LIAQUAT UNIVERSITY OF MEDICAL AND HEALTH SCIENCES,

LIAQUAT UNIVERSITY OF MEDICAL AND HEALTHSCIENCES,

The Department of Plastic, Reconstructive & Burn Unit, Liaquat

University of Medical & Health Sciences, Jamshoro, is catering health

care facility to the citizens of entire Sindh. It has emergency wing at Liaquat University Hospital Hyderabad providing emergence care and surgical management of Burn patients.

None of the district Hospital has facilities of Plastic Surgery, or any Centre for burn victim yet exist throughout Sindh except Karachi.

Therefore, our vision is to train graduates & Post Graduates in this specialty so that this facility of Plastic, Reconstructive and Burn Surgery may be available to common people of the province in particular and to large by large to all citizens of Pakistan.

FACULTY MEMBERS

DR. AAMNA SANOBER

FCPS, MRCSEd(UK), CHPE

ASSISTANT PROFESSOR

INCHARGE

DEPARTMENT OF PLASTIC, RECONSTRUCTIVE SURGERY, LUMHS.

DR. SADIA RASHEED

MS

ASSISTANT PROFESSOR,

DEPARTMENT OF PLASTIC, RECONSTRUCTIVE AND BURNS CENTRE, LUMHS.

DR. KASHAN SHAIKH

MS

SENIOR REGISTRAR,

DEPARTMENT OF PLASTIC, RECONSTRUCTIVE AND BURNS CENTRE, LUMHS.

MISSION STATEMENT

The mission of Department of Plastic, Reconstructive and Burns Surgery at Liaquat University of Medical and Health Sciences is:

- To provide compassionate, state of the art, Plastic Surgery clinical care to the citizens of Sindh and Pakistan.

- To provide the best educational experience in the art and science of Plastic Surgery and produce caring, competent, well educated practitioners of plastic surgery who will contribute and advance the field of Plastic Surgery.

- To provide education in the art and science of Plastic Surgery to the community at large and to the medical students, residents and post graduate students of the Liaquat University of Medical and Health Sciences.

- We are particularly dedicated to educating the next Generation of Plastic Surgeon to become exception clinicians, clear and insightful thinkers, and generous citizens with unimpeachable ethical qualities and a dedication to service.

- To inculcate leadership qualities, enthusiasm, and the capacity in post-graduates to critical evaluate new information and the flexibility to synthesize the information to adaptations in practice.

- To train competent, safe, moral, and ethical Plastic Surgeons that enable them to deliver the highest quality of care, state of the art instruction, and leadership in surgical matters.

- To advance the art and science of Plastic Surgery.

LIAQUAT UNIVERSITY OF MEDICAL AND HEALTH SCIENCES,

TRAINING PROGRAM

OBJECTIVES

At the end of training for M.S in Plastic Surgery a candidate shall be able to:

1. Initially assess the patients coming to plastic surgery by:
   - Obtaining pertinent history.
   - Performing physical examination correctly.
   - Formulating a working diagnosis.
   - Deciding whether the patient requires:
     Ambulatory care for the hospitalization
     Referral to other health Professionals
     Emergency care and life saving procedures

2 Manage patients requiring treatment by plastic surgeon.
   - Plan an enquiry strategy i.e. order appropriate investigation and interpret the results.
   - Obtain standard clinical photographs for planning and evaluation of management.
   - Perform anthropometrics including detailed cephalometric measurement and determining deviations for normal values, if any.
   - When required perform surgical procedures independently and competently.
   - Deal effectively and promptly with any complications, which may occur during the course of disease.
   - Maintain record of patients.

3. Undertake research and publish findings
4. Acquire new information; assess the utility and make . Appropriate applications.
5. Recognize the role of teamwork and function as effective team Member.
6. Advise the community on promoting health and preventing diseases.
7. Train paraprofessionals and other junior members of the team.

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CURRICULUM

The postgraduate program focuses on few key pegs of viable training: these are knowledge, skills and attitude.

Learning outcomes

The learning outcomes after completion of the course tenure are related cognition, skills and attitude

Cognition (critical thinking)

The candidate should be able to:

- Relate how body function gets altered in diseased states.
- Request and justify investigations and plan management for medical disorders
- Assess new medical knowledge and apply to their setting.
- Apply quality assurance procedures in their daily work.

SKILLS

The candidate after completion of training must have developed sufficient skills relating to written and verbal communication, clinical examination, clinical management and clinical research.

(i) Written communication:

The candidate should be able to:

- *Correctly write updated medical records which are clear, concise and accurate.*
- *Write clear management plans, discharge summaries and competent letters for outpatient after a referral form from a general practitioner.*

Verbal communication

The candidate should be able:

- Establish professional relationships with patients and their relatives and caretakers in order to obtain a clinical history, physical management and provide appropriate management.
- Demonstrate usage of appropriate language in seminars, bedside' session', outpatient and other work situations.

- Demonstrate the ability to communicate clearly, considerably and sensitively to patients, relatives, other health professional and the public.

- Demonstrate competence in presentations**.**

CLINCIAL EXAMIATION SKILLS

The candidate will be able to:

- Perform an accurate physical and mental state examination an complex medical problem after involving multiple systems
- Interpret physical exam findings after physical examination so as to formulate further management

PATIENT MANAGEMENT SKILLS

The candidate will be able to:

- Interpret and integrate the history and examination and arrive at an appropriate differential diagnosis diagnose.
- Demonstrate competence in problem identification, analysis and management of the problem at hand by the use of appropriate, resources and interpretation of lab reports.
- Prioritize different problems within a time frame.

Skills in research

Candidate should be able to understand:

- Fundamental concepts of Epidemiology and study designs.
- Core knowledge of Biostatistics.
- Methods use of collection of data.
- Selection of appropriate statistical test applicable to collected data.
- Different ways of presenting data.
- Conduct research individually by using appropriate research methodology and statistical methods that are applicable.
- Correctly guide others in conducting research methodology.
- Correctly guide others in conducting research by statistical methods that are applicable.
- Interpret and use results of various research articles.

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ATTITUDES:

Towards patients

The candidate will be able to:

- Establish a positive relationship with all patients in order to cause ease in illness and suffering.
- Facilitate the transfer of information with all patients in order to ease in illness and suffering
- Demonstrate awareness of bio-psycho-social factors fi=in the assessment and management kindliness in performing internal examination.

Towards self-development:

The candidate will be able to:

- Demonstrating consistently respect for every human being irrespective of ethnic background, culture, socioeconomic status and religion.
- Deal with patients in a non-discriminating and prejudice- free manner.
- Deals the patient with honesty and compassionately.
- Demonstrate flexibility and willingness to adjust appropriately to changing circumstances.
- Foster the habit and principle of self-education and reflection in order to constantly update and refresh knowledge and skills and a commitment to continuing knowledge.
- Recognize stress in self and others.
- Handle complains including self-criticism or by colleagues or patients.
- Understand the importance of obtaining and valuing a second opinion.

Towards Society

The candidate will be able to:

- Understand the social and governmental aspects of health care provision.
- Apply an understanding of hospital and community-based resources available for patients and care providers in rural areas.
- Demonstrate an understanding of health services.
- Understand the use of “Telemedicine” in practicing health.
- Understand and realize the importance of awareness programs and organize the same.

- Apply and avail all available methods and techniques to disseminate the information of preventable disease to the remote and rural areas.

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- Demonstrate an understanding of health services.
- Understand the use of "Telemedicine" in particular health.
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LIAQUAT UNIVERSITY OF MEDICAL AND HEALTH SCIENCES,

GENERAL CONSIDERATIONS

DEGREE IN PLASTIC SURGERY

The course for the degree is open to graduates in medicine and surgery who have been selected on procedure of rules and regulations of 2003 of Liaquat University of Medical and health sciences.

ELIGIBILITY REQUIREMENT:

- MBBS or equivalent qualification registered with the PMDC
- One-year house job in an institute recognized by the PMDC
- the previous experience in general surgery would be an advantage and a good understanding of English language is essential

DURATION:

This Is a five-years program after which an examination shall be held and the successful candidates shall be awarded the degree to plastic surgery and holder of this degree shall be eligible to work as Plastic Surgeon

DUTIES AND ROTATIONS

Then candidate should be full time resident.
He/She will work like a Registrar
He/She will be working in plastic and reconstructive surgery unit Jamshoro and burn unit Hyderabad doing elective and emergency duties respectively
He/She will work in Burns unit for 6 months in 3 years, 2 months in year 1st, 3rd and 4th year of training.

The Candidate will be required to:

FIRST YEAR

- History and clinical examination.
- Investigations
- Pre-operative assessment of cases
- Research Methodology and Biostatics
- Professional ethics and Communication Skills
  Selection of research topic and protocol writing its submission and approval within 10 months of joining.
- Take compulsory workshops.

SECOND YEAR

- Clinical Rotations.
- Optional/Compulsory workshops
- Review of Literature for approved Research topic.
- Historical background for the approved research topic
- Collection of cases for the research topic.

1st HALF OF 3RD YEAR:

- Clinical Rotations to selected Departments.
- Optional/compulsory workshops
- Collection of cases for the research topic

2nd half of 3rd YEAR

- Clinical work at the department of Plastic, Reconstructive and Burn Surgery
- Collection of cases for the research. Topic should be finalized
- Start of original work for thesis
- Case presentations
- Operative Surgery

FOURTH YEAR

- Clinical work at the department of Plastic, Reconstructive and Burn Surgery
- Case presentation
- Operative surgery
- Evidence base learning
- At the end of 4th year candidate must submit his/her research work(Thesis) to relevant authority

FINAL YEAR STUDENT

- Clinical work at the Department of Plastic, Reconstructive and burn Surgery.
- Problem Solving
- Case presentation
- Operative Surgery
- Evidence based learning.

TEACHING METHODOLOGY

The teaching methodology at Department of Plastic Surgery consisits of :

- Bedside discussions
- Ward rounds
- Case presentations.
- Clinical grand rounds
- Statistical meetings.
- Journal club
- Lectures and seminars

Along with these activities, trainees should take part in in-departmental meetings i.e

- Clinico-pathological
- Clinico-radiological, as and when organized by Departments.

Trainees are also expected to be fully conversant with the use of computers and be able to database like Medline, Pub me etc

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TEACHING SCHEDULE

Following is the suggested weekly teaching program in the Department of Plastic Surgery.

Description	Frequency
• Central teaching (Syllabus bases)	Once a week
• Seminar/Journal club	Once a week
• Case presentation	Once a week
• Operative Surgery	Once a week
• Grand Round	Once a week
• Files Audit/Statistical ward meeting	Once a month
• Interdepartmental meeting	Once a month

INTERNAL EVALUATION

The performance of the resident during the training period will be monitored throughout the course. It will be evaluated at the end of each training year. To make this assessments valid it will be objective with following format

DESCRIPTION

A. PERSONAL ATTRIBUTES	20
B. CLINICAL WORK	20
C. ACADEMIC ACTIVITIES	20
D. END OF TERM YEAR MCQ THEORY EXAMINATION	40

A: PERSONAL ATTRIBUTES

- *Behavior and emotional stability (5 marks)*: Dependable, disciplined, dedicated, stable in emergency situations, show positive approach
- *Motivation and Initiative (5 marks)*: Takes on responsibility, Innovative, enterprising, does not shirk duties or leave any work pending.
- Honesty and Integrity (5 marks): truthful, admits mistakes, does not cook up information, has ethical conduct, exhibits good moral values, loyal to the institution.
- Interpersonal skills and Leadership Quality (5 marks): has compassionate attitude towards patients and attendants, gets on well with colleagues and paramedical staff, respectful to seniors, has good communication skills

B: CLINICAL WORK

- Availability (5 marks): Punctual, available continuously on duty, responds promptly on calls, and takes proper permission for leave.
- Diligence (5 marks): Dedicated, hard-working, does not shirk duties, leaves no work pending, and does not sit idle, competent in clinical case work up and management.
- Academic ability (5 marks): intelligent, shows sound knowledge and skills, participates adequately in academic activities and performs well in oral presentation and departmental tests.
- Clinical performance (5 marks): Proficiency in case discussion during rounds and OPD work up. Preparing Documents of the case History/Examination and progress notes in the file (daily notes, round discussion, investigations and management) skill of performing bedside procedures and handling emergencies.

C: ACADEMIC ACTIVITY: This will depend upon performance during:

Case presentation (5 marks)
Journal club (5 marks)
Monthly Ward meeting (5marks)
Grand Round (5 marks)

D: END OF TERM YEAR MCQ THEORY EXAMINATION

It will consist of 50 MCQs (Single best answer). These will be based on the module completed during the term year.

CLINICAL ROTATIONS

At the start of second year of training in Plastic Surgery, candidate will be allowed to work on clinical rotation in different departments as follows:
The rotation in the department of GENERAL SURGERY is compulsory for the period of 06 months. The candidate will then rotate in any 3 of the following department each for the period of 02 months. This will give comprise a total of 12 months (1year) spent in rotation.

- Neurosurgery
- Orthopedic Surgery
- Urology
- Maxillofacial Surgery

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CORE COMPETENCIES

The clinical skills, which a specialist must have are varied and complex. A complete list of the same necessary for trainees and trainers is given below. It is arranged year wise and the level of competence to be achieved each year is arranged as follows:

- Observer status
- Assistant status
- Performed under supervision
- Performed independently

A candidate is expected to attain the laid down level of competence for the following procedures by the end of each year.

COMPETENCIES	FIRST YEAR				SECOND YEAR				
	6 Months		12 Months		18 Months		24 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
GENERAL PROCEDURES									
EXCISION OF SIMPLE LESION WITH DIRECT CLOSURE	1	5	2	5	3	10	4	10	30
PLANNING AND EXECUTION OF Z PLASTY AND LOCAL FLAPS	1	5	2	5	3	10	4	10	30
INTRALESIONAL INJECTION	1	2	2	3	3	5	4	5	15
HARVESTING OF PARTIAL AND FULL THICKNESS SKIN GRAFTS	1	5	2	10	3	10	4	10	35
HARVESTING OF RIB/BONE GRAFTS	1	2	2	3	3	3	4	3	11
HARVESTING OF COSTAL CARTILAGE AND FRAMEWORK	1	2	2	2	3	1	4	2	7
FABRICATION									
HARVESTING OF NERVE GRAFTS	1	3	2	3	3	3	4	2	11

ELEVATION AND INSETTING OF FASCIOCUTANOUS FLAPS	1	3	2	3	3	5	4	3	14
ELEVATION AND INSETTING OF PERFORATOR FLAPS	1	2	2	2	3	2	4	1	07
ELEVATION AND INSETTING OF MUSCLE FLAPS	1	2	2	2	3	2	4	2	08

COMPETENCIES	FIRST YEAR				SECOND YEAR				
	6 Months		12 Months		18 Months		24 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
HEAD AND NECK SURGERY									
CLEFT LIP	1	3	2	3	2	3	2	3	12
CLEFT PALATE	1	3	2	3	2	3	2	3	12
RARE FACIAL AND CRANIOFACIAL CLEFTS	1	2	1	2	1	2	1	2	08
CONGENITAL NASAL DEFORMITIES	1	2	1	2	1	2	1	2	08
CONGENITAL EAR DEFORMITIES, MICROTIA	1	2	2	2	2	2	2	2	08
ALVEOLAR CLEFTS AND BONE GRAFTING	1	2	1	2	2	1	2	2	07
VELOPHARYNGEAL INSUFFICIENCY	1	-	1	1	2	1	2	1	03
CORRECTION OF SECONDARY LIP AND NASAL DEFORMITIES	1	1	1	2	1	2	1	2	07
NASAL RECONSTRUCTION	1	3	1	2	1	3	2	2	11
RECONSTRUCTION OF COMPLEX FACIAL SKELETON DEFECTS	1	2	1	2	2	2	2	3	09
FRACTURES OF FACIAL SKELETON	1	3	1	3	1	3	2	3	12
MAJOR HEAD NECK TUMOR RESECTION AND RECONSTRUCTION WITH LOCAL AND REGIONAL FLAPS	1	2	1	2	1	2	2	2	08
FACIAL REANIMATION	1	2	1	2	1	2	2	2	08

COMPETENCIES	FIRST YEAR				SECOND YEAR				
	06 MONTHS		12MONTHS		18 MONTHS		24 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
RECONSTRUCTION OF SCALP AND FOREHEAD	1	2	1	2	2	3	2	3	10
RECONSTRUCTION OF CHEEK	1	3	1	3	1	2	2	2	10
RECONSTRUCTION OF LIPS	1	2	1	2	2	2	2	2	08
MANDIBULAR RECONSTRUCTION	1	2	1	2	2	3	2	3	10
NECK RESURFACING AFTER CONTRACTURE RELEASE	1	2	1	2	1	2	2	2	08
RECONSTRUCTION OF AURICLE	1	2	1	2	1	2	2	2	08
PAROTID TUMORS	1	3	1	3	2	2	2	3	11
CUTANEOUS SURGERY									
SKIN LESION, EXCISION AND PRIMARY CLOSURE	1	5	2	5	3	10	4	10	30
SKIN LESION, EXCISION AND REPAIR BY LOCAL OR DISTSANT FLAPS.	1	5	2	5	3	10	4	5	25
TISSUE EXPANSION	1	2	2	2	3	1	4	1	06
REPAIR OF MAJOR SOFT TISSUE LOSSES	1	2	1	2	2	2	2	5	11
VASCULAR MALFORMATIONS	1	2	2	2	2	2	2	3	09
PRESSURE SORES	1	1	1	2	2	2	2	2	7
BURNS AND CONTRACTURE	1	3	2	5	2	5	3	5	18
ACUTE BURNS, EARLY TANGENTIAL EXCISION AND SKIN GRAFTING	1	2	1	2	2	4	3	5	13

COMPETENCIES	FIRST YEAR				SECOND YEAR				
	6 MONTHS		12 MONTHS		18 MONTHS		24 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
ACTUE BURNS DESLOUCHING/SERIAL EXCISION AND SKING GRAFTING	1	2	1	2	2	4	3	4	12

POST BURN SCARS/HYPERTROPHIC SCARS AND KELOIDS	1	3	2	3	2	3	3	3	12
POST BURN CONTRACTURE	1	5	2	3	2	3	3	3	14
UPPER LIMB SURGERY									
FINGER TIP INJURIES	1	3	1	3	2	5	3	3	14
TENDON INJURIES (REPAIR)	1	3	2	3	2	3	3	3	12
TENDON GRAFTING	1	2	2	2	2	2	3	2	08
ACUTE HAND TRAUMA – INITIAL MANAGEMENT	1	5	2	5	3	5	4	10	25
SOFT TISSUE COVERAGE WITH LOCAL AND REGIONAL FLAPS	1	5	2	5	2	5	3	10	25
NERVE REPAIRS AND GRAFTING	1	3	1	3	2	3	3	5	14
TENDON TRANSFERS	1	3	2	2	2	2	3	1	8
CONGENITAL HAND DEFORMITY CORRRECTION	1	3	1	3	2	5	2	5	16
FIXATION OF FRACTURES AND CORRECTION	1	2	1	2	1	2	2	5	11
REDUCTION OF DISLOCATIONS	1	2	1	2	2	2	3	2	08
BRACHIAL PLEXUS EXPLORATION AND REPAIR	1	2	1	2	2	2	2	2	08

COMPETENCIES	FIRST YEAR				SECOND YEAR				
	6 MONTHS		12 MONTHS		18 MONTHS		24 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
NERVE TRANSFERS	1	3	1	3	2	5	2	5	16
SURGERY FOR VIC	1	3	1	3	2	5	2	3	12
HAND INFECTIONS	1	5	2	5	3	5	4	5	20
AXILLARY DISSECTION	1	1	1	1	2	1	3	1	04
FUNCTIONAL MUSCLE TRANSFERS	1	2	1	2	2	2	2	2	08
LOWER LIMB SURGERY)									
LYMPHEDEMA SURGERY	1	1	1	1	1	1	2	1	04
LIMB SALVAGE PROCEDURES	1	1	1	1	1	1	2	1	04

GROIN DISSECTION	1	1	1	1	2	1	3	1	04
SOFT TISSUE COVERAGE OF EXPOSED BONE AND IMPLANTS WITH LOCAL FLAPS	1	3	2	3	2	3	3	3	12
SOFT TISSUE COVERAGE OF EXPOSED BONE AND IMPLANTS WITH FREE FLAPS	1	2	1	2	2	1	2	2	07
TRUNK SURGERY									
CHEST WALL RECONSTRUCTION	1	1	1	1	2	1	2	1	04
BREAST RECONSTRUCTION (PEDICLED FLAP)	1	1	1	1	2	3	2	3	08
BREAST RECONSTRUCTION (FREE FLAP)	1	3	1	3	2	3	2	3	12
ABDOMINAL WALL RECONSTRUCTION	1	3	1	3	1	3	2	3	12

COMPETENCIES	FIRST YEAR				SECOND YEAR				TOTAL
	6 MONTHS		12 MONTHS		18 MONTHS		24 MONTHS		
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
HYPOSPADIAS	1	3	1	3	2	3	2	3	12
EPISPADIAS	1	1	1	1	1	1	2	1	04
GENDER RE-ASSIGNMENT	1	3	1	3	1	3	2	3	12
VAGINAL RECONSTRUCTION	1	1	1	1	2	1	2	1	04
PENILE RECONSTRUCTION	1	1	1	1	2	1	2	1	04
AESTHETIC SURGERY									
FACE LIFT AND FOREHEAD LIFT	1	2	1	2	1	2	2	2	08
BLEPHROPLASTY	1	3	1	3	1	3	2	3	12
NATURAL AND ARTIFICIAL FILLER	1	3	1	3	1	3	2	3	12
BOTOX	1	3	1	3	1	3	2	5	14
RHINOPLASTY	1	2	1	2	2	2	2	2	08
PROMINENT EARS	1	1	1	1	1	1	2	1	04
HAIR RESTORATION SURGERY	1	1	1	1	1	1	1	1	04
DERMABRASION SURGERY	1	1	1	1	1	1	2	1	04
AMBDOMINOPLASTY	1	3	1	3	1	3	3	3	12
LIPOSUCTION	1	3	1	3	1	1	2	3	12
BREAST REDUCTION	1	1	1	1	2	1	2	1	04
BREAST AUGMENTATION	1	1	1	1	2	1	2	1	04
MASTOPEXY	1	1	1	1	2	1	2	1	04
GYNAECOMASTIA	1	3	1	3	2	3	2	2	12

LASER SURGERY	1	3	1	3	2	3	2	2	12

COMPETENCIES	THIRD YEAR				FOURTH YEAR				
	30 MONTHS		36 MONTHS		42 MONTHS		48 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
GENERAL PROCEDURES									
EXCISION OF SIMPLE LESION WITH DIRECT CLOSURE	4	5	4	5	4	5	4	5	20
PLANNING OF EXUCTION OF Z PLASTY AND LOCAL FLAPS	4	10	4	10	4	10	4	10	40
INTRALESIONAL INJECTION	4	5	4	5	4	5	4	5	20
HARVESTING OF PARTIAL AND FULL THICKNESS SKIN GRAFTS	4	5	4	5	4	5	4	5	20
HARVESTING OF RIB/BONE GRAFTS	4	2	4	3	4	3	4	3	11
HARVESTING OF COSTAL CARTILAGE AND FAMEWORK FABRICATION	4	2	4	2	4	2	4	2	08
HARVESTING OF NERVE GRAFTS	4	2	4	2	4	2	4	4	10
ELEVATION AND INSETTING OF FASCIOCUTANOUS FLAPS	4	3	4	3	4	5	4	5	16
ELEVATION AND INSETTING OF PERFORATOR FLAPS	4	2	4	2	4	2	4	2	08
ELEVATION OF MUSCLE FLAPS	4	2	4	4	4	2	4	2	08

COMPETENCIES	THIRD YEAR				FOURTH YEAR				
	30 Months		36 Months		42 Months		48 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
HEAD AND NECK SURGERY									
CLEFT LIP	3	3	3	3	3	3	3	3	12
CLEFT PALATE	3	2	3	2	3	2	3	2	08
RARE FACIAL AND CRANIOFACIAL CLEFTS	2	2	3	2	3	2	3	2	08

CONGENITAL NASAL DEFORMITIES	2	2	3	2	3	2	3	2	08
CONGENITAL EAR DEFORMITIES, MICROTIA	2	2	2	2	3	2	3	2	08
ALVEOLAR CLEFTS AND BONE GRAFTING	2	2	2	2	2	2	3	2	08
VELOPHARYNGEAL INSUFFICIENCY	2	2	2	2	2	2	3	2	07
CORRECTION OF SECONDARY LIP AND NASAL DEFORMITIES	2	2	2	2	2	2	3	1	08
NASAL RECONSTRUCTION	2	2	2	2	2	2	3	2	08
RECONSTRUCTION OF COMPLEX FACIAL SKELETON DEFECTS	2	1	2	1	2	1	3	1	04
FRACTURES OF FACIAL SKELETON	2	1	2	1	2	1	3	1	04
MAJOR HEAD NECK TUMOR RESECTION AND RECONSTRUCTION WITH LOCAL AND REGIONAL FLAPS	2	2	2	2	3	2	3	2	08
FACIAL REANIMATION	2	2	2	2	3	1	3	1	06

COMPETENCIES	THIRD YEAR				FOURTH YEAR				
	30 MONTHS		36 MONTHS		42 MONTHS		48 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
RECONSTRUCTION OF SCALP AND FOREHEAD	2	2	2	2	3	2	3	2	08
RECONSTRUCTION OF CHEEK	2	2	2	2	3	2	3	2	08
RECONSTRUCTION OF LIPS	2	3	2	3	3	3	3	3	12
MANDIBULAR RECONSTRUCTION	2	1	2	2	2	3	2	3	09
NECK RESURFACING AFTER CONTRACTURE RELEASE	2	3	2	3	3	5	3	5	16
RECONSTRUCTION OF AURICLE	2	2	2	2	3	2	3	2	08
PAROTID TUMORS	2	1	2	1	2	1	3	1	04
CUTANEOUS SURGERY									

SKIN LESION, EXCISION AND PRIMARY CLOSURE	4	5	4	5	4	5	4	5	20
SKIN LESION, EXCISION AND REPAIR BY LOCAL OR DISTSANT FLAPS.	4	5	4	5	4	5	4	5	20
TISSUE EXPANSION	4	3	4	3	4	3	4	3	12
REPAIR OF MAJOR SOFT TISSUE LOSSES	2	3	2	3	3	3	4	5	14
VASCULAR MALFORMATIONS	2	2	3	3	3	3	4	3	11
PRESSURE SORES	2	3	3	3	3	3	3	3	12
BURNS AND CONTRACTURE	3	5	3	5	4	5	4	5	20
ACUTE BURNS, EARLY TANGENTIAL EXCISION AND SKIN GRAFTING	3	5	3	5	4	5	4	5	20

COMPETENCIES	THIRD YEAR				FOURTH YEAR				TOTAL
	30 MONTHS		36 MONTHS		42 MONTHS		48 MONTHS		
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
ACTUE BURNS DESLOUCHING/SERIAL EXCISION AND SKIN GRAFTING	3	5	3	5	4	5	4	5	20
POST BURN SCARS/HYPERTROPHIC SCARS AND KELOIDS	3	5	4	5	4	5	4	5	20
POST BURN CONTRACTURE	3	5	3	5	4	10	4	10	30
UPPER LIMB SURGERY									
FINGER TIP INJURIES	3	10	3	10	4	5	4	5	30
TENDON INJURIES (REPAIR)	3	10	3	10	4	5	4	5	30
TENDON GRAFTING	3	5	3	5	4	3	4	3	16
ACUTE HAND TRAUMA – INITIAL MANAGEMENT	4	10	4	10	4	10	4	10	40
SOFT TISSUE COVERAGE WITH LOCAL AND REGIONAL FLAPS	3	5	3	5	3	5	4	5	20
NERVE REPAIRS AND GRAFTING	3	5	3	5	4	5	4	5	20
TENDON TRANSFERS	3	3	3	3	3	3	3	3	12
CONGENITAL HAND DEFORMITY CORRRECTION	2	3	2	3	3	3	3	3	12
FIXATION OF FRACTURES AND CORRECTION	3	3	3	3	3	3	4	3	12

REDUCTION OF DISLOCATIONS	3	3	3	3	4	3	4	3	12
BRACHIAL PLEXUS EXPLORATION AND REPAIR	2	3	2	3	3	3	3	3	12

COMPETENCIES	THIRD YEAR				FOURTH YEAR				
	30 MONTHS		36 MONTHS		42 MONTHS		48 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
NERVE TRANSFERS	2	5	2	5	3	5	3	5	20
SURGERY FOR VIC	2	3	2	3	3	3	3	5	12
HAND INFECTIONS	4	5	4	5	4	5	4	5	20
AXILLARY DISSECTION	3	2	3	2	3	2	4	3	09
FUNCTIONAL MUSCLE TRANSFERS	2	2	2	2	2	2	2	2	08
LOWER LIMB SURGERY)									
LYMPHEDEMA SURGERY	2	1	2	1	3	1	3	1	4
LIMB SALVAGE PROCEDURES	2	5	2	5	2	5	3	3	18
GROIN DISSECTION	3	1	3	1	3	1	4	1	4
SOFT TISSUE COVERAGE OF EXPOSED BONE AND IMPLANTS WITH LOCAL FLAPS	3	5	3	5	3	10	4	5	25
SOFT TISSUE COVERAGE OF EXPOSED BONE AND IMPLANTS WITH FREE FLAPS	2	2	2	3	3	1	3	1	7
TRUNK SURGERY									8
CHEST WALL RECONSTRUCTION	2	1	2	1	3	3	3	3	12
BREAST RECONSTRUCTION (PEDICLED FLAP)	2	3	2	3	2	3	2	3	4
BREAST RECONSTRUCTION (FREE FLAP)	2	1	2	1	2	1	2	1	26
ABDOMINAL WALL RECONSTRUCTION	2	3	2	3	3	3	3	3	12

COMPETENCIES	THIRD YEAR				FOURTH YEAR				
	30 MONTHS		36 MONTHS		42 MONTHS		48 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
HYPOSPADIAS	2	5	2	5	2	5	3	5	20

EPISPADIAS	2	1	2	1	2	1	2	1	4
GENDER RE-ASSIGNMENT	2	5	2	5	2	5	2	5	20
VAGINAL RECONSTRUCTION	2	1	2	1	2	1	2	1	4
PENILE RECONSTRUCTION	2	1	2	1	2	3	3	1	6
AESTHETIC SURGERY									
FACE LIFT AND FOREHEAD LIFT	2	3	2	3	2	3	2	3	12
BLEPHROPLASTY	2	3	2	3	2	3	2	3	12
NATURAL AND ARTIFICIAL FILLER	2	3	2	3	2	3	2	3	12
BOTOX	2	3	2	3	2	3	2	3	12
RHINOPLASTY	2	5	2	5	2	5	2	5	20
PROMINENT EARS	2	5	2	5	2	5	3	3	18
HAIR RESTORATION SURGERY	2	3	2	3	2	3	2	3	12
DERMABRASION SURGERY	2	2	2	2	2	2	2	2	08
AMBDOMINOPLASTY	2	3	2	3	2	3	2	3	12
LIPOSUCTION	2	5	2	5	2	5	3	3	18
BREAST REDUCTION	2	3	2	3	2	3	2	3	12
BREAST AUGMENTATION	2	3	2	3	2	3	2	3	12
MASTOPEXY	2	2	2	2	2	2	2	2	08
GYNAECOMASTIA	2	5	3	3	3	3	4	3	14
LASER SURGERY	2	5	2	5	2	5	2	5	2

COMPETENCIES	FINAL YEAR								
	51 MONTHS		54 MONTHS		57 MONTHS		60 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
GENERAL PROCEDURES									
EXCISION OF SIMPLE LESION WITH DIRECT CLOSURE	4	5	4	5	4	5	4	5	20
PLANNING OF EXUCTION OF Z PLASTY AND LOCAL FLAPS	4	10	4	10	4	10	4	10	40
INTRALESIONAL INJECTION	4	5	4	5	4	5	4	5	20
HARVESTING OF PARTIAL AND FULL THICKNESS SKIN GRAFTS	4	5	4	5	4	5	4	5	20
HARVESTING OF RIB/BONE GRAFTS	4	3	4	3	4	3	4	3	30
HARVESTING OF COSTAL CARTILAGE AND FAMEWORK FABRICATION	4	3	4	3	4	3	4	3	12
HARVESTING OF NERVE GRAFTS	4	3	4	3	4	3	4	4	12

ELEVATION AND INSETTING OF FASCIOCUTANOUS FLAPS	4	3	4	3	4	5	4	5	13
ELEVATION AND INSETTING OF PERFORATOR FLAPS	4	5	4	5	4	5	4	5	20
ELEVATION OF MUSCLE FLAPS	4	5	4	5	4	5	4	10	25

COMPETENCIES	FINAL YEAR								
	51 MONTHS		54 MONTHS		57 MONTHS		60 MONTHS		TOTA
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
HEAD AND NECK SURGERY									
CLEFT LIP	3	5	3	5	4	5	4	5	20
CLEFT PALATE	3	5	3	5	4	5	4	5	20
RARE FACIAL AND CRANIOFACIAL CLEFTS	3	3	3	3	4	1	4	1	08
CONGENITAL NASAL DEFORMITIES		3	3	3	4	3	4	3	12
CONGENITAL EAR DEFORMITIES, MICROTIA	3	3	4	3	4	3	4	3	12
ALVEOLAR CLEFTS AND BONE GRAFTING	3	3	3	3	4	2	4	2	10
VELOPHARYNGEAL INSUFFICIENCY	3	3	3	3	4	3	4	3	12
CORRECTION OF SECONDARY LIP AND NASAL DEFORMITIES	3	5	4	3	4	3	4	3	14
NASAL RECONSTRUCTION	3	3	3	3	4	3	4	3	12
RECONSTRUCTION OF COMPLEX FACIAL SKELETON DEFECTS	3	3	3	3	4	2	4	2	10
FRACTURES OF FACIAL SKELETON	3	3	3	3	4	3	4	3	12
MAJOR HEAD NECK TUMOR RESECTION AND RECONSTRUCTION WITH LOCAL AND REGIONAL FLAPS	3	5	4	3	4	3	4	3	14
FACIAL REANIMATION	3	3	3	3	3	3	4	2	11

COMPETENCIES	FINAL YEAR								
	51 MONTHS		54 MONTHS		57 MONTHS		60 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
RECONSTRUCTION OF SCALP AND FOREHEAD	3	5	4	3	4	3	4	3	14
RECONSTRUCTION OF CHEEK	4	3	4	3	4	3	4	3	12
RECONSTRUCTION OF LIPS	3	5	4	3	4	3	4	3	14
MANDIBULAR RECONSTRUCTION	2	3	3	1	3	1	4	1	06
NECK RESURFACING AFTER CONTRACTURE RELEASE	3	5	4	5	4	5	4	5	20
RECONSTRUCTION OF AURICLE	3	3	3	3	4	3	4	3	12
PAROTID TUMORS	3	1	3	1	3	1	4	1	04
CUTANEOUS SURGERY									
SKIN LESION, EXCISION AND PRIMARY CLOSURE	4	5	4	5	4	5	4	5	20
SKIN LESION, EXCISION AND REPAIR BY LOCAL OR DISTSANT FLAPS.	4	5	4	5	4	5	4	3	12
TISSUE EXPANSION	4	3	4	3	4	3	4	3	12
REPAIR OF MAJOR SOFT TISSUE LOSSES	3	5	4	5	4	5	4	5	20
VASCULAR MALFORMATIONS	4	5	4	5	4	5	4	5	20
PRESSURE SORES	4	5	4	5	4	5	4	5	20
BURNS AND CONTRACTURE	4	10	4	10	4	10	4	10	40
ACUTE BURNS, EARLY TANGENTIAL EXCISION AND SKIN GRAFTING	4	10	4	10	4	10	4	10	40

COMPETENCIES	FINAL YEAR								
	51 MONTHS		54 MONTHS		57 MONTHS		60 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
ACTUE BURNS DESLOUCHING/SERIAL EXCISION AND SKING GRAFTING	4	10	4	10	4	10	4	10	40
POST BURN SCARS/HYPERTROPHIC SCARS AND KELOIDS	4	5	4	5	4	5	4	5	20
POST BURN CONTRACTURE	4	10	4	10	4	10	4	10	40
UPPER LIMB SURGERY									

FINGER TIP INJURIES	4	5	4	5	4	5	4	5	20
TENDON INJURIES (REPAIR)	4	5	4	5	4	5	4	5	20
TENDON GRAFTING	4	3	4	3	4	3	4	3	12
ACUTE HAND TRAUMA – INITIAL MANAGEMENT	4	10	4	10	4	10	4	10	40
SOFT TISSUE COVERAGE WITH LOCAL AND REGIONAL FLAPS	4	5	4	5	4	5	4	5	20
NERVE REPAIRS AND GRAFTING	4	5	4	5	4	5	4	5	20
TENDON TRANSFERS	4	3	4	3	4	3	4	3	12
CONGENITAL HAND DEFORMITY CORRRECTION	4	3	4	3	4	3	4	3	12
FIXATION OF FRACTURES AND CORRECTION	4	5	4	5	4	5	4	5	20
REDUCTION OF DISLOCATIONS	4	3	4	3	4	3	4	3	12
BRACHIAL PLEXUS EXPLORATION AND REPAIR	3	3	3	3	4	3	4	3	12

COMPETENCIES	FINAL YEAR								
	51 MONTHS		54 MONTHS		57 MONTHS		60 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
NERVE TRANSFERS	3	5	4	3	4	3	4	3	14
SURGERY FOR VIC	3	2	3	2	4	2	4	2	08
HAND INFECTIONS	4	5	4	5	4	5	4	5	20
AXILLARY DISSECTION	4	1	4	1	4	1	4	1	04
FUNCTIONAL MUSCLE TRANSFERS	3	2	3	2	4	1	4	1	06
LOWER LIMB SURGERY)									
LYMPHEDEMA SURGERY	3	1	3	1	4	1	4	1	4
LIMB SALVAGE PROCEDURES	3	10	3	10	4	3	4	3	26
GROIN DISSECTION	4	3	4	3	4	3	4	3	12
SOFT TISSUE COVERAGE OF EXPOSED BONE AND IMPLANTS WITH LOCAL FLAPS	4	10	4	10	4	10	4	10	40
SOFT TISSUE COVERAGE OF EXPOSED BONE AND IMPLANTS WITH FREE FLAPS	3	3	3	3	4	2	4	2	10
TRUNK SURGERY									
CHEST WALL RECONSTRUCTION	3	3	3	3	4	2	4	2	10
BREAST RECONSTRUCTION (PEDICLED FLAP)	3	3	3	3	4	2	4	2	10
BREAST RECONSTRUCTION (FREE FLAP)	3	2	3	2	4	1	4	1	6
ABDOMINAL WALL RECONSTRUCTION	3	5	3	5	4	3	4	3	16

COMPETENCIES	FINAL YEAR								
	51 MONTHS		54 MONTHS		57 MONTHS		60 MONTHS		TOTAL
	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	LEVEL	CASES	
PATIENT MANAGEMENT									
HYPOSPADIAS	3	5	3	5	4	3	4	3	16
EPISPADIAS	3	1	3	1	4	1	4	1	4

GENDER RE-ASSIGNMENT	3	1	3	1	3	3	4	2	7
VAGINAL RECONSTRUCTION	3	2	3	2	3	2	4	1	6
PENILE RECONSTRUCTION	3	2	3	2	4	1	4	1	6
AESTHETIC SURGERY									
FACE LIFT AND FOREHEAD LIFT	3	3	3	3	3	3	4	3	12
BLEPHROPLASTY	3	3	3	3	3	3	4	2	11
NATURAL AND ARTIFICIAL FILLER	3	3	3	3	3	3	4	3	12
BOTOX	3	3	3	3	3	3	4	5	14
RHINOPLASTY	3	5	3	5	3	5	4	3	18
PROMINENT EARS	3	5	4	3	4	3	4	3	14
HAIR RESTORATION SURGERY	3	5	3	5	4	5	4	5	20
DERMABRASION SURGERY AND CHEMICAL PEEL	3	3	3	3	4	3	4	3	12
AMBDOMINOPLASTY	3	5	3	5	4	3	4	3	16
LIPOSUCTION	3	5	3	5	4	5	4	5	20
BREAST REDUCTION	3	3	3	3	4	3	4	3	12
BREAST AUGMENTATION3	3	5	3	5	4	3	4	3	16
MASTOPEXY	3	3	3	3	3	3	4	2	11
GYNAECOMASTIA	4	5	4	5	4	5	4	5	20
LASER SURGERY	3	5	3	5	3	5	4	10	25

The resident is required to fill the procedure column in the Log-book with code given in the code column.

LIAQUAT UNIVERSITY OF MEDICAL AND HEALTH SCIENCES,

LOG BOOK

Trainees are required to maintain a logbook. These logbooks will be sent to examination department.

GUIDELINES FOR TRAINEES:

1. The logbook is intended for documenting all the activities performed by the trainee during training period.
2. Entries must commence from the start of the training program.
3. Trainees are advised to make the required entries on the day of the event. The immediate supervisor must sign all entries on the day of event.
4. Candidate is required to get logbook certified monthly by supervisor and quarterly by chairman and every six months by Dean and yearly by Director PG in order to maintain the performance record of the candidate.
5. Logbook should be submitted to the postgraduate section at the end of the course.
6. Completed and duly certified logbook will form a part of the application for appearing M.S Part II examination and would be made available during the practical examination.

GUIDELINES FOR SUPERVISORS:

1. This logbook is a day to day record of the clinical and academic work done by the trainee.
2. Its purpose is to assess the overall training of the candidate and to determine deficiencies if any so that they may be corrected.
3. The supervisor should ascertain that the entries in the logbook are complete in all respects. They should then certify the accomplishment of desired competency by signing in the appropriate column soon after the activity is conducted.
4. The head of unit shall authenticate the entries by signing the certificate.

THE SUMMARY SHEET:

1. This forms a part fo the formative assessment.
2. It identifies the various competencies as well as level of competence that has been achieved during a specified year of training.
3. The trainee should fill the number of encounter at each level of competence and also enter the total number of encounters at the end of each year.
4. Photocopy of the summary sheet every year shall e submitted to the PG section for maintain the PG record.

LIAQUAT UNIVERSITY OF MEDICAL AND HEALTH SCIENCES,

RESEARCH AND MANDATORY WORKSHOPS

RESEARCH (DISSERTATION)

Dissertation is part the training. Dissertation synopsis must be submitted to the PG section within the first year of training period for approval. As a word caution the **candidate is advice to select topic other the frequency/prevalence** as these are merely audit rather than true research. Based on approved synopsis, Trainees must submit 4 copies of dissertation along with copy of approved synopsis, to the university at the end of 4th year of training along with the prescribed fee for dissertation. Once reviewed by the assigned reviewers then only the dissertation will be considered APPROVED and a certificate to this effect will be issued. This certificate will form a part of the documents to be submitted along with the application form for taking the examination. Thesis has to be published as article before sitting in the final examination and proof of publication has to be submitted.
2 articles in-lieu dissertation can be submitted if article is published within 5 years of training. Proof of publication or acceptance for publication has to be submitted to appear in the final exam.

MANDATORY WORKSHOPS:

It will be mandatory for all trainees to attend the following workshops duly certified by the university for being eligible to appear in examination.

PGY 1

- Communication skills
- Research Methodology and Dissertation writing.
  - Synopsis writing
  - Research methodology
  - SPSS for data analysis
  - Thesis writing
  - Manuscript writing
- Computer and internet orientation.

PGY 2

- Core surgical skills
- Basic life support (BLS) and Advanced Trauma Life Support (ATLS)

EXAMINATION
FORMAT OF MID-TERM EVALUATION

Component I:

Type of Question	Total number of questions	Marks Reserved	Passing Marks
MCQ (Single best answer)	100	100	65%

Component II:

Type	**Number of stations**	**Marks Allocated**	**Passing Marks**
TOACS	12	120	65%

FORMAT OF EXAMINATION

Every candidate must pass both parts of the degree program

MS part II (Clinical)

Component I: **Allocated Marks:**

1. Theory examination of two papers. 200 marks
   (100 marks for each paper)

Type of Question	Total number of questions	Marks Reserved	Passing Marks
Paper I: MCQ (Single best answer)	100	100	65%
Paper II: MCQ (Single best answer)	100	100	65%

Component II: **Allocated Marks:**

Short and long essay and TOACS/OSCE**.** 300 marks
(100 marks for each paper)

Type	**Number of questions**	**Marks Allocated**	**Passing Marks**
A. Long Case	One Case	100	60%
B. Short Case	Two Cases	100	
C. OSCE		100	
Total		300	

Eligibility criteria:

Mid-term evaluation examination:

Synopsis submission and 2 years minimum training is mandatory to appear in Mid-term evaluation examination.

M.S final Examination:

Submission of Certificate of 5 years training along with rotation completion, approved dissertation/thesis with certificate of approval and publishing of thesis/ two articles in-lieu dissertation published with proof of publication and completed Logbook entries.

The candidate, who remains unsuccessful in component II examination, will have the opportunity to take next 2 consecutive component-II examinations. Failing to appear or failed to pass within 3 consecutive examinations, he/she shall have to repeat theory examination again.

Successful candidates will be awarded degree of Plastic Surgery of Liaquat University of Medical and Health Sciences.