



MS SURGERY PROGRAM

STUDY GUIDE

CONTENTS

Sr.No	<u>TABLE OF CONTENTS</u>	<u>PAGE NO.</u>
1.	General Information and Program Goals .	2
2.	Introduction	3
3.	Course Description	5
	• Nomenclature of the Degree Program .	6
	• Course Title	6
	• Training Center	6
	• Program Duration and Structure	6
4.	Admission Criteria	7
	• Application Process	7
	• Eligibility Requirements .	7
	• Registration and Enrollment	7
5.	Aims and Objectives of the Course	9
	• General Objectives-	10
	• Professional ethics	10
6.	Admission Criteria for MS Program	13
	• Eligibility Requirements	14
	• Registration and Enrollment	14
7.	Road Map of MS Surgery	16
8.	Contents of Learning and Learning Resources	17
	• - Recommended Books	18
9.	Methods of Instruction and Course Conduction	24
10.	Log Book	27
11.	Evaluation and Assessment Strategies	30
12.	Thesis	33
13.	Mandatory Workshops	36

GENERAL INFORMATION AND PROGRAM GOALS:

The Master of Surgery (MS) in General Surgery is a four-year program designed for individuals aspiring to become skilled and competent surgeons.

The MS General Surgery program at Sharif Medical City Hospital provides state-of-the-art facilities and a supportive learning environment for aspiring surgeons. With access to advanced clinical training and experienced faculty, students are equipped to excel in their surgical careers.

The curriculum emphasizes structured teaching and the development of knowledge, skills, and professional competence. Through rigorous training, students are groomed to become adept researchers, enabling them to practice evidence-based surgery. Graduates of the MS General Surgery program are expected to exhibit advanced expertise, refined clinical skills, and a patient-centered approach in the management and care of patients.



INTRODUCTION

The General Surgery MS Residency Program at Sharif Medical City Hospital is a structured four-year postgraduate training pathway culminating in the award of a Master of Surgery (MS) in General Surgery. The curriculum is meticulously designed to encompass comprehensive training in both general and specialized surgical disciplines. It adheres to Level 7 category competencies and serves as a benchmark for the acquisition of essential knowledge, technical skills, and professional attitudes required at various stages of surgical training.

Key Objectives

1. **Competency Development:** Equip residents with a robust foundation in general and specialized surgical principles, ensuring proficiency in essential surgical skills and clinical decision-making.
2. **Patient Safety:** Safeguard public interest by establishing clear competency standards and ensuring residents meet these benchmarks throughout their training.
3. **Enhanced Access to Specialty Training:** Provide a well-structured pathway to advanced surgical training, distinguishing it from general medical practice.
4. **Flexible Learning Framework:** Offer residents the flexibility to benefit from mentorship under a diverse team of experienced instructors, fostering a holistic learning environment.
5. **Workforce Preparedness:** Develop a skilled cadre of surgeons capable of addressing a wide spectrum of treatment complexities while catering to diverse patient demographics and healthcare needs.
6. **Research and Scholarly Contribution:** Foster an academic culture by enabling residents to undertake impactful research projects, critically appraise scientific literature, and contribute to the advancement of medical science through publications and presentations at professional forums.

This program is designed to ensure excellence in clinical expertise, academic rigor, and research innovation, producing highly competent surgeons equipped to meet the demands of modern healthcare at Sharif Medical City Hospital.

COURSE DESCRIPTION

COURSE DESCRIPTION

Nomenclature of the Degree Program

The proposed degree program is designated as **MS General Surgery**, a globally recognized and established nomenclature upheld for several decades.

Course Title

Master of Surgery (MS) in General Surgery

Training Center

The program's training will be conducted in **Departments of General Surgery at Sharif medical city hospital, Lahore, accredited** by the **University of Health Sciences (UHS), Lahore.**

Program Duration and Structure

The MS General Surgery program spans **four (4) years**, encompassing structured training under the supervision of accredited faculty within recognized departments.

1. Induction Period (First 6 Months):

- Orientation to the field of general surgery.
- Completion of mandatory workshops.
- Development of a research project and preparation of a synopsis.

2. Basic Principles of General Surgery (Next 18 Months):

- Comprehensive training in the foundational aspects of general surgery.
- Submission and approval of the research synopsis by the Advanced Studies and Research Board (ASRB).
- Completion of the **Intermediate Examination** at the conclusion of this period.

3. Advanced Training and Research (Final Two Years):

- **Clinical Training:** Hands-on practice in general surgery, including rotations in relevant sub-specialties to achieve competency-based learning objectives.
- **Research and Thesis Writing:** Research is conducted as a continuous block or through periodic rotations over four years.

Competency-Based Framework:

- The program is structured to ensure the development of both generic and specialty-specific competencies, monitored through **Continuous Internal Assessments.**

Admission Criteria:

Applications will be invited through advertisements in print and electronic media, clearly specifying deadlines and entry examination schedules.

Eligibility Requirements:

1. **Educational Qualification:** MBBS or an equivalent qualification recognized by the Pakistan Medical and Dental Council (PMDC).
2. **House Job Experience:**
 - A valid certificate confirming one year of House Job in a PMDC-recognized institution.
 - Applicants yet to complete their House Job must provide a **Hope Certificate** from the relevant Medical Superintendent, ensuring completion before the interview.
3. **PMDC Registration:** A valid certificate of permanent or provisional registration with PMDC is mandatory.

Registration and Enrollment

- The trainee-to-supervisor ratio shall not exceed **5:1 per annum** for all postgraduate programs.
- Our teaching institution maintains a minimum **bed-to-trainee ratio of 5:1**.
- Trainees are enrolled and subsequently registered with UHS as per university regulations.

Accreditation Requirements for Training Institutions

Institutions offering the MS General Surgery program must ensure compliance with the following standards:

A. Faculty

- Availability of adequately qualified teaching staff, meeting PMDC guidelines.

B. Infrastructure and Facilities

- Sufficient infrastructure, including classrooms equipped with audiovisual aids, demonstration rooms, computer laboratories, and clinical pathology facilities.

C. Library Resources

- Well-equipped departmental libraries containing up-to-date editions of recommended texts, reference books, and national and international journals.

Monitoring and Compliance:

- Accreditation may be **temporarily or permanently suspended** by the University

if institutions fail to meet prescribed standards for resident training.

- Institutions must submit comprehensive training plans for resident education and maintain detailed monthly documentation of training activities and evaluations.
- The University reserves the right to conduct **surprise inspections** to ensure compliance and take appropriate corrective actions where necessary.

This proposal highlights the MS General Surgery program's alignment with international best practices and UHS regulations. The structured training, rigorous assessment mechanisms, and adherence to quality standards aim to cultivate highly skilled professionals in the field of general surgery.

AIMS AND OBJECTIVES OF THE COURSE

Aims and Objectives of the Course

The primary aim of the four-year MS General Surgery program is to develop residents into competent specialists in the field of General Surgery. Upon completion of the program, trainees will possess the expertise required to excel as skilled clinicians, educators, and researchers in their specialty.

General Objectives

The MS General Surgery program is structured to enable residents to acquire the following competencies and skills:

Knowledge Application

1. Integration of Knowledge into Practice

- Utilize relevant and current knowledge in clinical settings.
- Apply scientific evidence to enhance patient care tailored to individual needs and contexts.
- Critically appraise and incorporate emerging technologies and methodologies.

2. Lifelong Learning

- Maintain up-to-date knowledge through self-directed learning.
- Assess and integrate new trends, research, and evidence-based practices in General Surgery.

Surgical Proficiency

3. Surgical Skills

- Consistently demonstrate advanced surgical techniques with precision.
- Execute procedures safely and competently, ensuring patient and team safety.
- Adapt surgical approaches based on patient-specific factors and procedural requirements.
- Exhibit manual dexterity and procedural knowledge commensurate with training levels.

4. Continuous Improvement

- Analyze clinical performance critically for ongoing refinement of skills and

strategies.

- Acquire and master new surgical skills to meet evolving medical challenges.

Clinical Decision-Making and Patient Management

5. Effective Diagnosis and Treatment

- Conduct thorough assessments, including history-taking, physical examinations, and diagnostic evaluations.
- Formulate differential diagnoses and develop evidence-based management plans.
- Address the physical, psychological, social, and cultural needs of patients.

6. Complex Case Management

- Manage trauma cases, including multi-system trauma, and handle complications efficiently.
- Assess and balance risks associated with treatment modalities.
- Navigate uncertainty and complexity in decision-making processes.

Multidisciplinary Collaboration and Resource Management

7. Interdisciplinary Teamwork

- Collaborate effectively with healthcare professionals to develop comprehensive care plans.
- Employ a consultative approach in complex cases, ensuring seamless referrals when necessary.
- Leverage interdisciplinary expertise for optimal patient outcomes.

8. Resource Optimization

- Efficiently allocate resources to balance patient care and system demands.
- Prioritize competing needs in resource-constrained environments.

Communication Proficiency

9. Patient-Centered Communication

- Convey treatment options, risks, and potential outcomes clearly to patients and families, facilitating informed decision-making.
- Tailor communication approaches to accommodate cultural and linguistic differences.

10. Team and Conflict Resolution

- Engage and coordinate with healthcare teams to optimize surgical outcomes.

- Address misunderstandings or disputes constructively.

Research and Academic Contribution

11. Research Competency

- Design and execute research projects, critically analyze findings, and contribute to academic publications.
- Facilitate knowledge dissemination through teaching and mentoring.

12. Evidence-Based Practice

- Appraise and implement innovative techniques and emerging technologies with a critical perspective.
-

Professionalism and Ethics

13. Ethical Practice

- Consistently adhere to ethical standards in patient care, research, and professional interactions.
- Understand and comply with legal requirements related to informed consent, confidentiality, and medico-legal obligations.

14. Professional Accountability

- Demonstrate insight into personal limitations and actively seek opportunities for improvement.
- Participate in peer-reviewed audits and maintain transparency in clinical performance.

Leadership and Advocacy

15. Leadership in Healthcare

- Lead clinical teams effectively, recognizing and utilizing diverse expertise to achieve optimal outcomes.
- Maintain accurate, contemporaneous clinical records to support care delivery and accountability.

16. Health Advocacy

- Promote health maintenance and advocate for equitable healthcare resource allocation.
- Serve as an advocate for both patient and community health needs.

This program fosters the development of well-rounded surgical specialists who are skilled, ethical, and capable of meeting the evolving challenges in healthcare delivery.

Admission Criteria For MS Training Programs

Application Process

Admissions to the MS training programs are advertised through print and electronic media, specifying the application closing date and the schedule for the Entry Examination.

Eligibility Requirements

Applicants must fulfill the following criteria by the last date for submission of applications:

1. Basic Medical Qualification:

- Possess an MBBS degree or an equivalent qualification recognized by the Pakistan Medical & Dental Council (PMDC).

2. House Job Experience:

- Provide proof of one year of house job experience in a PMDC-recognized institution.
- If the house job is incomplete at the time of application, a **Hope Certificate** must be submitted from the relevant Medical Superintendent, confirming the house job will be completed before the interview date.

3. Registration with PMDC:

- Hold a valid permanent or provisional registration certificate from the PMDC.

Registration and Enrollment

• Supervisor-Trainee Ratio:

- As per PMDC policy, each supervisor may mentor a maximum of five postgraduate trainees per annum, including those in minor programs, if applicable.

• Beds-to-Trainee Ratio:

- The approved teaching site must maintain a minimum ratio of five beds per trainee to ensure adequate clinical exposure.

• Supervisor Approval:

- Supervisors for the MS courses will be approved by the University based on established criteria.

• Trainee Registration:

- Candidates selected for MS courses must enroll in the relevant institution

and register with the University of Health Sciences (UHS) in accordance with the prescribed registration regulations.

This admission policy ensures that only qualified and eligible candidates are selected, fostering high academic and professional standards in the MS training programs.

ROAD MAP OF MS General Surgery

Admission Process

Eligibility --> Entry Exam --> Selection --> Enrollment at UHS



Year 1

Induction Period (6 Months):

- Orientation***
- Mandatory Workshops***
- Research Synopsis Design***



Basic Principles of General Surgery (18 Months):

- Training under Supervisor***
- Research Synopsis Approval by ASRB***



Year 2

Intermediate Examination



Year 3-4

Clinical Training in General Surgery + Research & Thesis Writing



Completion

Degree Awarded (MS General Surgery)

**CONTENTS OF LEARNING
AND
LEARNING RESOURCES**

Recommended Books for MS General Surgery Program

Basic Sciences (Part-I Examination)

1. Anatomy

- *General Anatomy* by Professor Tassaduq Hussain
- *Langman's Embryology*
- *Clinical Anatomy* by Shell
- *Basic Histology* by Jenqueira
- *Neuroanatomy* by Snell

2. Pharmacology

- *Lippincott's Illustrated Review of Pharmacology*

3. Pathology

- *Microbiology* by Jawetz
- *Postgraduate Hematology* by Hoffbrand
- *Robin's Pathology: Basic Disease*
- *Chemical Pathology* by Bishop

Surgery

1. Clinical Surgery

- *An Introduction to the Symptoms and Signs of Surgical Disease* by Norman Browse
- *Pocketbook of Differential Diagnosis* by A. Raftery and E. Lim

2. Theory of Surgery

- *Essentials of General Surgery* (Latest Edition) by Peter Lawrence
- *Essentials of Surgical Specialties* (Latest Edition) by Peter Lawrence

3. Operative Surgery

- *General Surgery* by Rob & Smith
- *General Surgery, 2nd Edition* by Burge DM

Additional References for In-Depth Reading

1. *Bailey & Love's Short Practice of Surgery* by H. Bailey & R.J. McNeil
2. *An Aid to Clinical Surgery* by HAF Dudley and BP Waxman
3. *Principles of Surgery, 7th Edition* by Seymour I. Schwartz
4. *Essential Surgery* by H. George Burkit and B. O'Donnel

5. *Principle and Practice of Surgery* by Forrest, Carter, Macleod
6. *Textbook of Surgery, 2nd Edition* by Clunie GJA, Tjandra JJ, Thomas RSJ
7. *MCQ's and Short Answer Questions for Surgery* by Clunie GJA, Tjandra JJ, Ross H
8. *Principles and Practice of Surgery* by Forrest AP, Carter DC, MacLeod IB
9. *Clinical Problems in General Surgery* by Hunt PS, Marshall VC
10. *Oxford Textbook of Surgery, 2nd Edition* by Morris PJ, Malt RA
11. *An Aid to Clinical Surgery, 6th Edition* by Williamson R
12. *Surgery: Pretest Self-Assessment and Review, 9th Edition*

Surgical Atlases

1. *Operative Surgery: Principles and Techniques* by Paul Nora
2. *Atlas of General Surgery, 3rd Edition* by Carter
3. *Mastery of Surgery* by Nyhus and Baker
4. *An Atlas of Surgical Operations* by Zollinger and Zollinger
5. *Operative Orthopedics, 7th Edition* by Campbell
6. *Vascular Surgery, 4th Edition* by Robert Rutherford (2 volumes)
7. *Johnson's Surgery of the Chest* by Waldhausen and Pierce

This comprehensive list of textbooks and atlases provides an essential resource for mastering the theoretical knowledge, clinical skills, and surgical techniques required for the MS General Surgery program.

Content of Learning

Training Components

▪ Defined Standards

- Establish clear standards of knowledge and skills required to practice General Surgery at secondary and tertiary care levels.

Basic Sciences

- Understand basic sciences relevant to surgical diseases and their management.

General Surgery Specialization Areas

Principles of wound healing:

- Knowledge of collagen synthesis (stimulating and inhibitory factors).
- Primary and secondary intention prevention.

- Treatment of dehiscence and management of chronic wounds.
- Suturing techniques.
- Fluid/Electrolyte and Acid/Base Physiology:
 - Understanding normal physiology of body water and minerals.
 - Recognize common derangements and their treatment.
- Critical Care:
 - Basic principles of hemodynamic monitoring, acid/base physiology, oxygen consumption, oxygen delivery, respiratory failure, ventilation support, and nutrition.
- Trauma:
 - Systematic approach to managing multiply injured patients.
 - Indications for operative and non-operative management.
 - Understanding the pathophysiology of injury.
- Surgical Oncology:
 - Principles of solid tumor management.
 - Role of surgery in a multidisciplinary approach.
 - Understanding the natural history of common malignancies (breast cancer, colon cancer, GI cancers, melanoma).
- Emergent Non-Traumatic Surgical Problems:
 - Evaluation of acute abdominal pain.
 - Indications for emergent surgical intervention.
 - Diagnosis and treatment of common conditions presenting as surgical emergencies.
- Surgical Infections:
 - Microbiology, predisposing factors, and treatment of nosocomial infections.
 - Management of postoperative wound infections and intra-abdominal abscesses.
- Surgical Diseases:
 - Familiarity with natural history, diagnosis, preoperative work-up, intraoperative approaches, postoperative management, and recognition/treatment of postoperative complications.
 - Diseases include:
 - Acute abdomen.
 - Peritonitis.

- Acute appendicitis.
- Gynecological emergencies.
- Intestinal obstructions.
- Skin infections and necrotizing infections.
- Hernias (primary, recurrent, obstructed, strangulated).
- Multiple injuries (assessment of multiply injured patients, including children).
- Blunt and penetrating injuries.
- Abdominal injuries (splenic, hepatic, pancreatic).
- Urinary tract injuries.
- Vascular injuries.
- Management of benign/malignant lesions of the skin and subcutaneous tissue.
- Perforated peptic ulcers.
- Acute GI hemorrhage.
- Gastroscopy and endoscopy for lower GI problems.
- **Subspecialties in General Surgery**
 - Management of:
 - Upper GI symptoms (dysphagia, dyspepsia).
 - Elective esophagogastric disorders.
 - Biliary tract symptoms (jaundice, gallstone disease, pancreatitis).
 - Lower GI diseases (benign colon conditions, colorectal neoplasia, inflammatory bowel disease).
 - Breast conditions (acute infections, common conditions).
 - Varicose veins and ischemic limbs.
- **Surgical Subspecialties**
 - Emergency Surgery.
 - Central and peripheral nervous systems.
 - Head and neck surgery.
 - Thoracic surgery.
 - Gastrointestinal surgery.
 - Genitourinary surgery.
 - Laparoscopic surgery.
 - Traumatology.

- Organ transplantation.
- Surgical oncology.
- **Trauma/Emergency Surgery Service**
 - Evaluation of injury mechanisms.
 - Understanding pathophysiology (hemorrhagic, neurogenic, obstructive shock).
 - Role of imaging in acute care.
 - Steps in managing long-bone and pelvic musculoskeletal injuries.
 - Fluid and electrolyte management.
 - Management of postoperative fever.
 - Importance of injury prevention.
 - Role of nutrition, physical therapy, and rehabilitation.
 - History taking and physical examination for acute abdominal pain.
 - Initial management of respiratory and cardiovascular arrest.
 - Chest radiograph, ABG, and ECG interpretation.
 - Diagnosis and treatment of shock and arrhythmias.
 - ICU sedation, nutrition, and renal failure management.
 - Placement of catheters, chest tubes, and central venous lines.
- **Anesthesiology/Perioperative Care**
 - Preoperative evaluation, intraoperative monitoring, and postoperative management.
 - Handling critical incidents (airway and vascular access).
 - Pharmacology of anesthetics and vasoactive drugs.
- **Burn Care**
 - Emergency assessment (airway, breathing, circulation).
 - Fluid resuscitation and wound management.
 - Skin grafting techniques and rehabilitation.
- **Orthopedic Surgery**
 - Diagnosis and management of fractures, dislocations, ligament injuries, and arthritis.
 - Radiographic interpretation and postoperative care.
- **Thoracic and Cardiovascular Surgery**
 - Preoperative and postoperative management of cardiothoracic conditions.
 - Use of bypass pump, hypothermia, and tissue protection techniques.
- **Transplant Surgery**
 - Understanding immunology and management of transplant patients.
 - Recognizing complications of immunosuppression.

- **Hepatobiliary Surgery**
 - Management of liver and biliary tract diseases.
 - Portal hypertension and hepatobiliary imaging.
- **Urology**
 - Diagnosis and management of urological diseases.
 - Basics of renal transplantation and dialysis indications.
- **Plastic Surgery**
 - Physical examination and wound closure techniques.
 - Management of congenital anomalies, hand injuries, skin cancers, and breast reconstruction.
- **Head and Neck Surgery**
 - Airway maintenance, tracheostomy, lymph nodes, and oral malignancies.
- **Neurosurgery**
 - Principles of neurosurgical treatment for central and peripheral nervous system diseases.
- **Ophthalmologic Surgery**
 - Basic anatomy and surgical subspecialty knowledge of the eye.
- **Otolaryngology**
 - Diagnosis and treatment of ENT conditions.
- **Reproductive System and Breast Surgery**
 - Management of gynecological emergencies, prostate diseases, breast reconstruction, and carcinoma.
- **Surgical Oncology**
 - Cancer treatment (surgery, radiotherapy, chemotherapy).
 - Principles of molecular biology and cancer screening.
- **Professional Development**
 - Ethical practice and cultural sensitivity.
 - Lifelong learning and self-assessment.
 - Teamwork and leadership in clinical settings.
 - Research and education.

**METHODS OF
INSTRUCTION/COURSE
CONDUCTION**

Teaching Modalities

1. Lectures.
2. Seminar presentations and journal club presentations.
3. Group discussions.
4. Grand rounds.
5. Clinico-pathological conferences.
6. SEQ as assignments on the content areas.
7. Skill teaching in ICU, operation theatres, emergency, and ward settings.
8. Attendance at genetic clinics and rounds for at least one month.
9. Participation in genetic counseling sessions.
10. Self-study, assignments, and use of the internet.
11. Bedside teaching rounds in wards.
12. OPD and follow-up clinics.
13. Long and short case presentations.

- **Interactive Strategies**

- Conferences to improve communication and clinical skills for upcoming consultants.
- Regularly scheduled conferences attended by faculty and residents.
- Participation in autopsies and review of pathological material.

- **Clinical Case Conferences**

- Each resident responsible for at least one clinical case conference monthly.
- Cases may be from consultation or clinic service or specialty rotations.
- Residents, with attending surgeons, prepare and present cases and review relevant literature.

- **Monthly Student Meetings**

- Each affiliated medical college provides a room for student meetings and discussions.
- Activities include: a. Journal club meetings. b. Core curriculum meetings. c. Skill development sessions.

- a. **Journal Club Meetings**

- Residents present and discuss research articles of broad interest.
- Two hours per month allocated for discussions.
- Faculty or external researchers present outlines or results of current research.
- Articles critically evaluated for clinical practice relevance.
- Records of articles maintained in relevant departments.

b. Core Curriculum Meetings

- Monthly discussions on core General Surgery topics.
- Sessions last at least two hours and chaired by the elected chief resident.
- Residents brainstorm and generate ideas for course improvement.

c. Skill Development Sessions

- Two hours twice a month for clinical skill practice.
- Skills include:
 1. Understanding indications, contraindications, and complications of technical procedures.
 2. Educating patients about procedures and obtaining informed consent.
 3. Evaluating medical literature, study design, risks of disease, and medical statistics.
 4. Addressing cultural, social, family, and economic aspects in decision-making.
 5. Counseling skills and community education.
 6. Communication techniques for diverse populations.
 7. Performing clinical laboratory and radionuclide studies with quality control standards.
 8. Managing essential surgical cases under supervision and independently.

• Annual Grand Meeting

- Once a year, residents enrolled in MS General Surgery gather at UHS Lahore.
- One full day allocated to:
 - Presenting annual reports by chief residents from affiliated institutes.
 - Discussing issues and concerns related to courses.
 - Collecting feedback and suggestions to involve residents in decision-making.
- Research and literary work by residents displayed.
- Evening informal gathering and dinner arranged to foster a sense of belonging.

LOG BOOK

The residents must maintain a log book and get it signed regularly by the supervisor. A complete and duly certified log book should be part of the requirement to sit for MS examination. Log book should include adequate number of diagnostic and therapeutic procedures observed and performed the indications for the procedure, any complications and the interpretation of the results, routine and emergency management of patients, case presentations in CPCs, journal club meetings and literature review.

Proposed Format of Log Book is as follows:

Candidate's Name: _____

Roll No. _____

Sr.#	Date	Name of Patient, Age, Sex & Admission No.	Diagnosis	Procedure Performed	Supervisor's Signature
1					
2					
3					
4					

Emergencies Handled

Sr.#	Date	Name of Patient, Age, Sex & Admission No.	Diagnosis	Procedure/management	Supervisor's Signature
1					
2					
3					
4					

Case Presented

Sr.#	Date	Name of Patient, Age, Sex & Admission No.	Case Presented	Supervisor's Signature
1				
2				
3				
4				

Evaluation Record

Sr.#	Date	Method of Evaluation (Oral, Practical, Theory)	Rating (Excellent, Good, Adequate, Inadequate, Poor)	Supervisor's Signature
1				
2				
3				
4				

EVALUATION & ASSESSMENT STRATEGIES

Evaluation & Assessment Strategies

Assessment Overview

- Focus on action- and professional growth-oriented, student-centered integrated assessments.
- Includes informal internal, formative, and summative assessments.

Student-Centered Integrated Assessment

- Empowers students as decision-makers, promoting responsibility for evaluation and self-improvement.
- Characteristics: Growth-oriented, student-controlled, collaborative, dynamic, informal, flexible, and action-oriented.

Components:

1. Self-Assessment
 - Students complete a self-assessment form to evaluate their comfort and competency in clinical situations.
 - Responsibility lies with students to identify weaknesses and address them.
2. Peer Assessment
 - Students evaluate peers after monthly group meetings.
 - Focused on constructive, non-judgmental feedback, fostering mentorship skills.
3. Informal Internal Assessment by Faculty
 - No marks allocation, encouraging students to openly confront weaknesses.
 - Components:
 - a. Punctuality
 - b. Ward Work
 - c. Monthly Assessments (written tests highlighting areas of weakness)
 - d. Participation in Interactive Sessions

Formative Assessment

- Continuous assessment of progress and competence conducted through workplace-based assessments during the training period.
- Involves a range of assessors and covers procedures suitable to the stage of training.
- Methods include:
 - Directly Observed Practical Skills (DOPS)

- Case-Based Discussion (CbD)
- Mini Clinical Examination Exercises (Mini-CEX)
- Multiple Source Feedback (MSF)
- Supervisors will evaluate residents quarterly based on the syllabus/curriculum.

Summative Assessment

- Conducted in two stages:
 1. **Mid-Term Assessment (MTA) Examination:** Held at the end of the 2nd year.
 2. **Final/Exit Examination:** Held at the end of the final year.
- Performance requirements will be based on the knowledge and skills necessary for acceptable performance.
- Passing criteria will be determined through careful analysis and judgment without regulating the number or proportion of candidates passing.

THESIS

Thesis Evaluation Guidelines

1. **Thesis Submission Timeline:**

- The candidate must submit the thesis at least six months before the completion of training.

2. **Submission Process:**

- The thesis, along with a certificate of approval from the supervisor, is to be submitted to the Registrar's office.
- The Registrar will record the date and time of submission and ensure the thesis is forwarded to the Controller of Examinations within five working days.

3. **Examiner Selection:**

- The Controller of Examinations will submit a panel of eight examiners within seven days for the Vice Chancellor to select four examiners.
- The Vice Chancellor must return the final panel within five working days.
- In case of delays, the Controller of Examinations will personally bring the case to the Vice Chancellor.

4. **Supervisor's Role:**

- The supervisor will not act as an examiner or participate in the thesis evaluation.

5. **Thesis Distribution:**

- The Controller of Examinations will ensure the thesis is sent to examiners properly and will issue reminders every ten days.

6. **Evaluation Timeline:**

- Examiners must complete the evaluation within six weeks.
- If delays occur, the Controller of Examinations will send two fortnightly reminders and, if needed, notify the Vice Chancellor in person.

7. **Appointment of Examiners:**

- If an internal examiner cannot be found, the Vice Chancellor, in consultation with the concerned Deans, may appoint a relevant person as an examiner.
- There will be two internal and two external examiners. In case of difficulty, at least three examiners (one internal and two external) will be appointed.

8. **Evaluation Marks:**

- The thesis evaluation carries 400 marks, with a minimum of 60% required to pass.

- The thesis will be accepted if the cumulative score from all examiners is 60%.

9. Eligibility for Final Examination:

- Clinical training ends with the stipulated training period.
- The candidate becomes eligible for the final examination after completing clinical training and thesis acceptance.
- If clinical training ends earlier, the training slot will remain vacant until the stipulated period concludes.

MANDATORY WORKSHOPS

MANDATORY WORKSHOPS

1. Each candidate of the MD/MS/MDS program must attend the four mandatory workshops and any other workshop as required by the university.
2. The four mandatory workshops will include the following:
 - Research Methodology and Biostatistics
 - Synopsis/Writing
 - Communication Skills
 - Introduction to Computer / Information Technology and Software Programs
3. The workshops will be held on a three-monthly basis.
4. An appropriate fee will be charged for each workshop.
5. Each workshop will last for 2–5 days.
6. Certificates of attendance will be issued upon satisfactory completion of workshops.