

September 2008

[KT 172]

Sub. Code: 2066

M.D. DEGREE EXAMINATION

Branch XVIII – Psychiatry

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

(Common to all Candidates)

Q.P. Code : 202066

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Describe the anatomy and physiology of dorsolateral prefrontal lobes and its relevance to psychiatry.
2. Discuss the various approaches to the assessment of thought disorders in psychiatry.

II. Write short notes on :

(10 X 6 = 60)

1. Tests of significance.
 2. Indian adaptations of Holmes and Rahe scale.
 3. Cytochrome P450
 4. Attachment theory.
 5. Neuronal plasticity.
 6. Karl Rogers.
 7. Nor-adrenergic pathways in brain.
 8. Voltage gated ion channels.
 9. Behaviour modification techniques.
 10. Down syndrome.
-

March 2009

[KU 172]

Sub. Code: 2066

M.D. DEGREE EXAMINATION

**Branch XVIII – PSYCHIATRY
(Common to all candidates)**

**Paper I - BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY,
ABNORMAL PSYCHOLOGY, SOCIAL PSYCHOLOGY
PSYCHOMETRY AND GENETICS AS RELATED TO
PSYCHIATRY**

Q.P. Code : 202066

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions : (2 x 20 = 40)

1. Describe the anatomy and physiology of autonomic nervous system.
2. Describe the executive functions of the brain, their clinical significance in psychiatry and tests to measure them.

II. Write short notes on : (10 x 6 = 60)

1. Behaviour therapy for phobias.
2. Transference in psychotherapy.
3. Contributions of Dr. Surya.
4. Apoptosis.
5. Non parametric statistics.
6. Genetic counseling in psychiatry.
7. Role of CNS glutamate in psychiatry.
8. Chronobiology.
9. Psychotropic drug interactions.
10. Defense mechanisms in depression.

September 2009

[KV 172]

Sub. Code: 2066

M.D. DEGREE EXAMINATION

Branch XVIII – PSYCHIATRY
(Common to all candidates)

Paper I - BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY,
ABNORMAL PSYCHOLOGY, SOCIAL PSYCHOLOGY
PSYCHOMETRY AND GENETICS AS RELATED TO
PSYCHIATRY

Q.P. Code : 202066

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions :

(2 x 20 = 40)

1. Describe the significance of Monoamine Neuro transmitters in Psychiatric Illness.
2. The Genetics of Schizophrenia.

II. Write short notes on :

(10 x 6 = 60)

1. Measures of statistical significance
2. The Rorshach test
3. Rational Emotive Behavioural therapy
4. Repression
5. Anomie
6. Quantification of Psychiatric disability
7. Behaviour modification in Panic disorder
8. Psychopharmacology of Reward
9. The Caudate Nucleus
10. Transactional Analysis

September 2010

[KX 172]

Sub. Code: 2066

M.D. DEGREE EXAMINATION

Branch XVIII – PSYCHIATRY

**BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY,
ABNORMAL PSYCHOLOGY, SOCIAL PSYCHOLOGY,
PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)**

**Paper I – (for candidates admitted upto 2007-2008) and
Part I - (for candidates admitted from 2008-09 onwards)**

Q.P. Code : 202066

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. What are Neurotransmitters? Classify Neurotransmitters. Write in detail about serotonin Neurotransmission.
2. What is Emotion? Discuss the various theories of Emotion.

II. Write short notes on :

(10 X 6 = 60)

1. Defense mechanisms in depression.
2. Drug interactions in psychiatry.
3. Memory.
4. Adolescence.
5. Temporal lobe.
6. Synapse.
7. Basal ganglia.
8. Dopamine.
9. Functions of frontal lobe.
10. Physiology of sleep.

MAY 2011

[KY 172]

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY
BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY,
ABNORMAL PSYCHOLOGY, SOCIAL PSYCHOLOGY, PSYCHOMETRY
AND GENETICS AS RELATED TO PSYCHIATRY)**

Q.P. Code : 202066

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Describe the stages of Psychosexual development as described by Sigmund Freud.	11	35	15
2. Describe the stages of sleep and abnormalities commonly seen in Psychiatric and Neurologic disorders.	11	35	15

II. Write notes on :

1. Defense mechanisms in obsessive compulsive disorder.	4	10	7
2. Mechanisms of transference.	4	10	7
3. Genetics of schizophrenia.	4	10	7
4. Pharmacokinetics.	4	10	7
5. Rorschach Test.	4	10	7
6. Chi squared test.	4	10	7
7. Social quotient.	4	10	7
8. Acetylcholine.	4	10	7
9. Electroencephalogram abnormalities in seizure disorders.	4	10	7
10. Hypothalamic-Pituitary-Thyroid Axis.	4	10	7

October 2011

[KZ 172]

Sub. Code: 2066

M.D. DEGREE EXAMINATION

BRANCH XVIII – PSYCHIATRY

BASIC SCIENCES AS RELATED TO PSYCHIATRY

**(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY,
ABNORMAL PSYCHOLOGY, SOCIAL PSYCHOLOGY, PSYCHOMETRY
AND GENETICS AS RELATED TO PSYCHIATRY)**

Q.P. Code : 202066

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages (Max.)	Time (Max.)	Marks (Max.)
-------------------------	------------------------	-------------------------

- | | | | |
|---|----|----|----|
| 1. Stress and immune response in relation to Psychiatry. | 11 | 35 | 15 |
| 2. Erik H Erikson stages of Psycho social development an detailed overview. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Novel Neurotransmitters. | 4 | 10 | 7 |
| 2. Immigrants and refugees a Psychiatric perspective. | 4 | 10 | 7 |
| 3. Mature defenses. | 4 | 10 | 7 |
| 4. Internet use, abuse and addiction. | 4 | 10 | 7 |
| 5. Cognitive development. | 4 | 10 | 7 |
| 6. Rumours and mass Psychology. | 4 | 10 | 7 |
| 7. Aggression. | 4 | 10 | 7 |
| 8. Functions of frontal lobe. | 4 | 10 | 7 |
| 9. Suicide among children. | 4 | 10 | 7 |
| 10. Theories of emotion. | 4 | 10 | 7 |

[LA 172]

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

**BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL
PSYCHOLOGY, SOCIAL PSYCHOLOGY, PSYCHOMETRY AND GENETICS
AS RELATED TO PSYCHIATRY)**

Q.P. Code : 202066

Time : 3 hours

Maximum : 100 marks

(180 Min)

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

1. Various tools used in Adult Personality Assessment and their clinical applications.
2. Neuroimaging in Psychiatry disorders both in clinical practice and also in biological surgery research

16	35	15
16	35	15

II. Write notes on :

1. Role of neurotransmitter Dopamine in psychiatric Disorders.
2. Define Cognitive Dissonances and discuss it's relevance in human behavior.
3. Relevance of Cohort study in the field of research in behavioral medicine.
4. Indication for Neuropsychological testing in clinical psychiatric practice.
5. Self Actualization theory-Contribution in understanding the human development.
6. Contribution of genetic studies in understanding the biology of mental illness.
7. Concept of Transference – From psycho analytic point of view.
8. Relevance of Wisconsin Card Sorting Test in Psychiatric disorders.
9. Chi Square test in medical research.
10. Neuro anatomy of Limbic system with appropriate diagrams.

4	10	7
4	10	7
4	10	7
4	10	7
4	10	7
4	10	7
4	10	7
4	10	7
4	10	7
4	10	7

[LB 172]

OCTOBER 2012

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY
BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL
PSYCHOLOGY, SOCIAL PSYCHOLOGY, PSYCHOMETRY AND GENETICS
AS RELATED TO PSYCHIATRY)**

Q.P. Code : 202066

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Describe the Neurobiology of Memory and its relevance in clinical practice.	16	35	15
2. Erik Erickson's concept of epigenesis and stages of life cycle	16	35	15

II. Write notes on :

1. Projective tests in clinical psychology and indications in day to day practice.	4	10	7
2. Role of neurotransmitter Acetylcholine in psychiatric disorders.	4	10	7
3. Hypothalamic Pituitary-Adrenal Axis. Theory and its clinical application in Psychiatry.	4	10	7
4. Analysis of Variance (ANOVA). It's role in research in behavioral medicine.	4	10	7
5. List Culture bound syndromes. Write in detail of any two culture bound syndrome.	4	10	7
6. Contributions of Carl Rogers in the field of behavioral science.	4	10	7
7. Attachment theory-it's contribution in understanding human psychological development.	4	10	7
8. Single Photon Emission Computed Tomography(SPECT) it's current role in psychiatry research.	4	10	7
9. Describe how a case control study is done with an example.	4	10	7
10. Psycho neuro immunology-it's contribution to biological psychiatry.	4	10	7

(LC 172)

APRIL 2013

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

**BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY,
NEUROCHEMISTRY, BIOSTATISTICS, GENERAL PSYCHOLOGY,
ABNORMAL PSYCHOLOGY, SOCIAL PSYCHOLOGY,
PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)**

Q.P. Code : 202066

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Describe the stages of cognitive development as described by Jean Piaget.
2. Elaborate on Electro Encephalogram and describe various EEG abnormalities seen in psychiatric disorders and their validity.

II. Write notes on:

(10X7=70)

1. Defense mechanisms involved in alcohol dependence and their application in planning the relapse prevention.
2. Applied Psychology of Cognitive dissonance.
3. Role of Self esteem in the development of personality and Psychopathology.
4. Major Principles of Pharmacodynamics and its relevance in clinical practice.
5. Applied statistics of Pearson correlation coefficient.
6. Synthesis of GABA and about GABA receptors, role of GABA in Psychopathology.
7. Psychoneuro immunology and its Relevance in various psychiatric disorders.
8. Contributions of Alfred Adler to Psychiatry.
9. Pseudo hallucination, differences between true hallucination and Pseudo hallucination and clinical applications.
10. Role of Sleep hygiene in the management of Insomnia.

M.D. DEGREE EXAMINATION

BRANCH XVIII – PSYCHIATRY

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY,
SOCIAL PSYCHOLOGY, PSYCHOMETRY AND GENETICS
AS RELATED TO PSYCHIATRY)

Q.P. Code : 202066

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Neuroanatomy of Papez Circuit and a brief mention about the Caudate Nucleus.
2. Theories of Emotion.

II. Write notes on:

(10 x 7 = 70)

1. Counter Transference.
2. Social Deprivation.
3. Medial Longitudinal Fasciculus.
4. Raven's Progressive Matrices.
5. Operant Conditioning.
6. Phenyl Ketonuria.
7. Gestalt School of Psychology.
8. Social Theories of Suicide.
9. Word Association Test.
10. Learned Helplessness.

[LH 172]

OCTOBER 2015

Sub. Code: 2066

M.D. DEGREE EXAMINATION

BRANCH XVIII – PSYCHIATRY

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

**(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY,
SOCIAL PSYCHOLOGY, PSYCHOMETRY AND GENETICS
AS RELATED TO PSYCHIATRY)**

Q.P. Code : 202066

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the various types of memory and its evaluation in the clinical setting.
2. Discuss in detail the development of language and its dysfunction in Psychiatric disorders.

II. Write notes on:

(10 x 7 = 70)

1. Biological markers for Psychiatric disorder.
2. Hormonal assays in various psychiatric disorders.
3. Lie detector test.
4. Mature defense mechanisms and positive mental health.
5. Nucleus accumbens.
6. Non parametric tests.
7. Adolf Meyer's contribution to Psychiatry.
8. Reward neural circuits in brain.
9. Hypothalamus.
10. Neuro Modulators.

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P.Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the various defense mechanisms and their understanding in neurotic disorder.
2. Discuss the anatomy of basal ganglia, its clinical application in Psychiatry.

II. Write notes on:

(10 x 7 = 70)

1. Erik Erikson.
2. Endorphins and encephalins.
3. Sphenoidal EEG.
4. Urine screening tests for mental retardation.
5. Operant conditioning, its application in psychiatry.
6. Life events scale.
7. Type I and Type II errors.
8. Reward neural circuits in alcohol dependence.
9. Genotype, phenotype, genome in psychiatric disorders.
10. Rumours, prejudice its impact on society.

(LJ 172)

OCTOBER 2016

Sub. Code:2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P.Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the various theories of intelligence, write a note on the intelligent tests used for children in India.
2. Discuss the functional anatomy of hypothalamus, its Dysfunctions in psychiatric disorder.

II. Write notes on:

(10 x 7 = 70)

1. Long term potentiation of memory.
2. ANOVA.
3. Types of Leaderships.
4. Prejudice.
5. Delusion formation.
6. Drug trials.
7. Evoked potentials.
8. Grief and mourning.
9. Gate control theory of pain transmission.
10. Projective tests.

(LK 172)

MAY 2017

Sub. Code:2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P.Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Enumerate Ego Defence Mechanisms based on Psychoanalytic principles of Sigmund Freud; describe any three mechanisms with suitable examples.
2. Neuroanatomy and Neurophysiology of Memory Mechanisms.

II. Write notes on:

(10 x 7 = 70)

1. Bender Gestalt Test.
2. Cortical blindness.
3. Peer Group influence in adolescence.
4. Papez Circuit.
5. Piaget's description of Sensori Motor Stage in Cognitive Development.
6. Ideomotor Apraxia.
7. Insight Learning.
8. Group Cohesion.
9. Statistical Importance of Anova.
10. Down's syndrome.

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P.Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe various theories of Emotions. Critically evaluate James - Lange theory and its clinical implications.
2. Describe the anatomy of Cerebellum and its connections.

II. Write notes on: **(10 x 7 = 70)**

1. Standard Deviation.
2. Cognitive Dissonance.
3. Tests of Memory.
4. Margaret Mahler.
5. Cholecystokinin.
6. Stages of Sleep.
7. Genetic Mapping.
8. Nucleus Accumbens.
9. Double Bind Theory.
10. SPECT.

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P.Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. What are Neurotransmitters? Describe in detail about GABA and Glutamate neurotransmission.
2. Describe in detail about Jean Piaget`s stages of Cognitive development and their implications in psychiatry.

II. Write notes on: **(10 x 7 = 70)**

1. Wechsler Adult Intelligence Scale.
2. Group Dynamics.
3. Multifactor theories of Intelligence.
4. Substance P.
5. Locus Ceruleus.
6. Hypothalamo Pituitary Adrenal Axis.
7. Tests of Significance.
8. Inhibition.
9. Linkage Analysis.
10. MRI applications of Schizophrenia.

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Theories of Intelligence and their application in Psychiatry.
2. Neurobiology of Sleep and Wakefulness.

II. Write notes on:

(10 x 7 = 70)

1. Montreal Cognitive Assessment (MoCA).
2. Five Factor Model of Personality.
3. Serotonin.
4. Type I and Type II Error.
5. Altruism.
6. Types of Leadership.
7. Shaping and Modelling.
8. Temper Tantrums.
9. Erik Erikson.
10. Counter Transference.

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. What are the various intelligence test? Critically evaluate its advantages and disadvantages? How scales are developed and validated?
2. Write about the limbic system and its importance in psychiatric disorders?

II. Write notes on: **(10 x 7 = 70)**

1. Power of a test.
2. Defense Mechanism – Projection and Regression.
3. Karen Horney.
4. Gestalt School of Psychology.
5. Theories of Dream.
6. Neurotensin.
7. Diffusion MRI.
8. “Pathological families” in Schizophrenia.
9. Leadership qualities.
10. Rating scales for catatonia.

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIostatISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Write in detail about the ‘Biogenic Amine neurotransmitters’ and implication in psychiatric disorders.
2. What are the various theories of memory and memory impairment in psychiatric illness?

II. Write notes on: **(10 x 7 = 70)**

1. Reliability.
2. Carl Gustav Jung.
3. Social Learning Theory.
4. Thematic Apperception test.
5. Executive Function.
6. Gastaut - Geschwind Syndrome.
7. Psychodynamics of Suicide.
8. Neurosteroids.
9. Pharmacology EEG.
10. Mob behavior.

[LQ 172]

**AUGUST 2020
(MAY 2020 SESSION)**

Sub. Code: 2066

M.D. DEGREE EXAMINATION

BRANCH XVIII – PSYCHIATRY

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Synthesis, metabolism and action of neurotransmitter serotonin and its role in psychiatry.
2. Healthy involuntary mental (Ego Defense) mechanisms.

II. Write notes on:

(10 x 7 = 70)

1. Open-versus Closed-ended questions in Psychiatric Interview.
2. Aetiological theories of hallucination.
3. Types of 'Validity' in statistics.
4. Formal and informal groups.
5. Long term potentiation (LTP) in memory.
6. Bender visuo motor gestalt Test (BGT).
7. Non-rapid eye movement sleep (NREM).
8. Stages of dying and death.
9. Circle of Willis.
10. John Bowlby and attachment theory.

[LS 172]

NOVEMBER 2020
(OCTOBER 2020 SESSION)
M.D. DEGREE EXAMINATION

Sub. Code: 2066

BRANCH XVIII – PSYCHIATRY

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Application of classical conditioning and operant conditioning principles in psychiatry.
2. Assessment of Executive Functions of the Mind.

II. Write notes on:

(10 x 7 = 70)

1. GABA (γ - aminobutyric acid) Receptors.
2. “Priming” in Memory.
3. Sampling and Sampling Strategies.
4. Social Learning.
5. Genome Wide Association Studies (GWAS).
6. James Lange Theory of Emotions.
7. Rapid Eye Movement Sleep (REM).
8. Erik H. Erikson - Eight Stages of the Life Cycle.
9. Structure, Organization and Functions of the Frontal Cerebral Cortex.
10. Peer Group Influence in Adolescence.

[MD 0721]

JULY 2021
(MAY 2021 SESSION)
M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY

Sub. Code: 2066

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIostatISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe in detail about white matters tracts in brain.
2. Various tools used in adult personality assessment and their clinical application.

II. Write notes on:

(10 x 7 = 70)

1. Otto rank.
2. Thyrotropin releasing factor.
3. Mature defense mechanism.
4. Type I and type II error.
5. Types of conflicts.
6. Validity.
7. Classical conditioning.
8. Oxytocin and vasopressin.
9. Cell migration.
10. Forgetting.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MD 1121]

**NOVEMBER 2021
(OCTOBER 2021 SESSION)**

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Write about thalamus and its relevance in psychiatric disorders.
2. Erik H.Erikson – Stages of Life Cycle.

II. Write notes on: **(10 x 7 = 70)**

1. Epigenetics.
2. Franz Alexander.
3. Neurotic defense mechanism.
4. Instrumental conditioning.
5. P300.
6. Logistic regression.
7. Association studies.
8. Stages of sleep.
9. Cannabinoid receptors.
10. Neuronal plasticity.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0522]

MAY 2022

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the basal ganglia and its role in psychiatric disorders.
2. Enumerate the types of stress & its effect on the immune system & psychiatric disorders.

II. Write notes on: **(10 x 7 = 70)**

1. Endocannabinoids.
2. Neurosteroids.
3. Relationship between circadian rhythm & seasonal affective disorders.
4. Illness anorexia.
5. Psychogenic amnesia.
6. Frontal lobe contribution to memory.
7. Thalamocortical dysrhythmia syndrome.
8. Acculturative stress.
9. Carl Rogers.
10. Case control study.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 1022]

OCTOBER 2022

Sub. Code: 2066

M.D. DEGREE EXAMINATION

BRANCH XVIII – PSYCHIATRY

PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY

**(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)**

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the functional anatomy of hypothalamus, its Dysfunctions in Psychiatric disorders.
2. Describe the stages of sleep and abnormalities commonly seen in Psychiatric and Neurologic disorders.

II. Write notes on:

(10 x 7 = 70)

1. Chi square test
2. Aggression.
3. Acetylcholine.
4. Rumours and mass Psychology.
5. Cytochrome P450.
6. Gestalt School of Psychology.
7. Biological markers for Psychiatric disorders.
8. Endorphins and Enkephalins.
9. Sphenoidal EEG.
10. Basal ganglia.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

**PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)**

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the Limbic system. Discuss its relevance to Psychiatry.
2. What do you understand by the term intelligence? Describe the one test commonly used for measuring intelligence which has been standardized for use in India.

II. Write notes on: **(10 x 7 = 70)**

1. Role of Culture in Psychiatry.
2. Piaget's stages of Intellectual Development.
3. Linkage analysis and relevance to Psychiatry.
4. Describe the Anatomy and Biochemistry of Dopamine synthesis and breakdown in the Brain.
5. Defense mechanisms.
6. Theories of Suicide.
7. 't' test in Statistical measurement.
8. Maslow's Hierarchy of Needs.
9. Aversive conditioning.
10. Effects of Sensory deprivation.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2066

**M.D. DEGREE EXAMINATION
BRANCH XVIII – PSYCHIATRY**

**PAPER I – BASIC SCIENCES AS RELATED TO PSYCHIATRY
(INCLUDING NEURO ANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY,
BIOSTATISTICS, GENERAL PSYCHOLOGY, ABNORMAL PSYCHOLOGY, SOCIAL
PSYCHOLOGY, PSYCHOMETRY AND GENETICS AS RELATED TO PSYCHIATRY)**

Q.P. Code: 202066

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Write in detail about the cerebellum, its connections, functions, and its importance in Psychiatry.
2. Write in detail about the classification of Pain. Enumerate Pain Receptors. Discuss Pain pathways and Association of Pain with Mental Illness.

II. Write notes on: (10 x 7 = 70)

1. Limbic system.
2. Neurotrophic factors.
3. Association fibres.
4. Evoked potentials.
5. Novel neurotransmitters.
6. Theories of intelligence.
7. Genetics of bipolar affective disorder.
8. Bystander effect.
9. Validity.
10. Erik Erikson.
