SWAT MEDICAL COLLEGE
SWAT

DEPARTMENT OF MEDICAL EDUCATION

MODULE NEUROSCIENCE II

4TH YEAR MBBS

BLOCK: 1

DURATION: 8 WEEKS

FROM:

STUDENT NAME

Contents

1 Acaedemic Calendar

Tentative Annual Calendar MBBS – 2023-24
Swat Medical College, Swat

Activity/ Events	Week	Date	1st Year	2nd Year	3rd Year	4th Year	5th Year
Orientation Week	1	12th to 16th Feb	Foundation-I (6 weeks) 22nd March, Module Exam	Neurosciences-IA (6 weeks) 22nd March, Module Exam	Foundation II (5 weeks) 22nd March, Module Exam	Neurosciences – II (6 weeks) 25th and 26th March Block J Exam	*Previous 5th Year Preparatory leaves and annual exam*
Regular Classes	2	19th to 23rd Feb					
Regular Classes	3	26th Feb to 1st March					
Regular Classes	4	4th to 8th March					
Regular Classes	5	11th to 15th March					Foundation-III (2 weeks) 22nd March Module Exam
Regular Classes	6	18th to 22nd March			Infection & Inflammation (6 weeks) 6th May to 7th May Block G exam		
Regular Classes	7	25th to 29th March	Blood & Immunology (5 weeks) 6th & 7th May Block A exam	Neurosciences-IB (5 weeks) 13th & 14th May Block D		GIT and Hepatobiliary – II (9 weeks) 10th and 11th June Block K Exam	Blood & Immunology-III (2 weeks) 5th April Module Exam
Regular Classes	8	1st to 5th April					
Spring Break/Eid ul Fitr	9	8th to 12th April					MSK-III (2 weeks) 06th & 07th May Block N exam
Sports Week	10	15th to 19th April					
Regular Classes	11	22nd to 26th April					
Regular Classes	12	29th to 3rd May			Multisystem (5 weeks) Module Exam 31st May		Cardiorespiratory-III (5 weeks) 3rd & 4th June Block O Exam
Regular Classes	13	6th to 10th May	MSK-I (6 weeks) 1st & 2nd July Block-B Exam	GIT, Hepatobiliary & Metabolism- (6 weeks) 1st & 2nd July			
Regular Classes	14	13th to 17th May					Renal- III Module (2 weeks) 14th June Module Exam
Regular Classes	15	20th to 24th May					
Regular Classes	16	27th May to 31st May			Blood & immunology (3 weeks) 1st & 2nd July module exam	Renal – II Module (4 weeks) 1st and 2nd July Module Exam	Endocrine & Reproduction-III (3 weeks) 29th & 30th July Block P Exam
Regular Classes	17	3rd to 7th June					
Regular Classes	18	10th to 14th June					
Eid-ul-Adha Holidays	19	17th to 21st June					
Regular Classes	20	24th to 28th June					
Summer Vacations	21-23	3rd to 21st July					
Regular Classes	24	22nd to 26th July	CVS-I (5 weeks) 23rd August Module Exam	Renal (3 weeks) 12th to 13th August Block E	MSK-II (5 weeks) 2nd Sep 3rd Sep Block H exam	Endocrine and Reproduction – II (8 weeks) 16th and 17th September Block-L exam	Neurosciences – III (3 weeks) 16th August Module Exam
Regular Classes	25	29th July to 2nd Aug					
Regular Classes	26	5th to 9th Aug		Endocrine-I (4 weeks) 6th Sep			
Regular Classes	27	12th to 16th Aug					GIT & Hepatobiliary (2 weeks) 6th Sep Module Exam
Regular Classes	28	19th 23rd Aug					
Regular Classes	29	26th to 30th Aug	Respiratory-I (4 weeks) 23rd -24th SEP Block-C Exam		CVS-II (3 weeks) 20th September Module exam		
Regular Classes	30	2nd to 6th Sep					
Regular Classes	31	9th to 13th Sep		Reproduction-I (4 weeks) 30th Sep 1st Oct			Multisystem-II (4 weeks) 7th -8th Oct Block Q Exam
Regular Classes	32	16th to 20th Sep					
Regular Classes/ Preparatory Leaves	33	23rd to 27th Sep	PREPARATORY LEAVES	PREPARATORY LEAVES	RES-II (4 weeks) 21st and 22nd October Block L exam	EYE and ENT (6 weeks) 14th to 15th Oct Block M1 & M2 Exam	PREPARATORY LEAVES
Regular Classes/ Preparatory Leaves	34	30th Sep to 4th Oct					
Regular Classes/ Preparatory Leaves	35	7th to 11th Oct					
Regular Classes/ Preparatory Leaves	36	14th to 18th Oct					
Regular Classes/ Preparatory Leaves	37	21st to 25th Oct					
Regular Classes/ Preparatory Leaves	38	28th Oct to 1st Nov					
Regular Classes/ Preparatory Leaves	39	4th to 8th Nov					
Regular Classes/ Preparatory Leaves	40	11th to 15th Nov	Annual Exam as per KMU schedule.	Annual Exam as per KMU	PREPARATORY LEAVES	PREPARATORY LEAVES	
Regular Classes/ Preparatory Leaves	41	18th to 22nd Nov					
Regular Classes/ Preparatory Leaves	42	25th to 29th Nov					
Regular Classes/ Preparatory Leaves	42	2nd to 6th Dec					
Regular Classes/ Preparatory Leaves	43	9th to 13th Dec					
Regular Classes/ Preparatory Leaves	44	16th to 20th Dec					
Regular Classes/ Preparatory Leaves	45	23rd to 27th Dec	Winter vacation	Winter vacation	Annual Exam as per KMU schedule.	------	
Regular Classes/ Preparatory Leaves	46-49	November 2024					
Regular Classes/ Preparatory Leaves	50-53	December 2024					
Regular Classes/ Preparatory Leaves	54-57	January 2025			Winter vacation	Annual Exam as per KMU schedule.	
Start of new academic session 2025-26			February 2025	February 2025	February 2025	February 2025	March 2025

Note: The given dates are tentative and may be subject to change as needed/demanded. The KMU will share the annual exam schedule at the end of the current session.

2 List Of Abbrevation

PRIME	Professionalism and Communication Skills, Research, Identity Formation, Management and Leadership, Ethics		
Pharma-L	Pharmacology Lecture	SGD	Small Group Discussion
Pead-L	Peadiatrics	DSL	Directed Self Learning
C.M-L	Community Medicine Lecture	CPC	Clinical Pathological Conference
Med-L	Medicine Lecture	LGIS	Large Group Interactive Session
Neuro-L	Neurosurgery Lecture	PBL	Problem Based Learning
F.M-L	Forensic Medicine Lecture	SL	Skill Lab
Ortho-L	Orthopaedics Lecture	MCQs	Multiple Choice Questions
M.E-L	Medical Education Lecture	OSPE	Objectively Structured Practical Examination
Patho-L	Pathalogy Lecture	SAQs	Short Answer Questions
SGDs	Small Group Discussions	SEQs	Short Essay Questions
IPA			

3 Module Committee:

s.no	Name	Department	Role
1.	Prof. Dr. Aziz Ahmad	Dean / principal	
2.	Dr. M Junaid Khan	DME	Director
	Module Team		
3.	Prof.Dr.Imran Uddin	Pathology	Chairman
4.	Dr.Mohammad Munib	Community Medicine	Coordinator
5.	Prof.Dr.Qaribullah	Community Medicine	Member
6.	Prof.Dr. Mukamil Shah	Pathology	Member
7.	Dr. Shabir Ahmad	Pathology	Member
8.	Dr. Rahman Shah	Pharmacology	Member
9.	Dr. Mohammad Younas	Forensic Medicine	Member
10.	Dr. Siyab Ahmad	Pathology	Member
11.			

Recommended List Of Icons

Introduction To Case

For Objectives

Critical Questions

Assessment

Resource Material

4 Mission/ Vision of the College

4.1 Mission Statement of the Institution:

To train medical students as per international standards, thereby producing doctors who exhibit excellence as professionals, academicians, researchers and adeptly fulfilling community healthcare needs through the application of ethical and evidence-based practices.

4.2 Vision Statement of the Institution:

To be a center of excellence in medical education, patient care and research globally.

5 Overview of the Module/ Preface

Welcome to the MBBS program/Module Neuroscience II, where the overarching goal is to equip students with a profound understanding of medical science and practice. Throughout the curriculum/module Neuroscience II, emphasis is placed on integrating theoretical knowledge with practical applications, ensuring a comprehensive educational experience. The core themes of modules, including Disturbed sleep, Disturbed mood & behavior, Right-sided weakness and inability to speak, Loss of consciousness and Fits, Tremors, Headache, Paraplegia, and Numbness and tingling are meticulously designed to foster a deep understanding of, Psychiatry, Forensic Medicine, Anesthesia, Pediatrics, pathology, pharmacology, Biostatistics, Epidemiology and clinical skills.

Students will gain hands-on experience through through clinical rotations in diverse settings such as Skill lab, interactive lectures and SGD providing a well-rounded education in diverse settings providing a well-rounded education.

The study guide serves as a crucial reference for assessment and evaluation. It outlines the components that will be assessed, such as knowledge and basic sciences practical implications, and the corresponding assessment tools, which include MCQs, SEQ, OSCE and OSPE. This transparency enables students to align their efforts with the evaluation criteria, promoting a sense of accountability and preparation for success in their academic pursuits. As future medical professionals, graduates can look forward to diverse career pathways, from clinical practice to research, with opportunities in Epidemiology and Biostatistics.

In essence, the study guide acts as an indispensable tool for students, offering clarity on module contents, instructional methodologies, faculty guidance, and assessment criteria. By actively engaging with the information provided, students can navigate their academic journey with confidence and purpose, maximizing their learning experience in the MBBS Program.

6 Introduction/ Organization of Module

6.1 Introduction:

Module Neuroscience II is a comprehensive module designed for 4th-year MBBS students to provide a multidisciplinary approach to understanding the etiology of neurological and mental disorders. The module aims to equip students with the knowledge and skills to describe anxiety disorders and their pharmacological management. Additionally, it focuses on explaining concepts related to various neurological problems, offering an in-depth understanding of their etiology. Moreover, this module introduces students to the practical aspects of managing mental and neurological disorders. The scope of Neuroscience II content encompasses anxiety disorders, pharmacological management, and understanding the underlying factors contributing to these conditions. Through this module, students will gain a deeper understanding of the various neurological disorders and their underlying pharmacological interventions, which will significantly contribute to their medical education and practice. Biostatistics, Epidemiology, and Research Methodology provide the necessary tools and skills for students to engage in meaningful research, analyze neuroscientific data, and contribute to evidence-based medical practice in the field of neurology and neuroscience. These disciplines empower students to critically evaluate scientific literature, design research studies, and apply statistical methods to enhance their understanding of neurological disorders and their management.

6.2 Rational:

The rationale behind the Neuroscience Module lies in providing 4th-year MBBS students with a profound understanding of the nervous system, a fundamental pillar in clinical medicine. Recognizing the pivotal role of neurology in healthcare, this module aims to equip students with comprehensive knowledge and skills to diagnose, manage, and understand neurological disorders. The module integrates basic neuroscience principles with clinical applications, ensuring that students can bridge theoretical knowledge with practical clinical scenarios.

6.3 Organization of the Study guide:

6.3.1 Curriculum Overview:

- Neuroanatomy: Detailed study of the structure of the brain, spinal cord, and peripheral nerves.
- Neurophysiology: Understanding the principles of neuronal communication, neurotransmitters, and synaptic transmission.
- Clinical Correlation: Linking anatomical structures to clinical presentations and manifestations of neurological disorders.
- Neurological Disorders: Exploration of common neurological conditions, including their pathophysiology and clinical features.
- Neuroimaging and Diagnosis: Introduction to neuroimaging techniques and their applications in diagnosing neurological disorders.
- Research Methodology and Biostatistics: Basics of research design, data analysis, and ethical considerations in neuroscience research.

6.3.2 Teaching Resources:

- Lectures and Tutorials: Didactic sessions providing foundational knowledge.
- Practical Sessions: Hands-on dissections, clinical skill development, and neuroimaging interpretation.
- Clinical Attachments: Exposure to real-life neurological cases and patient interactions.

6.3.3 Assignments and Assessments:

- Examinations: Written and practical assessments covering neuroanatomy, clinical skills, and theoretical knowledge.
- Clinical Assessment: Evaluation of neurological examination skills and patient interactions.
- Research Project or Presentation: Integration of research skills through a project or presentation.

6.4 Teaching Strategies:

LEARNING METHODOLOGIES:

The following teaching / learning methods are used to promote better understanding:

- Interactive Lectures
- Small Group Discussion
- Case- Based Discussion (CBD)
- Clinical Experiences o Clinical Rotations
- Skills session
- Self Study

INTERACTIVE LECTURES: In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.

SMALL GROUP SESSION: This format helps students to clarify concepts, acquire skills or desired attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE-BASED DISUCSSION (CBD): A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students' discuss and answer the questions applying relevant knowledge gained previously in clinical and basic health sciences during the module and construct new knowledge. The CBD will be provided by the concern department.

CLINICAL LEARNING EXPERIENCES: In small groups, students observe patients with signs and symptoms in hospital wards, clinics and outreach centers. This helps students to relate knowledge of basic and clinical sciences of the module and prepare for future practice.

o **CLINICAL ROTATIONS:** In small groups, students rotate in different wards like Medicine, Pediatrics, Surgery, Obs & Gyne, ENT, Eye, Family Medicine clinics, outreach centers & Community Medicine experiences. Here students observe patients, take histories and perform supervised clinical examinations in outpatient and inpatient settings. They also

get an opportunity to observe medical personnel working as a team. These rotations help students relate basic medical and clinical knowledge in diverse clinical areas.

SKILLS SESSION: Skills relevant to respective module are observed and practiced where applicable in skills laboratory.

SELF STUDY: Students' assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self study.

6.5 Assessment strategies

6.5.1 Formative Assessments:

- Regular quizzes, short assessments, and group discussions to gauge ongoing understanding.
- Feedback on practical skills during dissections and clinical skill sessions

6.5.2 Summative Assessments:

- Comprehensive written examinations covering the entire module content.
- Practical assessments evaluating neuroanatomy dissection skills and clinical examination competence.
- Research project or presentation as a summative assessment for research and critical appraisal skills

6.6 Feedback mechanism and summary

6.6.1 Continuous Feedback:

- Immediate feedback during practical sessions to enhance skill development.
- Regular review sessions after formative assessments to address common challenges and misconceptions.

6.6.2 Assessment Feedback:

- Detailed feedback on written examinations to guide further study.
- Individualized feedback on clinical assessments to highlight strengths and areas for improvement

6.7 Summary:

The Neuroscience Module is designed to provide a comprehensive and immersive learning experience. Through a structured curriculum, a variety of teaching strategies, and a diverse assessment approach, the module aims to produce well-rounded medical professionals equipped with the knowledge and skills necessary to navigate the complex landscape of neurology. Continuous feedback mechanisms ensure that students receive timely guidance and support, fostering a culture of continuous improvement and excellence in neurological understanding and practice

7 Table Of Specification

Subject	Weightage	No. of Hours allocated in SG	Percent Distribution	Assessment		
				IPA		MCQs
				OSPE/ OSCE	Viva	
Pathology	16%	24	17.267%	2	2	21
Pharmacology	14%	22	15.827%	3	2	19
Forensic medicine	13%	20	14.388%	2	2	17
Community medicine	23%	36	25.899%	3	2	31
General medicine	7%	12	8.633%	1	X	10
Psychiatry	7%	10	7.194%	1	X	9
Pediatrics	3%	5	3.597%	X	X	4
Neurosurgery	1%	2	1.438%	X	X	2
Orthopedics	1%	1	0.719%	X	X	1
Anaesthesia	2%	4	2.87%	X	X	3
Prime/Medical Education	1%	2	1.438%	X	X	2
Prime/Research	11%	16	16.719%	X	X	14
Family medicine	1%	1	0.719%	X	X	1
TOTAL	100	139	100	12	8	134

8 Learning Objectives

8.1 General Learning Outcomes

By the end of this module the students would be able to;

1. Describe anxiety disorders and their pharmacological management
2. Explain the concepts of Mood disorders and their pharmacological management
3. Explain psychotic disorders and their pharmacological management
4. Describe the pathophysiology and management of Dementias
5. Elaborate the pathophysiology, clinical features, management, and prevention of cerebrovascular diseases
6. Classify epilepsy and describe the pharmacological management of epilepsy in children and adults
7. Describe the types and protocols of anaesthesia and explain the drugs used as anaesthetics
8. Explain the pathology and clinical features of cerebellar diseases
9. Elaborate the clinical features and pharmacological management of Parkinson`s disease
10. Explain the clinical features and management of Motor neuron disease and Friedrich`s ataxia
11. Describe the pathology and management of head injury
12. Describe the pathogenesis, clinical features, and management of common CNS infections
13. Classify brain, spinal cord and peripheral nerves tumors, and describe their clinical features and management
14. Explain the pathophysiology, clinical features, investigations and management of Multiple sclerosis, transverse myelitis and

i. Guillain Barre syndrome

15. Classify peripheral neuropathies and elaborate their etiologies and clinical presentations
16. Explain the clinical features and forensic approach to a patient with neurotoxic poisons.
17. Explain the forensic aspects of insanity and head injury.
18. Skillful in History taking and Physical examination to compassionately deal with a patient.
19. Display professional values (honesty, accountability, cultural and religious sensitivity), attitudes and behaviors (empathy, ethics, good communication skills and lifelong learner) that embody good medical practice.
20. Exhibit a spirit of inquisitiveness, inventiveness, and ethical conduct while carrying out research in accordance with the prescribed guidelines

Table 1: Thematic Distribution

S. No	Theme	Duration in days
1	Disturbed sleep	5
2	Disturbed mood & behaviour	5
3	Right-sided weakness and inability to speak	3
4	Loss of consciousness and Fits	5
5	Tremors	2
6	Headache	5
7	Paraplegia	2
8	Numbness and tingling	3

Subject	Topic	Learning Objectives	Hours	MIT
Theme-1: Disturbed sleep				
Psychiatry	Sleep disorders	Describe the types of sleep disorders	3	Lecture
		Explain the pharmacological and non-pharmacological management of sleep disorders		
		Describe the ways of improving healthy sleep		
	Non-organic insomnia	Define non-organic insomnia		
		Explain the management of non-organic insomnia		
	Sleep wake cycle disorders	Describe the concept of sleep-wake cycle disorder		
		Describe the pharmacological and non-pharmacological management of sleep-wake wake cycle disorder		
Pharmacology	Introduction to the Pharmacology of CNS	Describe basic terms like neurotransmitters, neuromodulator/neurotropic factors, withdrawal symptoms (abstinence syndrome), cross-tolerance, reverse tolerance (sensitization) and cross-dependence	5	Lectures
		Describe the blood-brain barrier and its clinical significance		
		Enlist the principal neurotransmitters and their receptors in the CNS		
		Describe voltage-gated, ligand-gated (ionotropic), ion channels and metabotropic receptors on the neuronal membrane		
		Classify the drugs acting on the CNS		
	Sedative-hypnotics (Minor tranquilizers)	Classify broadly the Sedative-Hypnotics		
	Benzodiazepines	Classify Benzodiazepines		
		Describe the pharmacokinetics of Benzodiazepines		
		Describe the mechanism of action of Benzodiazepines		
		Describe the pharmacological effects of Benzodiazepines		
		Describe the clinical uses of Benzodiazepines		
		Describe the adverse effects of Benzodiazepines		

		Describe the tolerance and dependence on Benzodiazepines		
		Describe the drug interactions of Benzodiazepines		
		Name the antidote (competitive antagonist) to Benzodiazepines		
		Enlist the inverse agonists to Benzodiazepines		
	Barbiturates	Classify barbiturates		
		Describe the mechanism of action and clinical uses of barbiturates		
		Describe the difference regarding the mechanism of action of Barbiturates in comparison to Benzodiazepines		
	Buspirone	Describe the mechanism of action and clinical use of Buspirone		
		Describe the merits and demerits of Buspirone in comparison to Benzodiazepines		
	Ramelteon	Describe the mechanism of action and clinical use of Ramelteon		
	CNS stimulants	Classify CNS stimulants		
	Psychomotor stimulants (Amphetamine, Methylphenidate)	Describe the mechanism of action, clinical uses, and adverse effects of Psychomotor stimulants		
	Respiratory analeptics (Doxapram, Nikethamide)	Describe the mechanism of action, clinical uses and adverse effects of Respiratory analeptics		
	Methyl xanthine/Theophylline, Caffeine, Theobromine)	Describe the mechanism of action, clinical uses and adverse effects of Methyl xanthine		
	Sibutramine	Describe the mechanism of action and clinical use of Sibutramine		
Forensic Medicine	Classification of neurotoxins	Define and classify neurotoxins	4	Lectures
	Cerebral Poisons-Somniferous Poisons • Morphine • Opium • Heroin	Describe and enlist Somniferous poison.		
		Describe the mechanism of action for the Somniferous poison.		
		Describe different signs, symptoms and autopsy appearance in a typical of Somniferous poisons.		
		Describe fatal dose, treatment, and diagnosis for the Somniferous poisons.		

		Describe medico-legal importance for the Somniferous poisons.		
	Inebriant Poisons • Ethyl Alcohol • Methyl Alcohol	Describe and enlist Inebriant poison.		
		Describe mechanism of action for the Inebriant poison.		
		Describe different sign, symptoms and autopsy appearance in a typical of Inebriant poisons.		
		Describe fatal dose, treatment, and diagnosis for the Inebriant poisons.		
		Describe medico-legal importance for the Inebriant poisons.		
	Sedative & Hypnotics • Chloral hydrate • Barbiturates	Describe and enlist sedative and hypnotics		
		Describe mechanism of action for the Sedative and hypnotics.		
		Describe different sign, symptoms and autopsy appearance in a typical of Sedative and hypnotics.		
		Describe fatal dose, treatment, and diagnosis for the Sedative and hypnotics.		
		Describe medico-legal importance for the Sedative and hypnotics.		
	Fuels, stimulants and hallucinogens • Agrochemical poisons • Kerosene • Hallucinogens- LSD • Stimulants- Amphitamines	Describe and enlist fuels, stimulants and hallucinogens.		
		Describe mechanism of action of fuels, stimulants and hallucinogens.		
		Describe different sign, symptoms and autopsy appearance in a typical case of fuels, stimulants and hallucinogens poisoning.		
		Describe fatal dose, treatment, and diagnosis of fuels, stimulants and hallucinogens.		
		Describe medico-legal importance of fuels, stimulants and hallucinogens.		
	Drug Dependence	Describe Drug dependence and its psychological effects.		
		Describe drug abuse and outline the procedure to investigate a case due to narcotics.		
PRIME/MEDICAL EDUCATION	Emotional intelligence (EI)	Explain the concept of EI	1	Lectures
		Differentiate between EQ and IQ		
		Describe & Display appropriate emotional and social intelligence		
PRIME/RESEARCH	Epidemiology	Define epidemiology	1	Lectures
		Explain the basic concepts of epidemiology		
	Study design	Classify and elaborate study designs		
	Screening	Explain the screening in epidemiology		

	Measures of mortality and morbidity	Explain the measures of morbidity and mortality		
Theme 2: Disturbed mood & behaviour				
Psychiatry (mood and anxiety disorders	Depressive disorders	Classify depressive disorders	6	Lectures
		Describe the etiology, clinical features and management protocols of different depressive disorders		
	Atypical depression and seasonal affective disorder	Describe the clinical presentation of atypical depression		
		Recognize the symptoms of atypical depression		
		Describe the management of atypical depression and seasonal affective disorders		
	Bipolar affective disorders	Describe the clinical features and management protocols of Bipolar affective disorders		
	Suicide	Describe the preventive measures of suicide		
	Anxiety disorders	Classify anxiety disorders		
		Differentiate between medical and psychiatric causes of anxiety		
		Differentiate between anxiety and phobia		
		Describe the pharmacological and non-pharmacological management of different anxiety disorders including relaxation techniques and breathing exercises		
	Dissociative disorders	Explain the different behavioral and neurological presentations of dissociative disorders		
		Describe the pharmacological and non-pharmacological management of dissociative disorders		
	Stress related disorders	Classify stress related disorders		
		Explain the concept of stress in stress related disorders		
		Explain the pharmacological and non-pharmacological management of stress related disorders		
	Somatoform disorders	Classify somatoform disorders		
		Describe the concept of medically unexplained symptoms		
		Counsel a patient with medically unexplained symptoms		
Psychiatry (Psychotic illnesses)	Personality disorders	Classify personality disorders	2	Lectures
		Describe the clinical features, diagnostic criteria and management of personality disorder		

	Psychotic disorders	Differentiate between organic and non-organic psychosis		
		Explain the concept of psychosis		
		Classify psychotic disorders		
	Schizophrenias	Describe the clinical features, diagnostic criteria and management of Schizophrenias		
		Explain the role of psychotherapy and Electroconvulsive therapy in Schizophrenias		
		Describe the rehabilitations strategies with patients of Schizophrenias		
	Delusional disorders	Describe the types and management of delusional disorders		
		Describe the ways of differentiating delusional disorders from Schizophrenias		
	Substance abuse disorders	Describe the concept of drug dependence		
		Classify of drug abuse		
		Describe the principles of management of substance abuse		
		Explain the concept of harm reduction		
General Medicine	Alzheimer`s disease and Dementias	Explain the pathophysiology, clinical features and management of Alzheimer`s disease	1	Lecture
		Describe the reversible and irreversible causes of Dementia		
Pharmacology	Depression	Describe the Monoamine hypothesis of depression	8	Lectures
	Antidepressants	Classify antidepressants		
	SSRIs (Selective Serotonin Reuptake Inhibitors)	Enlist SSRIs		
		Enlist the most selective SSRIs		
		Describe the pharmacokinetics, mechanism of action, clinical uses, adverse effects and drug interactions of SSRIs		
	TCAs (Tricyclic Antidepressants)	Enlist TCAs		
		Describe the mechanism of action, clinical uses, adverse effects and drug interactions of TCAs		
	MAOIs (Monoamine Oxidase Inhibitors)	Enlist MAOIs		
		Describe the pharmacokinetics, mechanism of action, clinical use, adverse effects and drug interactions of MAOIs		

		Describe Serotonin syndrome		
		Describe Hypertensive Cheese reaction		
		Describe St John's Wort		
		Describe the procedure of switching-over from one category of antidepressants to another one		
		Describe "Augmentation" of antidepressant therapy		
		Describe Electroconvulsive Therapy (ECT) for depression		
	Psychoses (Schizophrenia and others)	Describe the Dopamine hypothesis of Schizophrenia		
	Antipsychotics (Anti-schizophrenic drugs)	Classify Antipsychotics		
		Describe the advantages of Atypical antipsychotics over the Typical (Classical/Traditional/Old) agents		
		Describe the mechanism of action of Antipsychotics		
		Describe the pharmacological effects of Antipsychotics		
		Describe the clinical uses of Antipsychotics		
		Describe the drug interactions of Antipsychotics		
		Describe the adverse effects of Antipsychotics		
		Explain the drug treatment of extrapyramidal syndrome		
	Bipolar affective disorder (Manic Depressive illness)	Describe the concept of "mood-stabilization" in Bipolar affective disorder (Manic Depressive illness)		
	Mood-stabilizing drugs	Enlist Mood-stabilizing drugs		
	Lithium carbonate	Describe the pharmacokinetics, mechanism of action, clinical uses, adverse effects and drug interactions of Lithium carbonate		
	Alcohols	Describe alcoholism		
		Describe the pharmacokinetics of Ethanol		
		Describe the mechanism of action of Ethanol		
		Describe the pharmacological effects of Ethanol		
		Describe the clinical uses of Ethanol		

		Describe the adverse effects of Ethanol		
		Describe Disulfiram-like reaction with example of drugs causing it		
		Describe the management of Ethanol intoxication		
		Describe the management of Ethanol withdrawal symptoms		
		Describe the treatment of alcoholism		
		Describe briefly Methanol poisoning		
		Describe the antidote for Methanol poisoning		
	Opioids (Morphine, Diamorphine, Codeine, Pethidine, Methadone, Pentazocine, Buprenorphine, Dextromethorphane)	Differentiate between Opioids and Opiates		
		Describe the term "narcotic"		
		Describe the source of Opium		
		Enlist the "brain's own Morphine" (endogenous Opioids)		
		Classify Opioids		
		Enlist Opioids with mixed agonist-antagonist properties		
		Enlist Opioids with partial agonist activity		
		Describe the pharmacokinetics, mechanism of action, pharmacological effects, clinical uses, adverse effects and drug interactions of Opioids		
		Describe the use of opioids as palliative care in terminal illness		
		Describe opioid rotation		
		Describe the treatment of Opioid over dosage		
		Describe the Opioid antagonists (antidotes)		
		Describe Opioid dependence		
		Describe the management of Opioid dependence		
		Describe the contraindications of Opioids		
		Enlist the drugs used for pain in opioid addicts		
	Tramadol	Describe the mechanism of action and clinical use of Tramadol		
	Drugs of abuse	Describe substance abuse, drug dependence, addiction and habituation		
		Describe the Dopamine hypothesis of addiction		
		Enlist the drugs causing addiction		
		Enlist the non-addictive drugs of abuse		

		Describe "Club drugs"		
		Enlist the drugs having high-risk of addiction (scored 5 on the list of relative-risk of addiction)		
		Enlist the drugs having moderate-risk of addiction (scored 4 on the list of relative-risk of addiction)		
		Describe the drug treatment of Nicotine, Alcohol, Cannabis and Opioid abuse		
		Describe the drug abuse in sports with examples		
Forensic Medicine	Insanity and relationship to criminal charges	Define insanity.	5	
		Classify insanity and explain its sub-types		
		Describe relationship of insanity with criminal charges.		
		Describe different pleas and its legal exception based on unsoundness of mind.		
		Describe McNaghten rules, Durham`s rule and Impulse along with its application and criticism.		
		Differentiate between true and feigned insanity		
	Forensic Psychiatry	Define and describe Forensic Psychiatry.		
		Describe different terms used in Forensic Psychiatry: a) Affect b) Confabulation c) Delirium d) Delusion e) Fague f) Hallucination g) Illusion h) Intelligent Quotient i) Lucid Interval j) Neurosis k) Psychopath l) Psychosis m) Stupor n) Twilight states		
	Mental health act	Define mental disorders based on mental health act		
		Describe procedure of admission and discharge of mentally ill patient based on mental health act		
		Describe procedure of handling a wandering lunatic		
	Will	Define testamentary capacity		

		Enlist conditions required for a valid Will		
		Describe the role of a doctor in taking a Will from a sick person		
	Civil and criminal responsibility of mentally ill patients	Explain the concept of civil and criminal responsibility of mentally ill patients		
Community medicine	Mental health	Describe classification of mental health illnesses	1	Lecture
		Define mental health		
		Discuss global perspectives and epidemiology of mental health disorders		
		Discuss risk factors leading to mental health problems		
		Discuss prevention and control of mental health disorders		
	Drug abuse and Alcoholism	Describe the global distribution and increase addiction to drug abuse and alcoholism		
		Discuss causes of drug abuse and alcoholism		
		Discuss the effects of alcoholism on mental health		
		Describe preventive and control measures of drug abuse and Alcoholism		
PRIME/MEDICAL EDUCATION	Conflict resolution	Explain the prerequisites for conflict resolution as a leader	1	Lecture
		Show the ability to solve problems regarding difficult patients/attendant.		
PRIME/RESEARCH	Biostatistics: Introduction	Describe the significance of biostatistics in health and epidemiology	2	Lecture
	Data and variable types	Define and classify variables		
	Sampling	Define sampling		
		Discuss types of sampling		
	Biases in epidemiological studies	Define Bias		
		Discuss different types of biases		
		Discuss how bias can be prevented		
Theme-3: Right sided weakness and inability to speak				
Pathology	Hypoxia, ischemia and infarction	Define hypoxia, ischemia and infarction, and describe its morphology and consequences in the context of CNS involvement	1	Lecture

	Intracranial hemorrhage	Describe the etiology, risk factors and morphology of intracranial haemorrhage		
	Strokes syndromes	Describe the etiology, risk factors, morphology, and clinical and radiological features of stroke		
	Subarachnoid hemorrhage (SAH)	Explain the etiology, risk factors and clinical features of SAH		
General Medicine	Stroke	Describe the risk factors of stroke	1	Lecture
		Explain the types of strokes		
		Describe the clinical features, radiological features, and management of a patient with intracerebral bleed		
		Describe the clinical features, radiological features, and management of a patient with stroke due to an infarction		
Community medicine	Non-communicable diseases: Strokes	Discuss the epidemiological determinants of stroke in community	1	Lecture
		Discuss the prevention and rehabilitation of strokes		
Neurosurgery	Management	Describe the neurosurgical management of stroke and Subarachnoid hemorrhage	1	Lecture
PRIME/RESEARCH	Measures of central tendency	Classify measures of central tendency	5	Lectures
		Calculate measures of central tendency		
		Interpret and signify the results		
		Describe the advantages and disadvantages of different measures		
	Measures of dispersion	Classify measures of dispersion		
		Calculate measures of dispersion		
		Interpret the results of measures of dispersion		
		Explain the advantages and disadvantages of measures of dispersion		
		Explain the use of different measures in specific circumstances		
	Normal distribution	Define normal distribution		
		Describe normal distribution		
		Calculate and graphically represent normal distribution		
		Explain its use & significance in relation to data		
		Describe percentile and interquartile range		
		Calculate and depict percentile and interquartile range		

		Explain use and significance of these in different situations		
	Confidence Interval, Confidence level, Standard error	Define confidence level and interval		
		Describe confidence level and interval		
		Calculate confidence level and interval		
		Explain their use and significance in different situations		
	P value, critical region, rejection region, alpha beta errors	Define P value, critical region, rejection region, $\alpha\,\beta$ errors		
		Describe P value, critical region, rejection region, $\alpha\,\beta$ errors		
		Calculate P value, critical region, rejection region, $\alpha\,\beta$ errors		
		Describe their use and significance in different situations		
Theme-4: Loss of consciousness and Fits				
General Medicine	Seizures	Define seizures	1	Lectures
		Differentiate between a seizure and syncope		
		Classify epilepsy		
		Explain the pathophysiology, clinical features, risk factors, investigations and treatment of Tonic-Clonic epilepsy		
		Explain the pathophysiology, clinical features, investigations and treatment of absence seizures		
		Explain the pathophysiology, clinical features, investigations and treatment of psychomotor epilepsy		
		Explain the management of a patient with status epilepticus		
Pediatrics	Epilepsy	Explain the pathophysiology, clinical features, risk factors, investigations and treatment of Tonic-Clonic epilepsy in children	1	Lecture
		Explain febrile convulsions and its management		
		Describe Infantile spasm and its management		
Anesthesia	Introduction to the subject	Define anesthesia	3	Lectures
		Describe different types of anesthesia		
	General anesthesia	Describe the methods of induction of anesthesia		
	Neuroaxis block	Describe the following terms: • Spinal block • Epidural block • Caudal block		

		• Combined spinal /Epidural		
	Regional anesthesia	Describe the following terms: • Nerve block • Single shot • Continuous infusion • Local infiltration		
	Preoperative evaluation and risk assessment	Explain the purpose of preoperative evaluation		
		Perform risk assessment of patient undergoing general anesthesia		
		Describe the steps of history taking in preoperative evaluation for anesthesia		
		Describe the plans of general and regional anaesthesia techniques		
		Describe the ASA classification for pre-operative risk assessment		
	Monitoring in anesthesia	Describe the non-invasive and invasive techniques of patients` monitoring for the following parameters during general anaesthesia <u>Non-invasive:</u> a. Oxygenation b. Hemodynamics c. Temperature d. Electrical activity e. Neuromuscular activity f. Circulation <u>Invasive:</u> a. Oxygenation b. Hemodynamics c. Temperature d. Cardiac output e. Central venous pressure f. Circulation		
Pharmacology	Anti-seizure drugs (Anti-epileptics)	Classify anti-seizure drugs	3	Lectures
		Enlist the "Broad-spectrum" anti-epileptics (Valproate and Lamotrigine)		
	Carbamazepine	Describe the mechanism of action, clinical uses, adverse effects and drug interactions of Carbamazepine		
	Phenytoin	Describe the pharmacokinetics of Phenytoin with reference to the phenomenon of zero-order kinetics		
		Describe the mechanism of action, clinical uses, adverse effects and drug interactions of Phenytoin		

	Valproate	Describe the mechanism of action, clinical uses, adverse effects and drug interactions of Valproate		
	Ethosuximide	Describe the mechanism of action, clinical uses and adverse effects of Ethosuximide		
	Phenobarbitone	Describe briefly the historic role of phenobarbitone in the management of epilepsy		
	Benzodiazepines	Name the benzodiazepines used in the management of epilepsy		
	Lamotrigine, Topiramate and others	Name the new antiepileptic drugs		
		Describe the mechanism of action, clinical uses and adverse effects of Lamotrigine and Topiramate		
		Describe the use of antiepileptics during pregnancy		
		Describe drug interaction of antiepileptics with oral contraceptive pills		
	Status epilepticus	Describe the management of status epilepticus		
	General anesthetics	Describe the stages of general anesthesia		
		Describe balanced anesthesia		
		Classify General anesthetics		
	Inhaled anesthetics (N_2O, Halothane, Isoflurane, Sevoflurane, Desflurane)	Describe the pharmacokinetics of Inhaled anesthetics		
		Discuss the clinical significance of Blood: Gas partition coefficient of Inhaled anesthetics		
		Describe the mechanism of action of Inhaled anesthetics		
		Define MAC_{50} (minimum Alveolar Concentration- 50%)		
		Describe the significance of MAC_{50}		
		Describe the pharmacological effects of Inhaled anesthetics		
		Describe the adverse effects of Inhaled anesthetics		
		Describe second gas effect		
		Describe diffusion hypoxia		
		Describe Malignant hyperthermia and its management		
		Describe the properties of an ideal inhaled anesthetics		
	IV anesthetics (Thiopentone, Propofol, Etomidate, Ketamine,	Describe the mechanism of action, clinical use and adverse effects of Intravenous anesthetics		
		Describe re-distribution of Thiopentone		

	Midazolam, Fentanyl)	Define neuroleptanalgesia and neuroleptanaesthesia		
		Describe dissociative anesthesia		
		Name the anesthetic agent that causes dissociative anesthesia		
		Describe TIVA (Total Intravenous Anesthesia) technique		
	Pre-anesthetic medications	Describe Pre-anesthetic medications		
		Describe the drugs used as Pre-anesthetic medications		
	Obstetric analgesia	Describe the drugs for obstetric analgesia		
Forensic medicine	Deliriant Poisons • Dhatura • Hyocyamus nigra Cannabis indica	Describe and enlist Deliriant poisons.	1	Lectures
		Describe mechanism of action of the Deliriant poisons.		
		Describe different sign, symptoms and autopsy appearance in a typical of Deliriant poisons.		
		Describe fatal dose, treatment, and diagnosis of the Deliriant poisons.		
		Describe medico-legal importance of the Deliriant poisons.		
PRIME/RESEARCH	Z test & it's application, Types / shapes of frequency distribution	Define & Describe 'z' test	1	Lecture
		Describe its use in different statistical settings		
		Calculate 'z' test		
		Explain its application in hypothesis testing		
		Interpret and apply to clinical settings		
		Discuss various shapes of frequency distribution		
		Describe the applications of parametric and non-parametric tests		
Theme-5: Tremors				
Pathology	Neurodegenerative disorders: • Alzheimer`s disease • Parkinson`s disease • Huntington's Disease and Spinocerebellar ataxias Motor Neuron disease	• Describe the etiology, risk factors, morphology and clinical features of Alzheimer`s disease • Describe the etiology, risk factors, morphology and clinical features of Parkinson`s disease • Describe the etiology, risk factors, morphology and clinical features of Huntington`s disease • Describe the clinical features of spinocerebellar ataxias	1	Lecture

		Describe the etiology, risk factors, morphology and clinical features of Motor Neuron Disease		
General Medicine	Parkinson`s disease	Describe the etiology, risk factors, clinical features and management of Parkinson`s disease	1	Lecture
		Describe the types, clinical presentation and management of Motor neuron disease		
Pharmacology	Drugs for Parkinsonism	Classify drugs for Parkinsonism	1	Lecture
	Levodopa (with Carbidopa)	Describe the pharmacokinetics, mechanism of action, adverse effects, contraindications and drug interactions of Levodopa		
		Discuss the rationale of combining Carbidopa (or Benserazide) with Levodopa		
		Describe the on-off phenomenon		
		Describe the end-of-dose akinesia		
		Describe "drug holidays" for Levodopa		
	Bromocriptine	Describe the mechanism of action, clinical uses and adverse effects of Bromocriptine		
	Selegiline	Describe the mechanism of action and clinical uses of Selegiline		
		Describe the differentiating point regarding the use of Selegiline as antiparkinsonian drug and its use as an antidepressant drug		
	Apomorphine	Describe the mechanism of action and clinical use of Apomorphine		
	Drug-induced Parkinsonism	Enlist the drugs causing Parkinsonism-like symptoms		
		Enlist the drugs used in the management of drug-induced Parkinsonism		
		Describe the rationale of avoiding Levodopa in drug-induced Parkinsonism		
Pediatrics	Cerebellar ataxias	Describe the clinical features and management of Friedreich's Ataxia	1	Lectures
PRIME/RESEARCH	"t" test & its application	Define & Describe 't' test	4	Lectures
		Explain its use in different statistical settings		
		Calculate 't' test		
		Describe its application in hypothesis testing		
		Interpret and apply to clinical settings		
		Calculate degree of freedom		

	Chi square test & its application	Describe 'x^2' test		
		Describe its use in different statistical settings		
		Calculate 'x^2' test		
		Explain its application in hypothesis testing		
		Interpret and apply to clinical settings		
	Correlation, regression	Describe Correlation & Regression		
		Interpret and apply to clinical settings		
	Practical Problems in biostatistics	Discuss practical problems encountered in the application of biostatistics and SPSS	1	Practical
Theme-6: Headache				
Pathology	Meningitis	Explain the etiology, clinical features, investigations and complications of acute pyogenic meningitis	2	Lectures
		Explain the etiology, clinical features, investigations and complications of Tuberculous meningitis		
	Encephalitis	Explain the etiology, clinical features, investigations and complications of viral encephalitis		
	Brain abscess	Explain the etiology, clinical features, investigations and complications of brain abscess		
	Cerebral Toxoplasmosis	Explain the etiology, clinical features, investigations and complications of Cerebral Toxoplasmosis		
	Tumors of CNS	Describe the classification of brain tumors on the basis of primary and secondary origin and benign and malignant		
	• Gliomas • Embryonal neoplasms • Meningioma Other neoplasms	• Describe the classification, gross and microscopic morphology and clinical features of Gliomas • Describe the classification, gross and microscopic morphology and clinical features of embryonal neoplasms of brain • Describe the gross and microscopic morphology and clinical features of Meningioma • Enlist brain neoplasms other than gliomas, meningioma and embryonal cell neoplasms • Enlist the metastatic brain neoplasms		

Pharmacology	Migraine and Cluster headaches	Classify drugs used for the treatment of Migraine and Cluster headaches	1	Lecture
		Enlist the drugs used for the prophylaxis of Migraine and Cluster headaches		
	Triptans (Sumatriptan and others)	Describe the mechanism of action, clinical use and adverse effects of Sumatriptan		
	Ergot alkaloids	Enlist Ergot alkaloids		
		Describe the pharmacological effects of Ergot alkaloids		
	Ergotamine	Describe the mechanism of action, clinical use and adverse effects of Ergotamine		
	Neuralgias (Neuropathic pain)	Describe the drug treatment of neuralgias (Trigeminal, post-herpetic and others)		
Forensic Medicine	Head Injury	Describe head injury in relation to scalp and skull injuries.	1	Lecture
		Classify different varieties of skull fractures.		
		Explain commonest site of skull fracture.		
		Describe mechanism of cerebral injury including coup and counter coup mechanism.		
		Describe injuries to cranial content and its medicolegal importance.		
		Describe intracranial hemorrhages and its types in detail as per medicolegal point of view.		
		Describe the medicolegal aspects of Punch drunk syndrome		
General Medicine	Meningitis	Explain the etiology, pathogenesis, clinical presentation, investigations and management of Acute pyogenic meningitis	1	Lecture
		Explain the etiology, pathogenesis, clinical presentation, investigations and management of Tuberculous meningitis		
	Encephalitis	Explain the etiology, pathogenesis, clinical presentation, investigations and management of viral encephalitis		
Community medicine	Rabies	Explain the etiology, clinical presentation of a patient with Rabies	1	Lecture
		Describe post-exposure prophylaxis of Rabies		
Family medicine	Rabies prophylaxis	Describe the types of wounds inflicted by rabid dog bite	1	Lecture

		Explain the types of active and passive immunisation for Rabies post-exposure prophylaxis		
		Describe the indications of Rabies vaccine and immunoglobulins		
Pediatrics	Meningitis	Explain the etiology, pathogenesis, clinical presentation, investigations and management of Acute pyogenic meningitis in children and neonates	1	Lecture
	TBM	Explain the etiology, pathogenesis, clinical presentation, investigations and management of Acute pyogenic meningitis in children		
Psychiatry	Chronic daily headache	Differentiate between neurological and psychological headache (chronic tension headache)	1	Lecture
		Identify the red signs in patients with headache		
		Describe the principles of management of acute and chronic headaches		
PRIME/RESEARCH	Data analysis	Use MS Excel for data analysis	3	Practical
		Use SPSS for data analysis		
		Use Endnote for reference management		
		Compile, analyze and write a dissertation		
Theme-7: Paraplegia				
Pathology	Multiple sclerosis and other demyelinating disorders of CNS	Explain the pathogenesis, morphology and clinical features of multiple sclerosis	1	Lecture
		Describe the morphology of the following: • Acute demyelinating encephalomyelitis • Acute necrotizing hemorrhagic encephalitis		
Forensic Medicine	Neurotoxins: Spinal Poisons	Describe and enlist spinal poison.	1	Lecture
		Describe mechanism of action for the spinal poison.		
		Describe different sign, symptoms and autopsy appearance in a typical case of spinal poisons.		
		Describe fatal dose, treatment, and diagnosis for the spinal poisons.		
		Describe medico-legal importance for the spinal poisons.		
		Describe vertebral and spinal injuries		

	Snake bite neurotoxins	Describe different sign, symptoms and autopsy appearance in a typical case of snake bite poisons.		
	Botulism toxins	Describe different sign, symptoms and autopsy appearance in a typical case of botulism		
General Medicine	Multiple sclerosis	Explain the pathophysiology, clinical features and management of Multiple sclerosis	1	Lecture
	Transverse myelitis	Describe the etiology, pathophysiology, clinical features and management of Transverse myelitis		
	Caries spine	Explain the pathophysiology, clinical features, investigations and management of Caries spine		
Orthopedics	Management of traumatic paraplegia	Describe the general management of a patient with traumatic paraplegia	1	Lecture
Neurosurgery	Traumatic paraplegia Spinal Tumor	Describe the general management of a patient with traumatic paraplegia	1	Lecture
		Describe the types, clinical features and surgical management of spinal tumors		
Theme-8: Numbness and tingling				
Pathology	Patterns and types of peripheral nerves injury	Describe the patterns and types of neuronal injury	2	Lectures
	Acute and chronic demyelinating neuropathies	Describe the pathophysiology and clinical features of Guillain Barre syndrome		
		Explain the pathophysiology of Chronic demyelinating polyneuropathies		
	Myasthenia Gravis	• Describe the pathophysiology and clinical features of Myasthenia Gravis		
	Tumors of Peripheral nerves	Enlist the tumors of peripheral nerves		
		Describe the clinical features, of Neurofibromatosis	3	Lectures
Pharmacology	Local anesthetics (Lignocaine and others)	Classify Local anesthetics		
		Enlist the Local anaesthetics used for surface anaesthesia		
		Enlist the Local anesthetics used for infiltration anesthesia, nerve block, spinal anesthesia and epidural anesthesia		

		Describe EMLA (Eutectic Mixture of Local Anesthetics) and its clinical use		
		Describe the pharmacokinetics of Local anesthetics		
		Describe the mechanism of action of Local anesthetics		
		Describe the pharmacological effects of Local anesthetics on nerves		
		Describe the differential blockade of peripheral nerves by Local anesthetics		
		Describe the pharmacological effects of Local anaesthetics on other excitable membranes		
		Describe the clinical uses of Local anaesthetics		
		Describe the major advantages of adding Adrenaline to Lignocaine for infiltration anaesthesia		
		Calculate the quantity of Adrenaline/ml in the traditionally used combinations of Adrenaline and Lignocaine (i.e. 1:200,000 & 1: 80,000)		
		Describe the adverse effects of Local anaesthetics		
Forensic Medicine	Neurotoxins: Peripheral poison	Describe and enumerate peripheral poisons.	1	Lecture
		Describe mechanism of action for the peripheral poisons.		
		Describe different sign, symptoms and autopsy appearance in a typical of peripheral poisons.		
		Describe fatal dose, treatment, and diagnosis for the peripheral poisons.		
		Describe medico-legal importance for the peripheral poisons.		
General Medicine	Guillain Barre syndrome	Explain the pathophysiology, clinical features and management of Guillain Barre syndrome	1	Lecture
	Neuropathies	Describe the causes, types, distribution and clinical features of different neuropathies		
	Myasthenia Gravis	Explain the pathophysiology, clinical features and management of Myasthenia Gravis		
		Describe the clinical features, types and management of Neurofibromatosis		

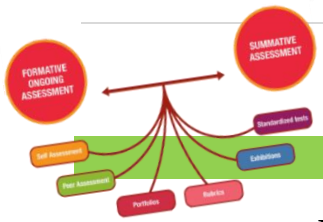
Pediatrics	Hereditary neuropathies	Describe the types, clinical features and management of hereditary neuropathies	1	Lecture
Orthopedics	Peripheral nerve injury	Describe the types and management of peripheral nerve injury	1	Lecture
		Explain entrapment neuropathies		
		Describe the risk factors, clinical features and management of Carpal tunnel syndrome		
Practical Work				
Pathology	CSF	1. Describe the chemical, cytological composition of CSF 2. Estimate the following analysis of CSF: • Chemistry • Cytology • Gram stain • Microbiology		
	Histopathological specimens of brain tumors	Identify the gross structure and microscopic features of: • Meningioma • Glioma/Astrocytoma		
Pharmacology	Depression	Formulate a prescription for a newly diagnosed case of depression		
	Epilepsy	Formulate prescriptions for patients with Tonic-Clonic and Petit-mal epilepsy		
	Migraine headache	Formulate prescription for a patient with migraine headache		
Forensic medicine	Somniferous poisons	Recognition of Opium and Heroin		
	Inebriant poisons	Recognition of Ethyl Alcohol and its examination		
	Fuel	Recognition of Kerosene oil		
	Deliriant	Recognition of Dhatura and Cannabis		
	Spinal poison	Recognition of Nux Vomica seeds		
Community medicine	Data presentation • pie chart • histogram • bar chart and its types • venn diagram • scatter plot	Identify and interpret the charts		

	Application and Interpretation of statistical data	Apply a statistical test on a given scenario		
	Data interpretation	nterpret the normal distribution curve, skewed distribution, bi and poly-modal distribution & Standard Normal Curve		

9 Learning Opportunities and Resources

a. **Books:**

S.No	Subjects	Resources
1	Community Medicine	1. Preventive and Social Medicine by K Park 2. Community Medicine by M. llyas 3. Basic Statistics for the Health Sciences by Jan W Kuzma 4. Textbook of Community Medicine and Public Health, 2018. Saira Afzal, Sabeena Jalal
2	Neurology	1. Davidson's Principles and Practice of Medicine 2. Kumar and Clark's Clinical Medicine, Edited by Parveen Kumar, 9th Edition
3	Neurosurgery	1. Bailey & Love's Short Practice of Surgery , 26th Edition
4	Pathology	1. Robbins & Cotran, Pathologic Basis of Disease,9 th edition. 2. Rapid Review Pathology,4 th edition by Edward F. Goljan MD
5	Pediatrics	1. Nelson Textbook of Pediatrics, 19th Edition 2. Textbook of Pediatrics by PPA, preface written by S. M. Haneef 3. Clinical Pediatrics by Lakshmanaswamy Aruchamy, 3rd Edition
6	Pharmacology	1. Lippincot Illustrated Pharmacology 2. Basic and Clinical Pharmacology by Katzung
7	Psychiatry	1 Oxford textbook of psychiatry by Michael G. Gelder, 2nd Edition 2. Handbook of Behavioural Sciences, by Mowadat H. Rana 3. Drugs used in Psychiatry, by Prof. Muhammad Iqbal Afridi 4. Kaplan Series, Behavioural Sciences, Psychiatry



10 Examination and Methods of Assessment:

a. Instruction:

- Students must arrive the examination venue at least 15 minutes before the scheduled start time. Latecomers 15 minutes after the start of exam, will not be allowed to enter the examination hall after the start time, and if permitted, they will not receive extra time.
- Students without College ID Card and white Lab Coat will not be allowed to sit in exam.
- In case of an emergency such as a medical emergency, students should inform the examination supervisor.
- Students are required to submit prohibited items such ass mobile phones, smartwatches, electronic devices, books, notes, or any unauthorized materials before entering the examination hall.
- Students must maintain complete silence within the examination hall. They should refrain from communicating with fellow students and strictly follow invigilator instructions.
- Students must mark their attendance properly.
- No student will be allowed to leave the examination hall before half the time is over and paper should be properly handed to the examiner.
- Violation of these guidelines may lead to disqualification from the examination.

b. **The distribution of Assessment Score for 4th Year MBBS will be as follows**:

- Total Marks for 4th Year MBBS= 1100, Theory marks = 480 & Internal Assessment Marks (10%) = 53
- OSPE/OSCE marks = 500 & internal assessment OSPE/OSCE (10%) = 67

4th Year MBBS Modules Assessment Plan						
Theory Paper	**Module**	**Theory Marks**	**Internal assessment Theory (10%)**	**OSPE/ OSCE**	**Internal assessment OSPE/OSCE (10%)**	**Total Marks**
Paper J	Neuroscience 2	120	13	120	13	266
Paper K	GJT & Hepatobiliary – 2	120	13	120	13	266
Paper L	Renal 2, Endocrine & Reproduction - 2	120	14	120	13	267
Paper M	ENT & Eye	120	13	120	13	266
Research				20	15	35
Total Marks		480	53	500	67	1100

c. UNIVERSITY EXAM: Exam has 90% Marks

- To appear in any university examination, more than 75% attendance in all disciplines is mandatory for the students.
- The Paper J will be comprised of 134 MCQs and 12 OSPE/OSCE. The distribution of 90% Marks for Paper J Written Exam will be as under:

Subject	Assessment			
	IPA			MCQs
	OSPE/ OSCE	Viva	Total Stations	
Pathology	2	2	4	21
Pharmacology	3	2	5	19
Forensic medicine	2	2	4	17
Community medicine	3	2	5	31
General medicine	1	X	1	10
Psychiatry	1	X	1	9
Pediatrics	X	X	X	4
Neurosurgery	X	X	X	2
Orthopedics	X	X	X	1
Anaesthesia	X	X	X	3
Prime/Medical Education	X	X	X	2
Prime/Research	X	X	X	14
Family medicine	X	X	X	1
TOTAL	**12**	**8**	**20**	**134**

12. Tentative timetables

SWAT MEDICAL COLLEGE, SWAT

Department of Medical Education

Time Table 4th Year MBBS Class Session 2024-25 Block-J: (Neuroscience II Modules)

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15 PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:30PM
Monday 12/02/2024	**Day Off**					
Tuesday 13/02/2024	**Psychiatry – L1** Introductory **Dr. Hussain**	**F. M – L1** Introductory **Dr. Hidayat Ur Rahman**	**HOSPITAL WORK**	**Pharma – L1** Introductory **Dr. Rahman Shah**	**PRAYER BREAK**	**Practical Patho Group A Dr. Bilal Iqbal Pharma Group B Dr. Faiza F.M Group C Dr. Shahkar Ali**
Wednesday 14/02/2024	**Pharma – L2** Introduction to the Pharmacology of CNS **Dr. Fawad Khalid**	**Paed – L1** Introductory **Dr. Usman Ali**		**Patho – L1** Introductory **Dr. Bilal Iqbal**		**Practical Patho Group B Dr. Bilal Iqbal Pharma Group C Dr. Faiza F. M Group A Dr. Shahkar Ali**
Thursday 15/02/2024	**ENT – L1** Introductory **Dr. Saad Hussain**	**C.M – L1** Introductory **Prof. Dr. Qarib Ullah**		**Anesthesia – L1** Introductory **Dr. Khurshid Ahmad**		**Practical Patho Group C Dr. Bilal Iqbal Pharma Group A Dr. Faiza F.M Group B Dr. Shahkar Ali**
Friday 16/02/2024	**EYE – L1** Introductory **Prof. Dr. Haroon Rashid**	**Med – L1** Introductory **Dr. Riaz**		**12:15PM – 01:30PM**		**01:30PM – 03:30PM**
				PRAYER BREAK		**F. M – L2** Neurotoxin **Dr. Hidayat Ur Rahman**

Week 1

Week – 2

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15 PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:30PM
Monday 19/02/2024	**F. M – L3** Incbrient poison **Dr. Hidayat Ur Rahman**	**Pharma – L3** Sedative-Hypnotics-I **Dr. Fawad Khalid**	**HOSPITAL WORK**	**Psychiatry – L1** Sleep disorders **Dr. Hussain**	**PRAYER BREAK**	**Practical Patho Group A Dr. Bilal Iqbal Pharma Group B Dr. Faiza F.M Group C Dr. Shahkar Ali**
Tuesday 20/02/2024	M.E-L1 Emotional intelligence (EI)	**Pharma – L4** Sedative-Hypnotics-II **Dr. Fawad Khalid**		**F. M – L4** Sedative & Hypnotics **Dr. Hidayat Ur Rahman**		**Practical Patho Group C Dr. Bilal Iqbal Pharma Group A Dr. Faiza F.M Group B Dr. Shahkar Ali**
Wednesday 21/02/2024	**Pharma – L5** Alcohols **Dr. Fawad Khalid**	**C.M – L2** Epidemiology Study design and screening Measures of mortality and morbidity**Prof. Dr. Qarib Ullah**		**F. M – L5** Fuels, stimulants and Hallucinogens **Dr. Younas**		**Research – L1 Prof. Dr. Qaribullah Dr.M.Munib Dr.Ubaidullah**
Thursday 22/02/2024	**Pharma – L6** CNS Stimulants **Dr. Rahman Shah**	**Psychiatry – L2** Depressive disorders **Dr. Hussain**		**C.M – L3** Mental health **Dr. Afroz Aziz**		**Practical Patho Group B Dr. Bilal Iqbal Pharma Group C Dr. Faiza F. M Group A Dr. Shahkar Ali**
Friday 23/02/2024	M.E-L2 Conflict Resolution	**F. M – L6** Deliriant Poisons **Dr. Younas**		**12:15PM – 01:30PM**		**01:30PM – 03:30PM**
				PRAYER BREAK		**Psychiatry – L3** Suicide, Anxiety Disorders **Dr. Hussain**

Theme-1: Disturbed sleep

Week – 3

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
Monday 26/02/2024	**Psychiatry – L3** Suicide, Anxiety Disorders **Dr. Hussain**	**EYE – L3** Visual pathway and visual field defects **Dr. Abdul Aziz**	**HOSPITAL WORK**	**Pharma – L6** Anti – Depressent **Dr. Rahman Shah**	**PRAYER BREAK**	**Practical** Patho Group A **Dr. Jawad Khan** Pharma Group B **Dr. Faiza** F.M Group C **Dr. Shahkar Ali**
Tuesday 27/02/2024	**F. M – L5** Deliriant Poisons **Dr. Hidayat Ur Rahman**	**C.M – L3** Study design and screening **Prof. Dr. Qarib Ullah**		**Patho – L5** Encephalitis **Prof. Dr. Imran Uddin**		**Practical** Patho Group C **Dr. Jawad Khan** Pharma Group A **Dr. Faiza** F.M Group B **Dr. Shahkar Ali**
Wednesday 28/02/2024	**F. M – L6** Hallucinogen **Dr. Younas**	**C.M – L4** Biostatistics Introduction **Dr. Munib**		**Patho – L6** Multiple sclerosis and other demyelinating disorder of CNS **Dr. Shabir Ahmad**		**Research – 2** Group: I **Prof. Dr. Qarib Ullah** Group: II **Dr. Muneeb** Group: III **Dr. Ubaid Ullah** Group: IV **Dr. Shahab**
Thursday 29/02/2024	**EYE – L4** Optical coherence tomography and visual fields **Prof. Dr. Haroon Rashid**	**C.M – L5** Measure of centrol tendency **Prof. Dr. Qarib Ullah**		**Anesthesia – L2** General Anaesthesia **Dr. Khurshid Ahmad**		**Practical** Patho Group B **Dr. Jawad Khan** Pharma Group C **Dr. Faiza** F. M Group A **Dr. Shahkar Ali**
Friday 01/03/2024	**ENT – L3** Acute and chronic tonsillitis **Prof. Dr. Ihsan Ullah**	**Pharma – L7** Antipsychotics drugs **Dr. Noman Shuja**		**12:15PM – 01:30PM**		**01:30PM – 03:30PM**
				PRAYER BREAK		**ENT – L4** Oral ulceration **Dr. Bakht Taj**

Theme-3: (Right sided weakness and inability to speak/Loss of consciousness and Fits)

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
Monday 04/03/2024	**EYE – L5** Fundus fluorescein angiography & ultrasonography **Prof. Dr. Haroon Rashid**	**Psychiatry – L4** Dissociative and Somatoform disorders **Dr. Hussain**	**HOSPITAL WORK**	**Patho – L7** Pattern and types of peripheral nerves injury **Dr. Bilal Iqbal**	**PRAYER BREAK**	**Practical** Patho Group A Skill Lab **(LP)** **Dr. Jawad Khan** C.M Group B **Dr. Zarak** Pharma Group C **Skill Lab (BSL)** **Dr. Faiza**
Tuesday 05/03/2024	**Pharma – L8** Drugs of abuse **Dr. Rahman Shah**	**C.M – L6** Sampling/Bias in ep. study **Dr. Mohammad Munib**		**Patho – L8** Tumors of peripheral nerve **Dr. Siyab Ahmad**		**Practical** Patho Group C Skill Lab **(LP)** **Dr. Jawad Khan** C.M Group A **Dr. Zarak** Pharma Group B **Skill Lab (BSL)** **Dr. Faiza**
Wednesday 06/03/2024	**F. M – L7** Insanity **Dr. Hidayat Ur Rahman**	**Med – L3** Stroke-II **Dr. Fozan Khan**		**Pharma – L9** Anti – seizure drugs (Anti epileptics) **Dr. Malak Amir Hamza**		**Research – 3** Group: I **Prof. Dr. Qarib Ullah** Group: II **Dr. Muneeb** Group: III **Dr. Ubaid Ullah** Group: IV **Dr. Shahab**
Thursday 07/03/2024	**EYE – L6** Optics & Eye **Prof. Dr. Haroon Rashid**	**C.M – L7** Non – Communicable disease **Dr. Mohammad Munib**		**F. M – L8** Mental health act **Dr. Hidayat Ur Rahman**		**Practical** Patho Group B Skill Lab **(LP)** **Dr. Jawad Khan** C.M Group C **Dr. Zarak** Pharma Group A **Skill Lab (BSL)** **Dr. Faiza**
Friday 08/03/2024	**ENT – L5** Trauma to the palate and oropharynx **Prof. Dr. Ihsan Ullah**	**Patho – L9** Neurodegenerative disorders, motor neuron disease **Prof. Dr. Mukammil Shah**		**12:15PM – 01:30PM** **PRAYER BREAK**		**01:30PM – 03:30PM** **ENT – L6** Carcinoma of oral cavity **Dr. Bakht Taj**

Week – 4

Theme-4: (Loss of consciousness and Fits/Tremors)

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
Monday 11/03/2024	**Psychiatry – L5** Stress related disorders **Dr. Hussain**	**F. M – L9** Head Injury – I **Dr. Younas**	**HOSPITAL WORK**	**Patho – L10** Acute and chronic demyelinating neuropathies **Dr. Jawad Khan**	**PRAYER BREAK**	**Practical** Patho Group A Skill Lab **(NG) (Dr. Ayaz Hussain)** C.M Group B **(Dr. Rafi Ullah)** Pharma Group C **Skill Lab (ETT) (Dr. Safeena)**
Tuesday 12/03/2024	**Patho – L11** Tumors of CNS **Dr. Aurangzeb Khan**	**C.M – L8** Measure of dispersion **Dr. Mohammad Munib**		**F. M – L10** Head Injury – II **Dr. Younas**		**Practical** Patho Group C Skill Lab **(NG) (Dr. Ayaz Hussain)** C.M Group A **(Dr. Zarak)** Pharma Group B **Skill Lab (ETT) (Dr. Safeena)**
Wednesday 13/03/2024	**ENT - 7**	**CPC**		**C.M – L9** Normal Distribution **Prof. Dr. Qarib Ullah**		**Research – 4** Group: I **Prof. Dr. Qarib Ullah** Group: II **Dr. Muneeb** Group: III **Dr. Ubaid Ullah** Group: IV **Dr. Shahab**
Thursday 14/03/2024	**EYE - 7**	**Paed – L3** Hereditary Neuropathies **Dr. Usman Ali**		**C.M – L10** Confidence Interval, Confidence level, **Dr. Mohammad Munib**		**Practical** Patho Group B Skill Lab **(NG) (Dr. Ayaz Hussain)** C.M Group C **(Dr. Javeria)** Pharma Group A **Skill Lab (ETT) (Dr. Safeena)**
Friday 15/03/2024	**Med – L4 Seizures Dr. Riaz Khan**	**ENT - 8**		**12:15PM – 01:30PM**		**01:30PM – 03:30PM**
				PRAYER BREAK		**EYE - 8**

Week – 5

Theme-5: (Headache)

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
Monday 18/03/2024	**Psychiatry – L6** Personality development and disorder **Dr. Hussain**	**F. M – L11** Neurotoxin peripheral poisons **Dr. Hidayar Ur Rahman**	**HOSPITAL WORK**	**Patho – L12** Cerebral toxoplasmosis and brain abscess **Prof. Dr. Mukammil Shah**	**PRAYER BREAK**	**Pharma – L10** Opioids – I **Dr. Rahman Shah**
Tuesday 19/03/2024	**Pharma – L11** Opioids – II **Dr. Rahman Shah**	**F. M – L12** Forensic psychiatry - II **Dr. Hidayar Ur Rahman**		**C.M – L11** P value, critical region, rejection **Dr. Mohammad Munib**		**EYE - 9**
Wednesday 20/03/2024	**ENT - 9**	**C.M – L12** Z – Test **Dr. Mohammad Munib**		**Med – L5**		**Research – 5** Group: I **Prof. Dr. Qarib Ullah** Group: II **Dr. Muneeb** Group: III **Dr. Ubaid Ullah** Group: IV **Dr. Shahab**
Thursday 21/03/2024	**Med – L6**	**C.M – L13 T – Test Dr. Mohammad Munib**		**Anesthesia – L3** Preoperative evaluation and risk assessment **Dr. Khurshid Ahmad**		**Patho – L13** Myasthenia Gravis **Dr. Jawad Khan**
Friday 22/03/2024	**Pharma – L12** General Anesthetics **Dr. Rahman Shah**	**ENT - 10**		**12:15PM – 01:30PM**		**01:30PM – 03:30PM**
				PRAYER BREAK		**EYE - 10**

Week – 6

Theme-6: (Paraplegia/ Numbness and tingling)

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
Monday 25/03/2024	**Psychiatry – L7** Psychosis schizophrenic delusion **Dr. Hussain**	**EYE - 11**	**HOSPITAL WORK**	**Pharma – L13** Drugs of Parkinson **Dr. Fawad Khalid**	**PRAYER BREAK**	**Prime – L1** Conflict resolution **Dr. Ubaid Ullah**
Tuesday 26/03/2024				**C.M – L14** Chi square test and its application **Dr. Mohammad Munib**		**Prime – L2**
Wednesday 27/03/2024	**Paed – L4** Muscular Dystrophy **Dr. Usman Ali**	**C.M – L15 Correlation regression Prof. Dr. Qarib Ullah**		**Med – L7**		**Research – 6** Group: I **Prof. Dr. Qarib Ullah** Group: II **Dr. Muneeb** Group: III **Dr. Ubaid Ullah** Group: IV **Dr. Shahab**
Thursday 28/03/2024	**Med – L8**	**C.M – L16 Rabies Dr. Mohammad Munib**		**Anesthesia – L4** Preoperative evaluation and risk assessment **Dr. Khurshid Ahmad**		**Neurosurgery – L1** Neurosurgical management of stroke and Subarachnoid hemorrhage **Dr. Zaheer Uddin**
Friday 29/03/2024	**ENT - 11**	**EYE - 12**		**12:15PM – 01:30PM**		**01:30PM – 03:30PM**
				PRAYER BREAK		**ENT - 12**

Week – 7

Theme-7: (Paraplegia/ Numbness and tingling)

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
Monday 01/04/2024	**Neurosurgery – L2** Traumatic paraplegia Spinal Tumor **Dr. Zaheer Uddin**	**EYE - 13**	**HOSPITAL WORK**	**Med – L9**	**PRAYER BREAK**	**ENT - 13**
Tuesday 02/04/2024	**ENT - 14**	**Paed – L5**		**C.M – L17 Rabies – II Dr. Mohammad Munib**		**EYE - 14**
Wednesday 03/04/2024	**Orthopaedics – L1** Traumatic Paraplegia **Dr. Yasir Iqbal**	**Family Medicine – L1** Rabies prophylaxis **Dr. Mohammad Munib**		**Patho – L14**		**Research – 7** Group: I **Prof. Dr. Qarib Ullah** Group: II **Dr. Muneeb** Group: III **Dr. Ubaid Ullah** Group: IV **Dr. Shahab**
Thursday 04/04/2024	**BLOCK – J THEORY EXAM**					
Friday 05/04/2024	**BLOCK – J OSPE EXAM**					

Week – 8

11 For inquiry and troubleshooting

13. Module Evaluation Form

This is an example of feedback form and real-time feedback will be obtained through an electronic link and/or your LMS.

MBBS Year: _____ Block: _____ Module: _____

Date: _____

1. (Unsatisfactory) 2 (Fair) 3 (Satisfactory) 4 (Good) 5 (Excellent)

Category: Course Contents

No.	Question	1	2	3	4	5
1	To what extent did the course contents align with the stated learning objectives of the module?					
2	How clear and comprehensive were the course materials provided in this module?					
3	Were the core topics adequately covered, ensuring a well-rounded understanding of the subject?					
4	How current and up-to-date were the course contents in reflecting recent advancements?					
5	Did the module incorporate real-world applications and case studies effectively?					
	Category: Learning Resources					
6	Were the learning resources (e.g., textbooks, online materials, laboratory facilities) readily available and easily accessible?					
7	How helpful were additional learning resources such as supplementary readings or multimedia content?					
8	Did the module offer adequate support for research and independent study?					
9	Were digital resources and online platforms effectively utilized to enhance the learning experience?					
10	Were there sufficient opportunities for hands-on practice and practical application of knowledge?					
	Category: Teaching Methods					
11	How well did instructors engage with students and create a supportive learning environment?					
12	Were diverse teaching methods (e.g., lectures, group discussions, simulations) effectively employed?					
13	How responsive were instructors to questions, concerns, and feedback from students?					
14	To what extent did instructors provide timely and constructive feedback on assignments and assessments?					
15	Were opportunities for collaborative learning and peer-to-peer interactions encouraged and facilitated?					
No.	**Category: Engagement and Motivation**					
16	To what extent did the module use real-world examples and practical applications to engage students?					
17	How well were active learning techniques (e.g., problem-solving, case studies) integrated into the curriculum?					

18	Did the module provide opportunities for students to pursue their individual interests within the subject matter?					
19	Were assessments designed to challenge and motivate students to excel in their studies?					
Category: Inclusivity and Diversity						
20	How well did the module accommodate different learning styles and preferences among students?					
21	Were efforts made to include diverse perspectives, cultures, and backgrounds in the curriculum?					
22	How effectively were accommodations provided for students with varying levels of prior knowledge?					
	Category: Overall					
No.	**Question**	**1 (Very Poor)**	**2 (Poor)**	**3 (Fair)**	**4 (Good)**	**5 (Excellent)**
23	How would you rate the overall quality of this module?					

12 Students Diary/Notes

S.NO	DATE	TASK	PENDING/COMPLETED	COMMENTS

PROGRESS:_____ ACHIEVMENT:_____