitted to the university six months before the final examination. The postgraduate student will be allowed to appear for the final examination, only after the dissertation is approved by the examiners and accepted by the university.

Postgraduate students are required to prepare a paper based on their dissertation for publication. Proof of submission of a paper based on the dissertation work along with the letter of acknowledgement from the concerned journal is mandatory for being issued the hall ticket for the final university examination. This rule will also apply to those postgraduate students who have submitted some other paper for publication earlier during the course. In addition, they are required to present a paper, or a poster based on their dissertation at a special meeting of the Scientific and Academic Forum of the institution. Presentation of the dissertation in this form does not preclude their presentation elsewhere later.

As per the regulations of the Medical Council of India, every postgraduate student should provide evidence of the following to be eligible to appear for the final degree examination:

1. One poster presentation
2. Evidence of having presented one paper at a national / state-level conference
3. Evidence of one research paper which should be published / accepted for publication / sent for

publication during the period of his / her postgraduate studies

10.16 Training in academic & clinical application of information technology

Postgraduate students will receive training in the optimal and efficient use of computers and the internet for academic, clinical and research work. A few examples are listed below.

- Conducting an online literature search using various resources, including databases such as PubMed and Proquest, and websites of journals
- Using current information from reliable sources to stay up to date with best clinical practice
- Electronic reference management using reference management software
- Retrieval of information pertaining to drugs [Drug Product Labels, Summary of Product Characteristics (SPC), etc.]
- Use of online drug interaction checkers
- Retrieval of clinical practice guidelines from standard and reliable web portals
- Effective and appropriate use of PowerPoint software
- Electronic sharing and dissemination of academic resources
- Collaborative preparation (co-authoring) of academic / scientific documents using web-based (online) applications such as Google Docs
- Maintaining an e-portfolio (described elsewhere)

10.17 Mapping of teaching-learning methods with domains of competencies

S.No	Teaching Learning Methods	DOC
10.1	Seminars	MK, ICS, PROF
10.2	Written tests	MK
10.3	Critical appraisal of published research (Journal Club)	PBLI, RMSC, ICS, PROF
10.4	Case conferences	MK, PC, ICS, PROF
10.5	Clinical training as a part of outpatient and inpatient services	PC, ICS, PROF
10.6	Training in clinical psychology	MK, PC
10.7	Practical demonstration	MK, PC
10.8	Electroconvulsive therapy	MK, PC, SBP
10.9	Training in Emergency Psychiatry & Emergency Medicine	PC
10.10	Community mental health services	SBP
10.11	Undergraduate teaching assignments (Theory / Clinics)	PBLI
10.12	Integrated interdepartmental and institutional programs	SBP, PBLI
10.13	Extramural activities	PBLI, RMSC
10.14	Schedule of postings / rotations	MK, PC

11 FORMATIVE ASSESSMENT

The performance of the postgraduate resident in various teaching-learning activities will be rigorously assessed on a continuous basis by the faculty members. Progress of postgraduate resident in the **academic**, **clinical** and **research** domains will be monitored. Feedback will be given to the trainee at regular intervals. The curriculum supports various assessment methods as listed below.

11.1 List of formative assessment methods

Domain of competencies	Assessment methods
Medical Knowledge (MK)	<ul style="list-style-type: none"> - Seminars - Appraisals of published research (APR / Journal club) - Case conferences - Capsule talks - Written tests - Case-based discussion (CBD) - Mini-clinical evaluation exercise (mCEX) - Direct observation during supervised clinical work - Direct observation of procedural skills (DOPS) - Audit of inpatient files - Paper presentation - Poster presentation - E-portfolio
Patient care (PC)	<ul style="list-style-type: none"> - Direct observation during supervised clinical work - Audit of inpatient files - Mini-clinical evaluation exercise (mCEX) - Direct observation of procedural skills (DOPS) - Case-based discussion (CBD) - Multi-source feedback (MSF) - E-portfolio
Systems-based Practice (SBP)	<ul style="list-style-type: none"> - Direct observation during supervised clinical work - Case-based discussion (CBD) - Clinical audit assignment / Quality improvement project
Practice-based Learning and Improvement (PBLI)	<ul style="list-style-type: none"> - Appraisals of published research (Journal club) - All other classroom programs (case conference, seminar, capsule talk) - Case-based discussion (CBD) - E-portfolio
Professionalism (PROF)	<ul style="list-style-type: none"> - Direct observation during supervised clinical work - Audit of inpatient files - Multi-source feedback (MSF) - E-portfolio
Interpersonal and Communication Skills (ICS)	<ul style="list-style-type: none"> - Direct observation during supervised clinical work - Direct observation of procedural skills (DOPS) - Multi-source feedback (MSF)

	<ul style="list-style-type: none"> - Audit of inpatient files (written communication) - E-portfolio (written communication)
Research Methodology and Scientific Communication (RMSC)	<ul style="list-style-type: none"> - Dissertation - Submission of a manuscript to a journal - Paper presentation - Poster presentation - Appraisals of published research (Journal club) - Written tests

11.2 Formative assessment methods mapped to domains of competencies

Assessment methods	MK	PC	SBP	PBLI	PROF	ICS	RMSC
Appraisals of published research (Journal club)	+			+			+
Audit of inpatient files	+	+			+	+	
Capsule talks	+			+			
Case conferences	+			+			
Case-based discussion (CBD)	+	+	+	+			
Clinical audit assignment / Quality improvement project			+				
Direct observation during supervised clinical work	+	+	+		+	+	
Direct observation of procedural skills (DOPS)	+	+				+	
Dissertation							+
E-portfolio	+	+		+	+	+	
Mini-clinical evaluation exercise (mCEX)	+	+					
Multi-source feedback (MSF)		+			+	+	
Paper presentation	+						+
Poster presentation	+						+
Seminars	+			+			
Submission of a manuscript to a journal							+
Written tests	+						+

11.3 Workplace-based assessment

Performance of the PG resident in clinical settings, in terms of various domains of competencies, will be assessed by the faculty, through workplace-based assessment (WBA). Timely feedback will be provided to the PG resident. WBA will include observation of clinical performance [mini-clinical evaluation exercise (mCEX), direct observation of procedural skills (DOPS)], discussion of clinical cases [case-based discussion (CBD)], and feedback from peers, nurses & other members of the healthcare team, apart from secretarial staff, undergraduate students and patients / patients' relatives [multi-source feedback (MSF)], with regard to various domains of competencies.

11.4 Assessment of performance in classroom programs & written tests

Performance of the PG resident in classroom programs such as seminars, appraisals of published research (Journal club), case conferences, capsule talks will be rated by faculty through structured questionnaires. Performance of the PG resident in monthly written tests will also be evaluated. Timely feedback will be provided to the PG resident.

11.5 E-portfolio

The trainee should maintain an online e-portfolio as per regulations of the university and record his / her participation in all training programs conducted by the department. Comments with regard to the postgraduate student's performance in various teaching-learning activities will be recorded by the faculty in the e-portfolio, at regular intervals, thus providing a formal documented feedback about the trainee's strengths and weaknesses, with suggestions for improvement. The e-portfolio will serve to record details under various sections such as daily log, patient care, procedures (ECT, psychological assessment & therapies), seminars, case conferences, journal club (critical appraisal), faculty lectures, postings, dissertation & other research activities, paper & poster presentations, participation in conferences, workshops & CME programs, teaching assignments, participation in outreach activities etc. PG students will also record their reflections about various aspects of their training, in the e-portfolio. PG students will be expected to present their respective e-portfolios during departmental e-portfolio review meetings.

11.6 Assessment of basic entry-level competencies

Basic entry-level competencies mentioned in the section titled "Competencies, sub-competencies and milestones" are considered to be the outcomes of undergraduate medical training. Thus, the PG resident is expected to possess these competencies & perform these activities / tasks at entry into residency. Various assessment methods listed above such as workplace-based assessment (WBA) will be used to assess the PG resident with regard to these entry-level competencies. Assessment of these competencies will shed light on emphasis areas that need additional focus during the postgraduate training program.

11.7 Milestone level rating

Rating of the PG resident based on milestones will be done by faculty, once in 6 months, except for the last rating, which will be done after a gap of 3 months. Levels attained by the PG will be marked, based on descriptions of levels provided in the section on milestones.

11.8 Entrustable professional activities (EPA)

Entrustable professional activities (EPAs) are designed to link competencies to clinical practice and make them feasible. EPAs are tasks or responsibilities that can be entrusted to a trainee once sufficient, specific competence is reached to allow for unsupervised execution. (Ten Cate O. Competency-based education, entrustable professional activities, and the power of language. J Grad Med Educ. 2013 Mar;5(1):6-7.) EPAs can be conceptualized as units of professional practice, defined as tasks or responsibilities that trainees are entrusted to perform unsupervised once they have attained sufficient specific competence. EPAs are independently executable, observable, and measurable in their process and outcome, and, therefore, suitable for entrustment decisions. EPAs may incorporate multiple competencies. They describe what it is we expect a particular specialist to be able to do without supervision upon graduation from residency and fellowship. (ACGME milestones guidebook 2016)

11.8.1 EPA entrustability levels

Level 1 : Trainee can observe the activity & learn.

Level 2 : Trainee is allowed to perform the activity with direct supervision (supervisor present and proactive in the room).

Level 3 : Trainee is allowed to perform the activity with indirect supervision (supervisor not present but is immediately available if needed).

Level 4 : Trainee is allowed to perform the activity independently (with distant supervision not immediately available).

Level 5 : Trainee is allowed to provide supervision to junior learners doing the activity. Binary entrustability levels:

Levels 1, 2, 3 = Pre-entrustable; Levels 4, 5 = Entrustable

11.8.2 List of EPAs related to training in psychiatric care, mental health promotion & teaching

Progress of the PG resident with reference to the following EPAs will be documented once in 6 months, except for the last rating which will be done after a gap of 3 months. The EPA progress report will be shared with the PG resident individually, along with feedback & discussion. *For the following EPAs, decision regarding entrustability will be based on achievement of milestones pertaining to the sub-competencies relevant to each EPA.* For a PG resident to be considered “entrustable” with regard to a particular EPA, he / she should have attained milestones level 3 and above, with reference to all sub-competencies relevant to that EPA.

1. Assess & manage a patient presenting with history suggestive of a mental disorder
2. Assess & manage mental/behavioural symptoms in a patient with physical illness, in collaboration with other medical/surgical specialists, incorporating principles of liaison psychiatry
3. Conduct mental health screening in non-psychiatric settings, including appropriate follow-up action
4. Administer electroconvulsive therapy (ECT) in accordance with standard operating procedure
5. Develop and implement a safe & comprehensive discharge plan for psychiatric inpatients
6. Plan & implement clinical audit, to improve patient care and outcomes
7. Provide basic education regarding the mind, mental health & mental illness to a lay audience
8. Provide counselling about stress management, mental health promotion & prevention of mental illness
9. Deliver didactic psychiatry lectures for undergraduate medical students
10. Conduct clinical training sessions for undergraduate medical students

11.8.3 Descriptions of EPAs

11.8.3.1 Assess & manage a patient presenting with history suggestive of a mental disorder

Description of the activity:

This unit of professional work requires the PG resident to comprehensively & systematically manage a patient presenting with history suggestive of a mental disorder, by performing a thorough psychiatric evaluation (including risk assessment), generating a psychiatric formulation and differential diagnosis, planning & executing a safe & evidence-based treatment regimen, including an appropriate combination of pharmacological & non-pharmacological therapies. This activity needs to be performed across diverse practice settings, including outpatient, inpatient & emergency settings. This process should be based on a sound knowledge of psycho pathology, psychotherapy & somatic therapies. Management of the patient should reflect the presence of competencies with regard to preventing medical errors & promoting patient safety. While assessing & managing the patient, the PG resident should demonstrate compassion, integrity, respect for others, sociocultural sensitivity, appropriate communication skills, & adherence to ethical principles.

Most relevant domains of competence :

Medical Knowledge (MK), Patient care (PC), Systems-based Practice (SBP), Professionalism (PROF),

Interpersonal and Communication Skills (ICS).

Sub-competencies critical to entrustment decisions:

MK2, MK4, MK5, PC1, PC2, PC3, PC5, SBP1, PROF1, PROF2, ICS1, ICS2

Methods of assessment :

- Direct observation during supervised clinical work
- Direct observation of procedural skills (DOPS)
- Mini-Clinical Evaluation Exercise (mCEX)
- Case-based discussion
- Classroom programs, written tests
- E-portfolio

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.2 Assess & manage mental / behavioural symptoms in a patient with physical illness, in collaboration with other medical/surgical specialists, incorporating principles of liaison psychiatry

Description of the activity:

This unit of professional work requires the PG resident to comprehensively & systematically manage mental/behavioural symptoms in a patient with physical illness, by performing a thorough psychiatric evaluation, generating a psychiatric formulation and differential diagnosis, planning & executing a safe & evidence-based treatment regimen, including an appropriate combination of pharmacological & non-pharmacological therapies. Formulating & executing the plan of care should be done in collaboration with the concerned medical/surgical specialists, incorporating principles of consultation-liaison psychiatry. This process should be based on a sound knowledge of psychopathology, clinical neuroscience, psychotherapy, somatic therapies & knowledge about the interface between psychiatry and the rest of medicine. Management of the patient should reflect the presence of competencies with regard to preventing medical errors & promoting patient safety. While assessing & managing the patient, the PG resident should demonstrate compassion, integrity, respect for others, sociocultural sensitivity, appropriate communication skills, & adherence to ethical principles.

Most relevant domains of competence:

Medical Knowledge (MK), Patient care (PC), Systems-based Practice (SBP), Professionalism (PROF), Interpersonal and Communication Skills (ICS)

Sub-competencies critical to entrustment decisions:

MK2, MK3, MK4, MK5, MK6, PC1, PC2, PC3, PC4, PC5, SBP1, PROF1, PROF2, ICS1, ICS2

Methods of assessment:

- Direct observation during supervised clinical work
- Direct observation of procedural skills (DOPS)
- Mini-Clinical Evaluation Exercise (mCEX)

- Case-based discussion
- Classroom programs, written tests
- E-portfolio

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.3 Conduct mental health screening in non-psychiatric settings, including appropriate follow-up action

Description of the activity:

This unit of professional work requires the PG resident to screen for mental health problems / mental disorders in non-psychiatric settings such as primary health centres (PHCs), preventive healthcare units etc, using standardized & validated questionnaires. Based on the outcome of the screening, appropriate follow-up action must be initiated, with referral facilitation if required. This process should be based on a sound knowledge of symptoms & signs of mental disorders & diverse manifestations of psychological distress. This activity requires the PG resident to possess adequate knowledge about community mental health care, national & district mental health programs, preventive psychiatry & mental health promotion, & the ability to appropriately apply this knowledge in routine psychiatric practice.

Most relevant domains of competence:

Medical Knowledge (MK), Patient care (PC), Systems-based Practice (SBP)

Sub-competencies critical to entrustment decisions:

MK1, MK2, MK3, MK6, PC1, PC2, PC3, PC4, SBP3, SBP4

Methods of assessment:

- Direct observation during supervised clinical work
- Direct observation of procedural skills (DOPS)
- Classroom programs, written tests
- E-portfolio

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.4 Administer electroconvulsive therapy (ECT) in accordance with standard operating procedure

Description of the activity:

This unit of professional work requires the PG resident to plan & implement an electroconvulsive therapy (ECT) protocol in accordance with standard operating procedure & standard guidelines. This activity requires the PG resident to possess adequate knowledge about ECT, including basic electrophysiology,

mechanism of action, indications, contraindications, clinical guidelines & adverse effects. In addition, this activity requires the PG resident to possess adequate knowledge about somatic therapies in general, & the interactions between psychopharmacological agents & ECT. Implementation of the ECT protocol should reflect the presence of competencies with regard to the prevention of clinical errors & promotion of patient safety, apart from competencies related to communication, teamwork & a systems-based approach in the context of medical errors & patient safety.

Most relevant domains of competence:

Medical Knowledge (MK), Patient care (PC), Systems-based Practice (SBP)

Sub-competencies critical to entrustment decisions:

MK3, MK5, PC5, SBP1

Methods of assessment:

- Direct observation of procedural skills (DOPS)
- Multi-source feedback
- Classroom programs, written tests
- E-portfolio

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.5 Develop and implement a safe & comprehensive discharge plan for psychiatric inpatients

Description of the activity:

This unit of professional work requires the PG resident to formulate & execute a discharge protocol for psychiatric inpatients. The PG resident should be able to prepare discharge summaries that are accurate, comprehensive, well-structured, & include vital components such as the reason for hospitalization, significant findings, procedures and treatment provided, patient's discharge condition, instructions for the patient and family, and signatures of the faculty & PG resident in charge of the patient. This activity requires the PG resident to possess competencies with regard to patient care, written communication, information sharing and record-keeping.

Most relevant domains of competence:

Patient care (PC), Interpersonal and Communication Skills (ICS)

Sub-competencies critical to entrustment decisions:

PC3, ICS2

Methods of assessment:

- Direct observation during supervised clinical work
- Clinical audit assignment / Quality improvement project
- Case-based Discussion (CbD)
- Multi-source feedback (MSF)

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.6 Plan & implement clinical audit, to improve patient care and outcomes

Description of the activity:

This unit of professional work requires the PG resident to develop & implement a clinical audit project (quality improvement), with a view to enhance quality of patient care. This activity requires the PG resident to demonstrate the knowledge required for prevention, early detection, and analysis of medical errors. This activity requires the PG resident to employ a systems-based approach in the context of medical errors and patient safety in routine psychiatric practice. This activity also requires the PG resident to demonstrate an understanding of costs of care, resource management, quality improvement projects related to patient care, and to apply this understanding in routine clinical care.

Most relevant domains of competence:

Systems-based Practice (SBP), Practice-based Learning and Improvement (PBLI)

Sub-competencies critical to entrustment decisions:

SBP1, SBP2, PBLI2

Methods of assessment:

Clinical audit assignment / Quality improvement project

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.7 Provide basic education regarding the mind, mental health & mental illness to a lay audience

Description of the activity:

This unit of professional work requires the PG resident to effectively communicate with the patients, their relatives, and the common public about the basic functions of mind, the importance of mental health, and the impact of mental illness, in the regional language, in various settings, using appropriate visual aids. This process should be based on a sound knowledge of human psychological development, influences of environmental and social factors on mental health, risk factors for mental illness, and the manifestations of mental disorders. This activity requires the PG resident to possess adequate knowledge about community mental health care, preventive psychiatry & mental health promotion and the ability to appropriately apply this knowledge in outreach activities.

Most relevant domains of competence:

Medical Knowledge (MK), Patient care (PC), Systems-based Practice (SBP), Interpersonal and Communication Skills (ICS)

Sub-competencies critical to entrustment decisions:

MK1, MK2, PC1, SBP3, ICS1, ICS2

Methods of assessment:

- Direct observation during supervised clinical work
- Direct observation of procedural skills (DOPS)
- Multi-source feedback (MSF)

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.8 Provide counselling about stress management, mental health promotion & prevention of mental illness

Description of the activity:

This unit of professional work requires the PG resident to demonstrate the ability to plan and deliver appropriate psychological counselling for stress management. This process is based on a thorough knowledge of psychological development, signs & symptoms of mental illness, counselling techniques, and the various forms of individual and group psychotherapies. This activity also requires the PG resident to possess adequate knowledge about preventive psychiatry & mental health promotion and the ability to appropriately apply this knowledge in routine patient care and in outreach activities related to mental health promotion.

Most relevant domains of competence:

Medical Knowledge (MK), Patient care (PC), Systems-based Practice (SBP), Interpersonal and Communication Skills (ICS)

Sub-competencies critical to entrustment decisions:

MK1, MK3, MK4, PC1, PC4, SBP3, SBP4, ICS1, ICS2

Methods of assessment:

- Direct observation during supervised clinical work
- Direct observation of procedural skills (DOPS)
- Multi-source feedback (MSF)

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.9 Deliver didactic psychiatry lectures for undergraduate medical students

Description of the activity:

This unit of professional work requires the PG resident to demonstrate observable teaching & presentation

skills by delivering classroom lectures for undergraduate medical students. The process should be based on knowledge about the basic principles of education and the teaching-learning process, apart from knowledge of psychopathology, clinical neuroscience, and general principles of pharmacotherapy and psychotherapy.

Most relevant domains of competence:

Medical Knowledge (MK), Practice-based Learning and Improvement (PBLI), Interpersonal and Communication Skills (ICS)

Sub-competencies critical to entrustment decisions:

MK1, MK2, MK3, MK4, MK5, PBLI1, PBLI3, ICS1, ICS2

Methods of assessment:

Multi-source feedback (MSF)

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.3.10 Conduct clinical training sessions for undergraduate medical students

Description of the activity:

This unit of professional work requires the PG resident to demonstrate observable teaching & presentation skills by conducting clinical training sessions for undergraduate medical students. The process should be based on knowledge about the basic principles of education and the teaching-learning process, apart from knowledge of psychopathology, clinical neuroscience, and general principles of pharmacotherapy and psychotherapy.

Most relevant domains of competence:

Medical Knowledge (MK), Practice-based Learning and Improvement (PBLI), Interpersonal and Communication Skills (ICS)

Sub-competencies critical to entrustment decisions:

MK1, MK2, MK3, MK4, MK5, MK6, PBLI3, ICS1, ICS2

Methods of assessment:

Multi-source feedback (MSF)

Expected behaviors for pre-entrustable and entrustable learners:

Behaviors described in milestone levels 1 & 2 in the sub-competencies relevant to this EPA will constitute expected behaviors of a pre-entrustable learner. Behaviors described in milestone levels 3 & above in the sub-competencies relevant to this EPA will constitute expected behaviors for an entrustable learner. To be considered an entrustable learner, the postgraduate resident should have attained a minimum of milestone level 3 on all sub-competencies relevant to this EPA. Details about the milestone levels are available in the exclusive section on milestones.

11.8.4 Mapping of EPAs with program outcomes, domains of competencies & sub-competencies

	EPA	Program outcomes	Domains of competencies	Sub-competencies
1	Assess & manage a patient presenting with history suggestive of a mental disorder	1	MK, PC, SBP, PROF, ICS	MK2, MK4, MK5, PC1, PC2, PC3, PC5, SBP1, PROF1, PROF2, ICS1, ICS2
2	Assess & manage mental/behavioural symptoms in a patient with physical illness, in collaboration with other medical/surgical specialists, incorporating the principles of liaison psychiatry	2	MK, PC, SBP, PROF, ICS	MK2, MK3, MK4, MK5, MK6, PC1, PC2, PC3, PC4, PC5, SBP1, PROF1, PROF2, ICS1, ICS2
3	Conduct mental health screening in non- psychiatric settings, including appropriate follow-up action	3	MK, PC, SBP	MK1, MK2, MK3, MK6, PC1, PC2, PC3, PC4, SBP3, SBP4
4	Administer electroconvulsive therapy (ECT) in accordance with standard operating procedure	4	MK, PC, SBP	MK3, MK5, PC5, SBP1
5	Develop and implement a safe & comprehensive discharge plan for psychiatric inpatients	5	PC, ICS	PC3, ICS2
6	Plan & implement clinical audit, to improve patient care and outcomes	6	SBP, PBLI	SBP1, SBP2, PBLI2
7	Provide basic education regarding the mind, mental health & mental illness to a lay audience	7	MK, PC, SBP, ICS	MK1, MK2, PC1, SBP3, ICS1, ICS2
8	Provide counselling about stress management, mental health promotion & prevention of mental illness	8	MK, PC, SBP, ICS	MK1, MK3, MK4, PC1, PC4, SBP3, SBP4, ICS1, ICS2
9	Deliver didactic psychiatry lectures for undergraduate medical students	9	MK, PBLI, ICS	MK1, MK2, MK3, MK4, MK5, PBLI1, PBLI3, ICS1, ICS2
10	Conduct clinical training sessions for undergraduate medical students	10	MK, PBLI, ICS	MK1, MK2, MK3, MK4, MK5, MK6, PBLI3, ICS1, ICS2

11.8.5 Mapping of EPAs with program educational objectives (PEO), domains of competencies (DOC), sub-competencies (SC), program outcomes (PO) & course outcomes (CO)

PEO	DOC	SC	PO	Course	Course outcomes	EPA
PEO 1	MK	MK1	3,7,8,9,10	1	CO 1.1	3,7,8,9,10
PEO 1	MK	MK2	1,2,3,7,9,10	1, 4	CO 1.2	1,2,3,7,9,10
PEO 1	MK	MK3	2,3,4,8,9,10	1	CO 1.3	2,3,4,8,9,10
PEO 5	PROF	PROF1	1, 2	1	CO 1.4	1,2
PEO 5	PROF	PROF2	1,2	1	CO 1.5	1,2
PEO 4	RMSC	RMSC 1	11,12	1	CO 1.6	11,12
PEO 4	RMSC	RMSC 2	13,14	1	CO 1.7	13,14
PEO 1	PC	PC1	1,2,3,7,8	2	CO 2.1	1,2,3,7,8
PEO 1	PC	PC2	1,2,3	2	CO 2.2	1,2,3
PEO 1	PC	PC3	1,2,3,5	2	CO 2.3	1,2,3,5
PEO 1	PC	PC4	2,3,8	2	CO 2.4	2,3,8
PEO 1	PC	PC5	1,2,4	2	CO 2.5	1,2,4
PEO 1	MK	MK4	2,8,9,10	2	CO 2.6	1,2,8,9,10
PEO 1	MK	MK5	2,4,9,10	2	CO 2.7	1,2,4,9,10
PEO 1	MK	MK6	2,3,10	2	CO 2.8	2,3,10
PEO 3	ICS	ICS1	1,2,7,8,9,10	2	CO 2.9	1,2,7,8,9,10
PEO 3	ICS	ICS2	1,2,5,7,8,9,10	2	CO 2.10	1,2,5,7,8,9,10
PEO 2	SBP	SBP2	6	3	CO 3.1	6
PEO 2	SBP	SBP3	3,7,8	3	CO 3.2	3,7,8
PEO 2	SBP	SBP4	3,8	4	CO 4.1	3,8
PEO 2	SBP	SBP1	1,2,4,6	4	CO 4.2	1,2,4,6
PEO 4	PBLI	PBLI1	9	4	CO 4.3	9
PEO 4	PBLI	PBLI2	6	4	CO 4.4	6
PEO 4	PBLI	PBLI3	9,10	4	CO 4.5	9,10

11.9 Mock examination

A mock examination will be conducted two months before the final qualifying examination. This will serve to prepare the trainee for the final examination.

12 SUMMATIVE ASSESSMENT

12.1 Objective

- To assess the theoretical and applied knowledge gained by the trainee.
- To assess the ability of the trainee to function as a competent psychiatrist in the areas of identification, evaluation and management of psychiatric disorders.

12.2 Eligibility

- Satisfactory attendance and participation in all training activities as reflected in e-portfolio.
- Approval of dissertation by the examiners.

- As per MCI regulations, every postgraduate student admitted to a degree course should provide evidence of the following to be eligible to appear for the final degree examination: (1) One poster presentation; (2) Evidence of having presented one paper at a national state- level conference; (3) Evidence of one research paper which should be published accepted for publication/sent for publication during the period of his/her postgraduate studies.

12.3 Theory / written examination

The theory examination comprises of four written papers as described below:

	<i>Topics</i>	<i>Duration</i>	<i>Marks</i>
Paper 1	Basic Sciences related to Psychiatry	3 hours	100
Paper 2	General Psychiatry	3 hours	100
Paper 3	Psychiatric specialties	3 hours	100
Paper 4	Psychosomatic Medicine and Consultation-Liaison Psychiatry; Neuropsychiatry and Behavioural Neurology	3 hours	100

All papers will include questions pertaining to recent advances and current Indian and international research in various spheres of Psychiatry.

12.4 Practical / clinical examination and viva voce

- Evaluation of the candidate's clinical skills, and viva-voce will be conducted by a panel of four psychiatrists (recognized as postgraduate teachers by the Medical Council of India), of which at least two shall be external examiners.
- All four examiners will assess the candidate together, for all components of the practical / clinical examination and viva voce.
- The Head of the Department of Psychiatry will serve as Chairman of the Board of Examiners.
- The practical examination will include a long case and a short case in Psychiatry, and one short case in Neurology.
- Viva voce will cover various components of the prescribed course content, and will include assessment of the candidate's knowledge and skills pertaining to electroencephalography, clinical neuropsychological assessment and neuroimaging.
- The PG student will qualify for the award of MD degree in Psychiatry if he/she scores a minimum of 50% marks in theory papers, and 50% marks in practical/clinical examination.

12.4.1 Long case presentation - Adult Psychiatry

The trainee will be given 45 minutes for evaluation, including history-taking, mental state examination and relevant physical examination. An additional 15 minutes will be given for the trainee to organize the presentation. The examiners may interview the patient in this time. The examiners may ask the trainee to elicit specific phenomena / clarify specific aspects during the viva.

Marking format:

<i>Component</i>	<i>Marks</i>
Adequacy of history-taking	20
Mental state examination	20

Diagnosis / Differential Diagnoses	10
Management	20
Discussion	20
Style of presentation (fluency, clarity of communication, ability to organize information); Interview with patient	10
Total marks	100

12.4.2 Short case - Psychiatry

The trainee will be given 25 minutes for history-taking and clinical examination and an additional 5 minutes for preparing the presentation.

Marking format:

<i>Component</i>	<i>Marks</i>
Adequacy of history-taking	10
Mental state examination	10
Diagnosis / Differential Diagnoses	10
Management	10
Discussion	10
Total marks	50

12.4.3 Neurology case

The trainee will be given 25 minutes for history-taking and clinical examination and an additional 5 minutes for preparing the presentation.

Marking format:

<i>Component</i>	<i>Marks</i>
Adequacy of history-taking	10
Neurological examination	10
Diagnosis / Differential Diagnoses	10
Management	10
Discussion	10
Total marks	50

12.4.4 Final viva-voce

Marking format:

<i>Component</i>	<i>Marks</i>
General questions covering various components of the PG syllabus/course content	40
Questions pertaining to psychological assessment tools	15
Interpretation of CT / MRI brain images	10
Interpretation of EEG recordings	10
Questions pertaining to research methods & dissertation	25
Total marks	100

12.5 Summary of distribution of marks

<i>Examination</i>	<i>Marks</i>
Theory / written examination	
- Theory paper 1	100
- Theory paper 2	100
- Theory paper 3	100
- Theory paper 4	100
Subtotal	400
Practical / clinical examination	
- Long case (Psychiatry)	100
- Short case 1 (Psychiatry)	50
- Short case 2 (Neurology)	50
- Viva voce	100
Subtotal	300
Grand total	700

12.6 Eligibility for award of final degree

- Acceptance of dissertation
- Pass (minimum of 50% marks) in theory / written examination
- Pass (minimum of 50% marks) in practical / clinical examination and viva voce

13 BLUEPRINTS FOR MD PSYCHIATRY QUESTION PAPERS

Paper 1: Basic sciences related to Psychiatry (including relevant recent advances) (100 marks)		
Topics to be covered	Recommended weightage of marks (%)	Recommended number of questions
Basic concepts of mind and mental health; Functional and behavioural neuroanatomy; Neurochemistry; Neurophysiology & electrophysiology; Cognitive neuroscience; Neuroimaging	20 %	2
Psychoneuroendocrinology; Psychoneuroimmunology; Chronobiology	10 %	1
Basic concepts of neurogenetics	10 %	1

Principles of clinical pharmacology	10 %	1
Psychology	20 %	2
Contributions of the sociocultural sciences to Psychiatry (Sociology, socio- biology and ethology; Anthropology and cross-cultural Psychiatry)	10 %	1
Principles & concepts of epidemiology, biostatistics, research methodology and evidence-based medicine	10 %	1
History of Psychiatry and historical cases in Psychiatry; Principles of medical education; Principles of medical informatics (Health Informatics)	10 %	1
Total	100	10
Paper 2: General Psychiatry (including relevant recent advances) (100 marks)		
Topics to be covered	Recommended weightage of marks (%)	Recommended number of questions
Signs and symptoms of mental disorders (psychopathology); classification of mental disorders; psychiatric assessment	10 %	1
Epidemiology (Indian and global research data), aetiology (biological, genetic and psychosocial factors), clinical features, diagnosis, course, outcome, prognosis, and management of various mental disorders (As applicable)		
- <i>Schizophrenia spectrum and other psychotic disorders</i>	10 %	1
- <i>Bipolar and related disorders; depressive disorders</i>	10 %	1
- <i>Anxiety disorders; Obsessive-compulsive and related disorders; Trauma- and stressor-related disorders; Dissociative disorders</i>	10 %	1
- <i>Feeding / eating disorders; Sleep-wake disorders; Sexual dysfunctions; Paraphilic disorders; Gender dysphoria; Disruptive, impulse control and conduct disorders</i>	10 %	1
- <i>Substance use and addictive disorders</i>	10 %	1
- <i>Personality disorders; Other mental disorders; Other conditions that may be a focus of attention in psychiatric practice</i>	10 %	1
Suicide and deliberate self-harm; Psychiatric emergencies in adults	10 %	1
General psychopharmacology; Brain stimulation methods	10 %	1
Psychotherapies	10 %	1
Total	100	10
Paper 3: Psychiatric specialities (including relevant recent advances) (100 marks)		
Topics to be covered	Recommended weightage of marks (%)	Recommended number of questions
Child Psychiatry	30 %	3
Geriatric Psychiatry	20 %	2

Community Psychiatry	30 %	3
Forensic Psychiatry	20 %	2
Total	100	10
Paper 4: Psychosomatic Medicine and Consultation-Liaison Psychiatry; Neuropsychiatry and Behavioural Neurology (including relevant recent advances) (100 marks)		
Topics to be covered	Recommended weightage of marks (%)	Recommended number of questions
Psychosomatic medicine and consultation-liaison psychiatry: Fundamental concepts (Examples: Brain-body information transfer systems and mechanisms of mind-body interactions, stress theory, health psychology etc.)	10 %	1
Somatic symptom & related disorders	10 %	1
Neurocognitive disorders	20 %	2
Mental disorders due to other medical conditions; Substance / medication- induced mental disorders	20 %	2
Neuropsychiatry and behavioural neurology; other specific physical conditions associated with psychiatric manifestations (Examples: Neuro psychiatric aspects of cerebrovascular disorders, neuropsychiatric aspects of HIV infection and AIDS, etc.)	20 %	2
Psychiatric issues in other specific medical/surgical scenarios (Examples: Psychiatric aspects of gastrointestinal disorders; Psychiatric aspects of skin disorders, etc.); CFS; Fibromyalgia	20 %	2
Total	100	10

14 MD PSYCHIATRY MODEL QUESTION PAPERS

Paper 1: Basic sciences related to Psychiatry

Write notes on:

	Marks
1. Neurobiology of consciousness	10
2. Functional magnetic resonance imaging & its role in neuropsychiatry	10
3. Hypothalamic-pituitary-adrenal axis & its relevance to Psychiatry	10
4. Utility of pharmacogenomics in Psychiatry	10
5. Types of receptor-drug interactions & relevance to Psychiatry	10
6. Instrumental conditioning	10
7. Assessment of intellectual abilities	10
8. Culture, migration and mental health	10
9. Study designs in medical research	10
10. Informatics in mental health care	10

Total marks: **100**

Paper 2: General Psychiatry

Write notes on:	Marks
1. Standardized diagnostic assessment methods in psychiatry	10
2. Course, outcome & prognosis of schizophrenia, with focus on recent Indian studies	10
3. Continuation & maintenance treatment of bipolar affective disorder	10
4. Epidemiology of anxiety disorders	10
5. Neurobiology of impulse-control disorders	10
6. Cue exposure therapy for the treatment of addictive disorders	10
7. Borderline personality disorder - Clinical features & management	10
8. Clinical management of a violent patient	10
9. Newer oral atypical antipsychotic agents	10
10. Systematic desensitization	10
Total marks:	100

Paper 3: Psychiatric specialities

Write notes on:	Marks
1. Diagnosis and management of attention-deficit/hyperactivity disorder.	10
2. Internet addiction among children and adolescents	10
3. DSM-5 concept of neurodevelopmental disorders	10
4. Status and requirements of geriatric mental health services in India	10
5. Late-onset psychosis	10
6. National Mental Health Programme of India: Objectives, strategies & implementation	10
7. Mental Health Gap Action Programme of the World Health Organization	10
8. Stigma of mental illness and anti-stigma campaigns	10
9. Testamentary capacity	10
10. Salient aspects of Indian Mental Health Care Act 2017	10
Total marks:	100

Paper 4: Psychosomatic Medicine, Consultation-Liaison Psychiatry; Neuropsychiatry & Behavioural Neurology

Write notes on:	Marks
1. Stress theory and neurophysiological responses to stress	10
2. Illness anxiety disorder	10
3. Aetiology and principles of management of delirium	10
4. DSM-5 concept of mild neurocognitive disorder	10
5. Psychotic disorder due to other medical conditions	10
6. Post-stroke depression	10
7. Neuropsychiatric aspects of epilepsy	10
8. Neuropsychiatric consequences of traumatic brain injury	10
9. Emotional and cognitive factors influencing pain	10
10. Psychiatric issues in critical care units	10
Total marks:	100

15 RECOMMENDED BOOKS, JOURNALS & OTHER RESOURCES

15.1 Core textbooks & resources (Latest editions)

- Shorter Oxford Textbook of Psychiatry. Philip Cowen, Paul Harrison, Tom Burns. Oxford University Press.
- Introductory Textbook of Psychiatry. Black DW, Andreasen NC. American Psychiatric Publishing.
- Kaplan & Sadock's Comprehensive Textbook of Psychiatry. Benjamin J Sadock, Virginia A Sadock. Lippincott Williams & Wilkins.
- Kaplan & Sadock's Synopsis of Psychiatry. Benjamin J Sadock, Virginia A Sadock. Wolters Kluwer / Lippincott Williams & Wilkins.
- Psychiatry. Allan Tasman, Jerald Kay, Jeffrey A. Lieberman, Michael B. First, Mario Maj. Wiley.
- The New Oxford Textbook of Psychiatry. Michael G Gelder, Nancy C Andreasen, Juan J Lopez-Ibor Jr, John R Geddes. Oxford University Press.
- Sims's Symptoms in the mind: An introduction to descriptive psychopathology. Femi Oyeboode. Saunders.
- Fish's Clinical Psychopathology: Signs & symptoms in Psychiatry. Patricia Casey, Brendan Kelly. Royal College of Psychiatrists.
- ICD-10 Symptom Glossary for Mental Disorders. World Health Organization.
- Lexicon of psychiatric and mental health terms. World Health Organization.
- Schedules for Clinical Assessment in Neuropsychiatry (SCAN) - Glossary. World Health Organization.
- Campbell's Psychiatric Dictionary. Robert J Campbell. Oxford University Press.
- ICD-10 Classification of Mental & Behavioural Disorders: Clinical descriptions & diagnostic guidelines. World Health Organization.
- Diagnostic & Statistical Manual of Mental Disorders (DSM-5). American Psychiatric Association.
- Lishman's Organic Psychiatry: A Textbook of Neuropsychiatry. Anthony David, Simon Fleminger, Michael Kopelman, Simon Lovestone, John Mellers. Wiley-Blackwell.
- Adams & Victor's Principles of Neurology. Allan H Ropper, Martin A Samuels. McGraw-Hill.
- Bickerstaff's Neurological Examination in Clinical Practice. John A. Spillane. Wiley-Blackwell.
- The Mental Status Examination in Neurology. Richard L Strub, F William Black. F A Davis Company.
- Manter and Gatz's Essentials of Clinical Neuroanatomy and Neurophysiology. Sid Gilman, Sarah Winans Newman. Jaypee Brothers Medical Publishers.
- Clinical Neuroanatomy. Richard S. Snell. Lippincott Williams & Wilkins.
- Atkinson & Hilgard's Introduction to Psychology. Susan Nolen-Hoeksema, Barbara L. Fredrickson, Geoffrey R. Loftus, Willem Wagenaar. Cengage Learning.
- Maudsley Prescribing Guidelines in Psychiatry. Taylor D, Paton C, Kapur S. John Wiley & Sons.
- Most recent Clinical practice guidelines of the Indian Psychiatric Society, published in Indian Journal of Psychiatry
- Cognitive-behavioural therapy. A guide to empirically-informed assessment and intervention. Stefan G. Hofmann, Mark A. Reinecke. Cambridge University Press.

- Communication skills in clinical practice: Doctor-patient communication. K R Sethuraman. Jaypee Brothers Medical Publishers.
- Basic methods of medical research. A. Indrayan. AITBS Publishers.
- Medical postgraduate dissertations: A step-by-step approach. Ananthkrishnan N. United India Periodicals.
- Community Mental Health in India. B. S. Chavan, Nitin Gupta, Priti Arun, Ajeet Sidana, Sushrut Jadhav. Jaypee Brothers Medical Publishers.
- Forensic psychiatry (Psychiatry and law). Nambi S. Jaypee Brothers Medical Publishers.

15.2 Other textbooks and resources (Latest editions)

- Rutter's Child and Adolescent Psychiatry. Michael Rutter, Dorothy Bishop, Daniel Pine, Steven Scott, Jim S. Stevenson, Eric A. Taylor, Anita Thapar. Wiley-Blackwell.
- Textbook of Geriatric Psychiatry. Dan G. Blazer, David C. Steffens. American Psychiatric Publishing.
- Textbook of Psychosomatic Medicine - Psychiatric Care of the Medically III. James L. Levenson. American Psychiatric Publishing.
- Lowinson and Ruiz's Substance Abuse: A Comprehensive Textbook. Pedro Ruiz, Eric Strain. Wolters Kluwer / Lippincott Williams & Wilkins.
- Clinical Manual of Emergency Psychiatry. Michelle B. Riba, Divy Ravindranath. American Psychiatric Publishing.
- Stahl's Essential Psychopharmacology: Neuroscientific Basis and Practical Applications. Stephen M. Stahl. Cambridge University Press.
- The Prescriber's Guide (Stahl's Essential Psychopharmacology). Stephen M. Stahl. Cambridge University Press.
- The ECT Handbook. Allan I F Scott. The Royal College of Psychiatrists.
- Textbook of Psychotherapeutic Treatments. Glen O. Gabbard. American Psychiatric Publishing.
- Kaufman's Clinical Neurology for Psychiatrists. David Myland Kaufman, Mark J Milstein. Elsevier / Saunders.
- Principles of Neural Science - Eric R. Kandel, James H. Schwartz, Thomas M. Jessell, Steven A. Siegelbaum, A. J. Hudspeth. McGraw-Hill.
- Cognitive Psychology: Mind and Brain. Edward E. Smith, Stephen M. Kosslyn. Pearson.
- Basic Epidemiology. R Bonita, R Beaglehole, T Kjellstrom. World Health Organization.
- Basic & Clinical Biostatistics. Beth Dawson, Robert G. Trapp. McGraw-Hill.
- Genetics Home Reference Handbook - US National Library of Medicine.
- Medical Education: Principles & Practice. N Ananthkrishnan, K R Sethuraman, Santhosh Kumar. Alumni Association of NTTTC, JIPMER.
- Mental health - An Indian perspective - 1946 to 2003. S P Agarwal. Elsevier / DGHS.
- Mental Health Act - Government of India.
- Narcotic Drugs and Psychotropic Substances Act - Government of India.
- Persons with Disability Act - Government of India.

15.3 Recommended journals

- Indian Journal of Psychiatry
- Indian Journal of Psychological Medicine
- American Journal of Psychiatry
- JAMA Psychiatry
- British Journal of Psychiatry
- Journal of Clinical Psychiatry
- Psychiatric Clinics of North America
- General Hospital Psychiatry

15.4 Recommended online/web resources

Medical Council of India PG curricula	https://www.mciindia.org/CMS/information-desk/for-colleges/pg-curricula-2
PubMed	http://www.ncbi.nlm.nih.gov/pubmed/
Proquest	http://search.proquest.com/
Cochrane	https://www.cochrane.org/
Centre for Reviews and Dissemination	http://www.crd.york.ac.uk/crdweb/
NHS Evidence	http://www.evidence.nhs.uk/
Canadian Network for Mood and Anxiety Treatments	https://www.canmat.org/
Scottish Intercollegiate Guidelines Network (SIGN) - Evidence-based clinical practice guidelines	http://www.sign.ac.uk/index.html
National Institute for Health and Care Excellence (NICE) - Clinical guidelines	http://www.nice.org.uk/
U.S. Food and Drug Administration - Medication Guides Database	https://www.fda.gov/drugs/drug-safety-and-availability/medication-guides
Epocrates online - Drug information & drug interaction checker	https://online.epocrates.com/
Electronic Medicines Compendium (eMC)	http://www.medicines.org.uk/emc/
British Association for Psychopharmacology: Consensus guidelines	http://www.bap.org.uk/
Indian Psychiatric Society	https://indianpsychiatricsociety.org/
American Psychiatric Association	http://www.psych.org/
National Institute of Mental Health (NIMH)	http://www.nimh.nih.gov/index.shtml
U.S. National Library of Medicine MedlinePlus	https://medlineplus.gov/
Royal College of Psychiatrists	https://www.rcpsych.ac.uk/
The Royal Australian and New Zealand College of Psychiatrists	https://www.ranzcp.org/home
World Federation for Mental Health	https://wfmh.global/
World Health Organization	http://www.who.int/en/

Centre for Evidence-based Medicine at the University of Oxford	http://www.cebm.net/
Evidence - based practice: Duke University Medical Center Library & Archives	http://guides.mclibrary.duke.edu/ebm
World Federation for Medical Education	https://wfme.org/
Zotero (Electronic reference management)	http://www.zotero.org/

16 ANNEXURE A: FORMATIVE ASSESSMENT TEMPLATES

Note: All formative assessment rating forms will be implemented in the digital format.

16.1 PG classroom program: Seminar

Name of the PG resident	
Topic	
Date of the presentation	
Name of the assessor	

S.No.	Criteria	Needs improvement	Meets expectations	Exceeds expectations
1	Presentation style / Fluency			
2	Organization/structure of presentation			
3	Breadth of reading			
4	Depth of understanding			
5	Citing / Referencing			
6	Recall ability			
7	Use of White Board			
8	Time management			
9	Responses to queries from the audience			
10	General comments, including positive observations & suggestions for improvement			

16.2 PG classroom program: Journal club (Appraisal of published research)

Name of the PG resident	
Article & Journal	
Date of the presentation	
Name of the assessor	

S.No.	Criteria	Needs improvement	Meets expectations	Exceeds expectations
1	Presentation style / Fluency			
2	Presentation of journal profile and metrics			
3	Understanding of methodological aspects			
4	Understanding of statistical aspects			
5	Supplementary / Additional reading			
6	Structured critique of the article			
7	Quality of PPT slides			
8	Time management			

9	Responses to queries from the audience			
10	General comments, including positive observations & suggestions for improvement			

16.3 Template for formative assessment (PG classroom programs): Case conference

Name of the PG resident	
Patient MRD no. & Diagnosis	
Date of the presentation	
Name of the assessor	

S.No.	Criteria	Needs improvement	Meets expectations	Exceeds expectations
1	Presentation style / Fluency			
2	Psychiatric history			
3	Physical examination			
4	Mental status examination			
5	Summary / Formulation			
6	Diagnosis/ Differential diagnosis			
7	Management plan & Prognostication			
8	Quality of written notes			
9	Responses to queries from the audience			
10	General comments, including positive observations & suggestions for improvement			

16.4 Template for formative assessment (PG classroom programs): Capsule talk

Name of the PG resident	
Topic	
Date of the presentation	
Name of the assessor	

S.No.	Criteria	Needs improvement	Meets expectations	Exceeds expectations
1	Presentation style / Fluency			
2	Organization/structure of presentation			
3	Breadth of reading			
4	Depth of understanding			
5	Citing / Referencing			

6	Ability to present in a concise manner			
7	Quality of PPT slides			
8	Time management			
9	Responses to queries from the audience			
10	General comments, including positive observations & suggestions for improvement			

16.5 Mini-Clinical evaluation exercise (Mini-CEX)

Name of the PG resident	
Date of assessment	
Name of the assessor	

S.No.	Criteria	Needs improvement	Meets expectations	Exceeds expectations
1	History-taking process			
2	History-taking content			
3	Mental state examination skills			
4	Physical examination skills			
5	Communication skills			
6	Data synthesis			
7	Organization / efficiency			
8	Time management			
9	General comments, including positive observations & suggestions for improvement			

16.6 Direct observation of procedural skills (DOPS)

Name of the PG resident	
Name of the procedure	
Date of assessment	
Name of the assessor	

S.No.	Criteria	Needs improvement	Meets expectations	Exceeds expectations
1	Communication skills			
2	Demonstrated knowledge of the procedure			
3	Procedural, technical or supervision skills			
4	Organization			

5	Time management			
6	Documentation			
7	Management of issues / problems arising during the procedure			
8	Professionalism			
9	General comments, including positive observations & suggestions for improvement			

16.7 Case-based discussion (CbD)

Name of the PG resident	
Patient MRD no. & Diagnosis	
Date of assessment	
Name of the assessor	

S.No.	Criteria	Needs improvement	Meets expectations	Exceeds expectations
1	Clinical record-keeping			
2	Clinical assessment			
3	Risk assessment and management			
4	Assessment and treatment of medical comorbidities			
5	Treatment planning			
6	Referrals			
7	Follow-up; Transfer of care			
8	Professionalism			
9	Clinical reasoning			
10	General comments, including positive observations & suggestions for improvement			

16.8 Multi-source feedback

Parameters	Sub-competencies PE	Rated by						
		IN	UG	NU	SE	PT		
1	Efficiently evaluates and diagnoses psychiatric disorders	PC1, PC2, MK2	+					
2	Adequately recognizes psychosocial aspects of the illness	PC2, MK2	+			+		
3	Diligently implements the management plan	PC3	+					
4	Utilizes resources rationally (E.g.: Investigations)	SBP2	+			+		

5	Recognizes situations where an urgent response is needed & takes action	SBP1	+			+	+	
6	Implements prompt and efficient documentation	SBP1	+			+	+	
7	Establishes rapport with patients and their relatives	ICS1, ICS2						+
8	Demonstrates empathy	ICS1, ICS2, PROF1						+
9	Listens to patients & their relatives ICS1, ICS2		+	+		+		+
10	Is polite and courteous with patients & their relatives	ICS1, ICS2	+	+		+		+
11	Provides clear explanation about health condition to patient & their relatives	ICS2	+	+		+		+
12	Elaborates on the reasons for medical tests being done	ICS2	+	+		+		+
13	Addresses patient/relatives in their native language with reasonable proficiency	ICS2, PROF2	+	+		+		+
14	Makes patient feel comfortable in sharing his/her personal problems	ICS1						+
15	Instills confidence in patient regarding doctor's capability to provide treatment	ICS1						+
16	Considers patient's financial circumstances while providing treatment	SBP2				+		+
17	Values the rights of the patient and their relatives	ICS1, ICS2	+			+	+	+
18	Maintains confidentiality with regard to patient details	ICS1, ICS2	+			+	+	+
19	Communicates effectively with team members	ICS2	+	+		+	+	
20	Respects team members	ICS1	+	+		+	+	
21	Maintains a warm relationship with team members	ICS1	+	+		+	+	
22	Recognizes / acknowledges the contribution of team members	ICS1	+	+		+	+	

23	Resolves conflict in an amicable manner	ICS1	+			+	+	
24	Accepts responsibility and accountability	PROF2	+			+	+	
25	Is accessible (Picking up calls promptly; easily approachable/available etc.)	PROF2	+	+		+	+	
26	Hands over cases appropriately / Arranges for cover during leave of absence	SBP1, ICS2, PROF2	+			+	+	
27	Implements good liaison with the health care team of other specialties	SBP4	+	+		+	+	
28	Introduces and presents a topic to the audience in an interesting manner	PBLI3	+	+	+	+		
29	Helps the audience understand the concepts clearly	PBLI3	+	+	+	+		
30	Utilizes visual aids (PPT, white board etc) appropriately	PBLI3	+	+	+	+		
31	Adequately clarifies doubts raised by the audience	PBLI3	+	+	+	+		
32	Efficiently addresses audience during mental health awareness programs	PBLI3	+					
33	Demonstrates a courteous approach towards students	ICS1		+	+			
34	Manages time efficiently	PROF2, PBLI1	+			+	+	
35	Manages stress appropriately	PROF2	+					
36	Demonstrates reliability / dependability	PROF2	+			+	+	
37	Accepts feedback / constructive criticism & acts upon it to improve clinical care	PBLI1	+					

Note:

- All MSF forms are based on a Likert-type scale: Strongly disagree / disagree / neutral / agree / strongly agree
- Categories of evaluators / assessors: PE = Peers; IN = Interns (MBBS); UG = Undergraduate students (MBBS); NU = Nurses; SE = Secretary; PT = Patients / Relatives of patients.
- Six exclusive MSF forms will be used - one for each category of evaluators / assessors. Each form contains only those items that will be marked by that specific category of evaluators / assessors.
- Items 1-6 are related to medical care parameters, items 7-18 are related to doctor-patient relationship parameters, items 19-27 are related to teamwork parameters, items 28-33 are related to teaching skills parameters, items 34-37 are related to miscellaneous parameters.

16.9 Rating of EPA levels

	Entrustable professional activities	Entrustability level at					
		6 months	12 months	18 months	24 months	30 months	33 months
1	Assess & manage a patient presenting with history suggestive of a mental disorder						

2	Assess & manage mental/behavioural symptoms in a patient with physical illness, in collaboration with other medical/surgical specialists, incorporating principles of liaison psychiatry						
3	Conduct mental health screening in non- psychiatric settings, including appropriate follow- up action						
4	Administer electroconvulsive therapy (ECT) in accordance with standard operating procedure						
5	Develop and implement a safe & comprehensive discharge plan for psychiatric inpatients						
6	Plan & implement clinical audit, to improve patient care and outcomes						
7	Provide basic education regarding the mind, mental health & mental illness to a lay audience						
8	Provide counselling about stress management, mental health promotion & prevention of mental illness						
9	Deliver didactic psychiatry lectures for undergraduate medical students						
10	Conduct clinical training sessions for undergraduate medical students						

Note: Progress of the PG resident with reference to the EPAs is documented once in 6 months, except for the last rating, which will be done after a gap of 3 months. EPA rating is based on the rating of milestone level attained with regard to each of the sub-competencies relevant to an EPA.

EPA entrustability levels

Level 1 : Trainee can observe the activity & learn.

Level 2 : Trainee is allowed to perform the activity with direct supervision (supervisor present and proactive in the room).

Level 3 : Trainee is allowed to perform the activity with indirect supervision (supervisor not present but is immediately available if needed).

Level 4 : Trainee is allowed to perform the activity independently (with distant supervision not immediately available).

Level 5 : Trainee is allowed to provide supervision to junior learners doing the activity.

Note : All formative assessment rating forms will be implemented in the digital format.

17 ANNEXURE B : LEARNING OBJECTIVES & COMPETENCIES SPECIFIED BY THE MEDICAL COUNCIL OF INDIA

17.1 Learning objectives

At the end of the MD course in Psychiatry, the student should be able to:

1. Understand the relevance of mental health in relation to the health needs of the country
2. Ethical considerations in the teaching and practice of Psychiatry
3. Identify the social, economic, biological and emotional determinants of mental health
4. Identify the environmental causes as determinants of mental health
5. Institute appropriate diagnostic, therapeutic and rehabilitative procedures to the mentally ill patient
6. Take detailed history, conduct appropriate ethically valid physical examination and institute appropriate evaluation procedures to make a correct clinical diagnosis
7. Perform relevant investigative and therapeutic procedures for the psychiatric patient
8. Recommend appropriate laboratory and imaging examinations and interpret the results correctly
9. Plan and deliver comprehensive treatment of a psychiatric patient using principles of rational drug therapy
10. Plan rehabilitation of psychiatric patient suffering from chronic illness
11. Clinically manage psychiatric emergencies efficiently
12. Demonstrate empathy and humane approach towards patients and their families and respect their sensibilities
13. Demonstrate communication skills of a high order in explaining management and prognosis, providing counseling and giving health education messages to patients, families and communities
14. Develop appropriate skills to practice evidence-based psychiatry
15. Demonstrate competence in basic concepts of research methodology and epidemiology
16. Be aware of and take appropriate steps in the implementation of national mental health programs, effectively and responsibly
17. Be aware of the concept of essential drugs and rational use of drugs
18. Be aware of the legal issues in the practise of Psychiatry
19. Be aware of the special requirements in the practice of Child and adolescent Psychiatry and Geriatric Psychiatry
20. Research: The student should know the basic concepts of research methodology and plan a research project in accordance with ethical principles. S/he should also be able to interpret research findings and apply these in clinical practice. S/he should know how to access and utilize information resources and should have basic knowledge of statistics.
21. Teaching: S/He should learn the basic methodology of teaching and develop competence in teaching medical/paramedical students, health professionals, members of allied disciplines (e.g. behavioural sciences), law enforcement agencies, families and consumers and members of the public.

17.2 Competencies

17.2.1 Cognitive domain (CD)

By the end of the course, the student should demonstrate knowledge in the following:

1. The student should be able to demonstrate knowledge of basic sciences (Anatomy, Physiology, Biochemistry, Microbiology, Pathology and Pharmacology) as applied to Psychiatry.
2. The student should be able to explain aetiology, assessment, classification and management and prognosis of various psychiatric disorders (including psychiatric sub specialities), and Neuroanatomy, Neurophysiology, Neurochemistry, Neuroimaging, Electrophysiology, Psychoneuroendocrinology, Psychoneuroimmunology, Chrono biology and Neurogenetics.
3. Acquire knowledge of delirium, dementia, amnesic & other cognitive disorders and mental disorders due to a general medical condition.
4. The student should be able to explain follow-up care of person suffering from chronic relapsing psychiatric ailments.
5. The student should acquire knowledge of emergency measures in acute crisis arising out of various psychiatric illnesses including drug detoxification and withdrawal.
6. The student should acquire knowledge of pharmacokinetics & pharmacodynamics of drugs involved in psychiatric management of patients.
7. The student should acquire knowledge of (a) normal child development and adolescence, mental retardation in children (b) learning & associated disorders and their management
8. The student should acquire knowledge and be able to explain mechanisms for rehabilitation of psychiatric patients.
9. The student should acquire knowledge of substance related disorders and their management.
10. The student should acquire knowledge of psychotic disorders, mood disorders, and anxiety disorders and their management
11. The student should acquire knowledge of sexual and gender identity disorders and their management.
12. The student should acquire knowledge of eating disorders and sleep disorders and their management.
13. The student should be conversant with recent advances in Psychiatry.
14. The student should be conversant with routine bedside diagnostic and therapeutic procedures and acquire knowledge of latest diagnostics and therapeutics procedures available.
15. The student should be conversant with various policy related aspects of Psychiatric practice in India (e.g. Mental Health Act, National Health Mental Health Programs etc.).
16. The student should be conversant with research methodologies.

17.2.2 Affective domain (AD)

1. The student should be able to function as a part of a team, develop an attitude of cooperation with colleagues, interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
2. The student should always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel
3. The student should demonstrate respect for the rights of the patient including the right to information and second opinion.
4. The student should develop communication skills to prepare reports and professional opinion as well as to interact with patients, relatives, peers, and paramedical staff, and for effective teaching.

17.2.3 Psychomotor domain (PD)

At the end of the course, the student should be able to:

1. Obtain a proper relevant history and perform a humane and thorough clinical examination including detailed mental state examinations using proper communication skills.
2. Arrive at a logical working diagnosis and differential diagnosis after clinical examination.
3. Order appropriate investigations keeping in mind their relevance and cost effectiveness and obtain additional relevant information from family members to help in diagnosis and management.
4. Identify psychiatric situations calling for urgent or early intervention and refer at the optimum time to appropriate centres.
5. Write a complete case record with all necessary details.
6. Write a proper discharge summary with all relevant information.
7. Obtain informed consent for any examination/procedure.
8. Perform clinical audit.
9. Must be able to perform modified Electroconvulsive therapy (ECT).
10. Counsel patients & their family members using a scientific basis

17.2.4 Other competencies (OD)

The student, at the end of the course should be able to perform independently, the following:

1. Conduct detailed Mental Status Examination (MSE)
2. Cognitive behaviour therapy
3. Supportive psychotherapy
4. Modified ECT
5. Clinical IQ assessment
6. Management of alcohol withdrawal
7. Alcohol intoxication management
8. Opioid withdrawal management
9. Management of patients with delirium
10. Crisis intervention

The student must be able to demonstrate approach to patient with variety of clinical presentations including following symptoms:

11. Auditory hallucinations
12. Visual hallucinations
13. Pseudo-hallucinations
14. Seizures and pseudo-seizures
15. Panic attack
16. Manic symptoms
17. Behavioural symptoms of schizophrenia

18. Catatonia
19. Delirium
20. Malingering

The student, at the end of the course should be able to perform under supervision, the following:

21. Behaviour therapy
22. Opioid intoxication management
23. Genetic counselling
24. Family therapy

The student, at the end of the course should be able to assist the expert in the following:

25. Interpersonal therapy
26. Management of suicide attempt

18 BIBLIOGRAPHY

Accreditation Council for Graduate Medical Education (ACGME), 2015. Frequently Asked Questions: Milestones. Available at <http://www.acgme.org/Portals/0/MilestonesFAQ.pdf>

Accreditation Council for Graduate Medical Education and American Board of Psychiatry, 2015. The Psychiatry Milestone Project A Joint Initiative of The Accreditation Council for Graduate Medical Education and The American Board of Psychiatry and Neurology. Chicago, IL. Available at <https://www.acgme.org/Portals/0/PDFs/Milestones/PsychiatryMilestones.pdf>

Association of American Medical Colleges, 2014. Core Entrustable Professional Activities for Entering Residency Faculty and Learners' Guide. Association of American Medical Colleges, Washington, DC.

Carraccio, C., Englander, R., Gilhooly, J., Mink, R., Hofkosh, D., Barone, M.A., Holmboe, E.S., 2017. Building a Framework of Entrustable Professional Activities, Supported by Competencies and Milestones, to Bridge the Educational Continuum. *Acad. Med. J. Assoc. Am. Med. Coll.* 92, 324–330. Available at <https://doi.org/10.1097/ACM.0000000000001141>

Englander, R., Cameron, T., Ballard, A.J., Dodge, J., Bull, J., Aschenbrener, C.A., 2013. Toward a common taxonomy of competency domains for the health professions and competencies for physicians. *Acad. Med. J. Assoc. Am. Med. Coll.* 88, 1088–1094. Available at <https://doi.org/10.1097/ACM.0b013e31829a3b2b>

Hart, D., Franzen, D., Beeson, M., Bhat, R., Kulkarni, M., Thibodeau, L., Weizberg, M., Promes, S., 2019. Integration of Entrustable Professional Activities with the Milestones for Emergency Medicine Residents. *West. J. Emerg. Med.* 20, 35–42. Available at <https://doi.org/10.5811/westjem.2018.11.38912>

Holmboe, E.S., Edgar, L. and Hamstra, S., 2016. The milestones guidebook. *Chicago, IL: Accreditation Council for Graduate Medical Education*. Available at <https://www.acgme.org/Portals/0/MilestonesGuidebook.pdf>

LaMantia, J., Yarris, L.M., Sunga, K., Weizberg, M., Hart, D., Farina, G., Rodriguez, E., Lucas, R., Mahmooth, Z., Snock, A., Lockyear, J., 2017. Developing and Implementing a Multisource Feedback Tool to Assess Competencies of Emergency Medicine Residents in the United States. *AEM Educ. Train.* 1, 243–249. Available at <https://doi.org/10.1002/aet2.10043>

Medical Council of India, 2017. Guidelines for Competency Based Postgraduate Training Programme for MD in Psychiatry. Medical Council of India, Dwarka, IN. Available at <https://www.mciindia.org/CMS/wp-content/uploads/2019/09/MD-Psychiatry.pdf>

Obeso V, Brown D, Aiyer M, Barron B, Bull J, Carter T, Emery M, Gillespie C, Hormann M, Hyderi A, Lupi C, Schwartz M, Uthman M, Vasilevskis EE, Yingling S, Phillipi C, eds.; for Core EPAs for Entering Residency Pilot Program. Toolkits for the 13 Core Entrustable Professional Activities for Entering Residency. Washington, DC: Association of American Medical Colleges; 2017.

ten Cate, O., 2013. Nuts and Bolts of Entrustable Professional Activities. *J. Grad. Med. Educ.* 5, 157–158. Available at <https://doi.org/10.4300/JGME-D-12-00380.1>

ten Cate, O., 2005. Entrustability of professional activities and competency-based training. *Med. Educ.* 39, 1176–1177. Available at <https://doi.org/10.1111/j.1365-2929.2005.02341.x>

ten Cate, O., Scheele, F., 2007. Competency-based postgraduate training: can we bridge the gap between theory and clinical practice? *Acad. Med. J. Assoc. Am. Med. Coll.* 82, 542–547. Available at <https://doi.org/10.1097/ACM.0b013e31805559c7>

The Royal Australian and New Zealand College of Psychiatrists, 2016. Direct observation of procedural skills WBA form v0.3. Available at <https://www.ranzcp.org/files/prefellowship/2012-fellowship-program/dops-form.aspx>

The Royal Australian and New Zealand College of Psychiatrists, 2015a. Case-based Discussion WBA form v2.5.1. Available at [https://www.ranzcp.org/files/prefellowship/2012-fellowship-program/cbd-form-\(reader-extended\).aspx](https://www.ranzcp.org/files/prefellowship/2012-fellowship-program/cbd-form-(reader-extended).aspx)

The Royal Australian and New Zealand College of Psychiatrists, 2015b. Mini-Clinical Evaluation Exercise WBA form v2.4.1. Available at [https://www.ranzcp.org/files/prefellowship/2012-fellowship-program/mini-cex-form-\(reader-extended\).aspx](https://www.ranzcp.org/files/prefellowship/2012-fellowship-program/mini-cex-form-(reader-extended).aspx)