



MAHATMA GANDHI UNIVERSITY
of
MEDICAL SCIENCES & TECHNOLOGY
JAIPUR

Super Specialty Courses

SYLLABUS

M.Ch. PLASTIC AND RECONSTRUCTIVE SURGERY

Notice

- Amendment made by the Medical Council of India in Rules/Regulations of Post Graduate Medical Courses shall automatically apply to the Rules/Regulations of the Mahatma Gandhi University of Medical Sciences & Technology (MGUMST), Jaipur.
- The University reserves the right to make changes in the syllabus/books/guidelines, fees-structure or any other information at any time without prior notice. The decision of the University shall be binding on all.
- The Jurisdiction of all court cases shall be Jaipur Bench of Hon'ble Rajasthan High Court only.

Syllabus of DM / M.Ch. Courses
M.Ch. PLASTIC AND RECONSTRUCTIVE SURGERY (9360)

Selection of Candidates:

There shall be a uniform entrance examination to all medical educational institutions at the Postgraduate level namely 'National Eligibility-cum-Entrance Test' for admission to postgraduate courses in each academic year and shall be conducted under the overall supervision of the Ministry of Health & Family Welfare, Government of India.

In order to be eligible for admission to Postgraduate Course for an academic year, it shall be necessary for a candidate to obtain minimum of marks at 50th percentile in the 'National Eligibility-Cum-Entrance Test for Postgraduate courses' held for the said academic year. However, in respect of candidates belonging to Scheduled Castes, Scheduled Tribes, and Other Backward Classes, the minimum marks shall be at 40th percentile. In respect of candidates with benchmark disabilities specified under the Rights of Persons with Disabilities Act, 2016, the minimum marks shall be at 45th percentile for General Category and 40th percentile for SC/ST/OBC.

The percentile shall be determined on the basis of highest marks secured in the All India Common merit list in National Eligibility-cum-Entrance Test for Postgraduate courses.

Provided when sufficient number of candidates in the respective categories fail to secure minimum marks as prescribed in National Eligibility-cum-Entrance Test held for any academic year for admission to Postgraduate Courses, the Central Government in consultation with Medical council of India may at its discretion lower the minimum marks required for admission to Post Graduate Course for candidates belonging to respective categories and marks so lowered by the Central Government shall be applicable for the academic year only.

The reservation of seats in Medical Colleges/institutions for respective categories shall be as per applicable laws prevailing in States/Union Territories. An all India merit list as well as State-wise merit list of the eligible candidates shall be prepared on the basis of the marks obtained in National Eligibility-cum-Entrance Test and candidates shall be admitted to Postgraduate Courses from the said merit lists only.

There shall be no admission of students in respect of any academic session beyond 31st August under any circumstances. The Universities shall not register any student admitted beyond the said date.

ELIGIBILITY:

S. No.	Area of Specialisation	Prior Requirement
1	DM Cardiology	MD (Medicine / Paediatrics)
2	DM Medical Gastroenterology	
3	DM Nephrology	
4	DM Neurology	
5	M.Ch. Cardio vascular & Thoracic Surgery	MS (Surgery)
6	M.Ch. Urology	
7	M.Ch. Neuro-Surgery	
8	M.Ch. Plastic Reconstructive Surgery	

Common Counseling:

There shall be a common counseling for admission to all Postgraduate Super specialty Courses (DM/ M.Ch.) in all Medical Educational Institutions on the basis of merit list of the National Eligibility-cum-Entrance Test.

Period of Training:

The period of training for obtaining DM/M.Ch Degrees shall be three completed years including the examination period.

Migration:

Under no circumstance, Migration/transfer of student undergoing any Super Specialty course shall be permitted by any University/Authority.

Staff - Faculty:

Only those teachers who possess 6 years teaching experience out of which at least 2 years teaching experience as Assistant Professor gained after obtaining the higher specialty degree shall be recognized post graduate teacher.

No teacher shall be considered as a postgraduate teacher in any other institution during the period till the postgraduate course at the institute which has been granted permission considering him as a postgraduate teacher is recognized u/s 11(2) of the Indian Medical Council Act, 1956.

Minimum staff required (Super-speciality):

- 1- Professor
- 1- Associate Professor
- 1- Assistant Professor
- 1- Senior Resident
- 2- Junior Resident

Training programme:

All the candidates joining the Post Graduate training programme shall work as 'Full Time Residents' during the period of training and shall attend not less than 80% (Eighty percent) of the imparted training during each academic year (Academic Term of 6 months) including assignments, assessed full time responsibilities and participation in all facets of the educational process.

No candidate shall be permitted to run a clinic/work in clinic/laboratory/nursing home while studying postgraduate super specialty course. No candidate shall join any other course or appear for any other examination conducted by this university or any other university in India or abroad during the period of registration.

Every institution undertaking Post Graduate training programme shall set up an Academic cell or a curriculum committee, under the chairmanship of a senior faculty member, which shall work out the details of the training programme in each speciality in consultation with other department faculty staff and also coordinate and monitor the implementation of these training Programmes.

The training programmes shall be updated as and when required. The structured training programme shall be written up and strictly followed, to enable the examiners to determine the training undergone by the candidates and the Medical Council of India inspectors to assess the same at the time of inspection.

The M.Ch. residents shall maintain a record (log) book of the work carried out by them and the training programme undergone during the period of training including details of surgical operations assisted or done independently by M.Ch. candidates.

The Record (Log) Books shall be checked and assessed periodically by the faculty members imparting the training.

During the training for award of Degree / Superspecialty in clinical disciplines, there shall be proper training in Basic medical sciences related to the disciplines concerned; so also in the applied aspects of the subject; and allied subjects related to the disciplines concerned. In the Post Graduate training programmes including both Clinical and Basic medical sciences, emphasis has to be laid on Preventive and Social aspects. Emergency care, facilities for Autopsies, Biopsies, Cytopsies, Endoscopy and Imaging etc. shall also be made available for training purposes.

The Post Graduate students shall be required to participate in the teaching and training programme of undergraduate students and interns posted in the department of Plastic & Reconstructive Surgery by rotation.

Training in Medical Audit, Management, Health Economics, Health Information System, basics of statistics, exposure to human behaviour studies, knowledge of pharmaco – economics and introduction to nonlinear mathematics shall be imparted to the Post Graduate students.

The teaching and training of the students shall include graded responsibility in the management and treatment of patients entrusted to their care; participation in Seminars, Journal Clubs, Group Discussions, Clinical Meetings, Grand Rounds, and Clinico-Pathological Conferences; practical training in Diagnosis and Medical and Surgical treatment; training in the Basic Medical Sciences, as well as in allied clinical specialities.

The training programme shall be on the same pattern as for M.D. / M.S. in clinical disciplines; with practical training including advanced Diagnostic, Therapeutic and Laboratory techniques, relevant to the subject of specialization. Postgraduate Superspecialty Residents in Surgical Specialties shall participate in Surgical operations as well.

A postgraduate student of a postgraduate degree course in super specialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

ENROLMENT AND REGISTRATION

Every candidate who is admitted to DM/MCh. course in Mahatma Gandhi Medical College & Hospital shall be required to get himself/herself enrolled and registered with the Mahatma Gandhi University of Medical Sciences & Technology upto November 30 of the year of admission without late fees upto December 31 of the year of admission with late fees after paying the prescribed eligibility and enrolment fees.

The candidate shall have to submit an application for the enrolment/eligibility along with the following original documents with the prescribed fees –

- (a) MD/MS pass Marks sheet/Degree certificate issued by the University.
- (b) Migration certificate issued by the concerned University (in case the University is other than the MGUMST).
- (c) Date of Birth Certificate
- (d) Certificate regarding registration with Rajasthan Medical Council / Medical Council of India / Other State Medical Council.

ELIGIBILITY TO APPEAR FOR UNIVERSITY EXAMINATION

1. **Work diary or Logbook:** Every candidate shall maintain a work diary for recording his/her participation in the training program conducted in the department. The work diary and logbook shall be verified and certified by the Department Head and Head of the Institution.
2. Every student would be required to present one poster presentation, to read one paper at a National/State Conference and to have one research paper which should be published/accepted for publication/ sent for publication to an indexed journal during the period of his/her post graduate studies so as to make him/her eligible to appear at the Post Graduate Degree Examination
3. **Attendance:** Every candidate shall have fulfilled the requirement of 80% attendance during each academic year of the postgraduate course (as per MCI rules)

EXAMINATIONS

The examination shall be held at the end of three academic years (six academic terms). The academic term shall mean six months training period. The examination shall consist of: Theory and Clinical/Practical and Oral.

The examinations shall be organised on the basis of 'Marking system' to evaluate and to certify candidate's level of knowledge, skill and competence.

For passing DM/M.Ch. examination as a whole, a candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory (2) Clinical / Practical and Oral examination.

(1) Theory:

There shall be four theory papers of 3 hours duration and 100 marks each. Out of the four theory papers, one Paper-I shall be on 'Basic Sciences', and another Paper-IV on 'Recent Advances'. The theory examination shall be held in advance before the Clinical and Practical examination, so that the answer books can be assessed and evaluated before the commencement of the clinical/Practical and Oral examination.

Paper I and II will be set by one external examiner from outside of the state and paper III and IV by another external examiner from outside of the state. The external examiner, who is paper setter for paper I & II shall evaluate the answer books of paper II. The external examiner, who is paper setter for paper III & IV shall evaluate the answer books of paper III. The answer books of paper I & IV shall be evaluated by internal examiners. The answer books of paper IV shall be evaluated by the Head of the Department and the answer books of paper I shall be evaluated by the second Internal Examiner.

Candidates will be required to attempt all the questions in every question paper. In Paper I, Paper II and Paper III there will be 10 questions. Each question shall carry 10 marks. In Paper IV there will be 5 questions of 20 marks each.

Obtaining a minimum of 40% marks in each theory paper and not less than 50% cumulatively in all the four papers shall be compulsory to pass the examination.

Nomenclature of Papers

Paper – I : Basic Sciences as related to Plastic and Reconstructive Surgery

Paper – II : Clinical Plastic and Reconstructive Surgery

Paper – III: Operative Plastic and Reconstructive Surgery

Paper – IV :Recent advances in Plastic and Reconstructive Surgery

(2) Clinical / Practical and Oral:

Clinical/Practical examination shall be conducted to test / aimed at assessing the knowledge and competence of the candidate for undertaking independent work as a specialist / teacher. Practical examination shall consist of carrying out special investigative techniques for Diagnosis and Therapy. M.Ch candidates shall also be examined in surgical procedures. Oral examination may be comprehensive enough to test the candidate's overall knowledge and competence about the subject, investigative procedures, therapeutic technique and other aspects of the super-specialty, which shall form a part of the examination.

There shall be one long case of 150 marks, two short cases of 75 marks each, Instruments/Radiology/Pathology/Bones & Splints / Operations (5 marks each) and Viva examination of 75 marks. Obtaining of 50% marks in Clinical / Practical and Oral examination shall be mandatory for passing the Clinical / Practical and Oral examination.

Result:

For passing DM/M.Ch. Examination, a candidate will be required to obtain at least 40% marks in each theory paper, 50% marks in the aggregate of all the four theory papers and 50% marks in the aggregate of Clinical / Practical and Oral examination separately. A candidate failing in any theory paper or in the aggregate of all four theory papers or Clinical / Practical and Oral examination shall have to repeat the whole DM/M.Ch. examination.

Grace Marks

No grace marks will be provided in DM/M.Ch. examinations.

Revaluation / Scrutiny

No Revaluation shall be permitted in the DM/M.Ch. examinations. However, the student can apply for scrutiny of the answer books as per University Rules

Examiners:

As per the Amendment Notification of the MCI dated June 5, 2017, no person shall be appointed as an internal examiner in any subject unless he/she has three years experience as recognized PG teacher in the concerned subject. For external examiners, he/she should have minimum six years of experience as recognized PG teacher in the concerned subject.

For all Post Graduate Super specialties examinations, the minimum number of Examiners shall be four, out of which at least two (50%) shall be External Examiners, who shall be invited from other recognised universities from outside the State.

Number of Candidates:

The maximum number of candidates to be examined in Clinical / practical and Oral on any day shall not exceed three for D.M./M.Ch examinations.

Number of Examinations:

The university shall conduct not more than two examinations in a year, for any subject, with an interval of not less than 4 and not more than 6 months between the two examinations.

MCh - PLASTIC AND RECONSTRUCTIVE SURGERY (9360)

The infrastructure and faculty of the department of Plastic & Reconstructive Surgery will be as per MCI guidelines

GOALS

The goal of MCh course is to produce a competent surgeon who:

- Recognizes the health needs of adults and carries out professional obligations in keeping with principles of National Health Policy and professional ethics;
- Has acquired the competencies pertaining to plastic surgery that are required to be practised in the community and at all levels of health care system;
- Has acquired skills in effectively communicating with the patients, family and the community;
- Is aware of the contemporary advances and developments in medical sciences.
- Acquires a spirit of scientific enquiry and is oriented to principles of research methodology; and has acquired skills in educating medical and paramedical professionals.

OBJECTIVES

At the end of the MCh Plastic Surgery, the student should be able to:

- Recognize the key importance of medical/surgical problems in the context of the health priority of the country;
- Practice the speciality of Plastic surgery in keeping with the principles of plastic surgery and professional ethics;
- Identify social, economic, environmental, biological and emotional determinants of adult Plastic Surgery and know the therapeutic, rehabilitative, preventive, surgical and promotion measures to provide holistic care to all patients;
- Take detailed history, perform full physical examination and make a clinical diagnosis;
- Perform and interpret relevant investigations (Imaging and Laboratory); Perform and interpret important diagnostic and surgical procedures;
- Diagnose illnesses in adults based on the analysis of history, physical examination and investigative work up;
- Plan and deliver comprehensive treatment for illness in adults using principles of rational drug therapy and principles of Plastic surgery;
- Plan and advise measures for the prevention of diseases; Plan rehabilitation of adults suffering from chronic illness, and those with special needs; Manage emergencies efficiently;
- Demonstrate skills in documentation of case details of morbidity and mortality data relevant to the assigned situation; Demonstrate empathy and humane approach towards patients and their families and respect their sensibilities;
- Demonstrate communication skills of a high order in explaining management and prognosis, providing counselling and giving health education messages to patients, families and communities.
- Develop skills as a self-directed learner, recognize continuing educational needs; use appropriate learning resources, and critically analyze relevant published literature in order to practice evidence-based medicine;
- Demonstrate competence in basic concepts of research methodology and epidemiology;
- Organize and supervise the desired managerial and leadership skills;
- Function as a productive member of a team engaged in health care, research and education.

SYLLABUS

Theory

Principles, Techniques, and Basic Sciences

- Techniques and principles in Plastic Surgery
- Wound Healing: Normal and Abnormal
- Wound care
- The Blood Supply of the Skin
- Muscle flaps and their Blood supply
- Transplant Biology and Applications to Plastic Surgery
- Implant Materials
- Principles of Microsurgery
- Microsurgical Repair of Peripheral Nerves and Nerve Grafts
- Tissue Expansion
- Local Anaesthetics
- Principles of Craniofacial distraction

Skin and Soft Tissue

- Dermatology for Plastic Surgeons
- Moh's Micrographic Surgery
- Congenital Melanocytic Nevi
- Malignant Melanoma
- Thermal, Chemical and Electric Injuries
- Principles of Burn Reconstruction
- Radiation and Radiation Injuries
- Lasers in Plastic Surgery
- Burns and Its Management

Congenital Anomalies and Pediatric Plastic Surgery

- Embryology of the Head and Neck
- Vascular Anomalies
- Cleft Lip and Palate
- Non syndromic Craniosynostosis and Deformational Plagiocephaly
- Craniosynostosis syndrome
- Craniofacial Microsomia
- Orthognathic Surgery
- Craniofacial Clefts and Hypertelorbitism
- Miscellaneous Craniofacial Conditions
- Otoplasty and Ear Reconstruction

Head and Neck

- Soft tissue and Skeletal injuries of the Face
- Head and Neck Cancer and Salivary Gland Tumors
- Skull Base Surgery
- Craniofacial and Maxillofacial Prosthetics
- Reconstruction of the Scalp, Calvarium and Forehead
- Reconstruction of the Lips
- Reconstruction of the Cheeks
- Nasal Reconstruction
- Reconstruction of the Eyelids, Correction of Ptosis and Canthoplasty

- Facial Paralysis
- Mandible Reconstruction
- Reconstruction of Defects of the Maxilla and Skull Base
- Reconstruction of the Oral Cavity, Pharynx and Esophagus

Aesthetic Surgery

- Cutaneous Resurfacing: Chemical Peeling, Dermabrasion and laser resurfacing
- Filler Materials
- Botulinum Toxin
- Structural Fat grafting
- Blepharoplasty
- Facelift
- Forehead Lift
- Rhinoplasty
- Liposuction
- Abdominoplasty and Lower Truncal Circumferential Body Contouring
- Facial Skeletal Augmentation with Implants
- Principles of Plastic Surgery after massive weight loss
- Osseous Genioplasty
- Hair Transplantation

Breast

- Augmentation Mammoplasty and its Complications
- Mastopexy and Mastopexy Augmentation
- Breast Reduction: Inverted-T Technique
- Vertical Reduction Mammoplasty
- Gynecomastia
- Breast Cancer for the Plastic Surgeon
- Breast Reconstruction: Prosthetic Techniques
- Latissimus Dorsi Flap Breast Reconstruction
- Breast Reconstruction: Tram Flap Techniques
- Breast Reconstruction- Free Flap Techniques
- Nipple Reconstruction

Trunk and Lower Extremity

- Thoracic Reconstruction
- Abdominal Wall Reconstruction
- Lower- Extremity Reconstruction
- Foot and Ankle Reconstruction
- Reconstruction of the Perineum
- Lymphedema
- Pressure Sores
- Reconstruction of the Penis

Hand

- Plastic Surgeons and the Development of Hand Surgery
- Principles of Upper Limb Surgery
- Radiologic Imaging of the Hand and Wrist
- Soft- tissue Reconstruction of the Hand
- Fractures and Ligamentous Injuries of the Wrist

- Fractures, Dislocations, and Ligamentous Injuries of the Hand
- Tendon Healing and Flexor Tendon Injury
- Repair of the Extensor Tendon System
- Infections of the Upper Limb
- Tenosynovitis
- Compression Neuropathies in the Upper Limb and Electrophysiologic Studies
- Thumb Reconstruction
- Tendon Transfers
- Congenital Hand Anomalies
- Dupuytren's Disease
- Replantation in the Upper Extremity
- Upper Limb Arthritis
- Upper Limb Amputation and Prosthesis
- Hand tumors
- Management of vasoconstriction
- Management of burned hand
- Targeted muscle reinnervation

Endoscopy in plastic surgery

Practical

(1) History, examination and writing of records:

- History taking should include the back ground information, presenting complaints and history of present illness, history of previous illness, family history, social and occupational history and treatment history.
- Detailed physical examination should include general examination and systemic examination (Chest, Cardio-vascular system, Abdomen, Central nervous system, locomotor system and joints), with detailed examination of the abdomen.
- Skills in writing up notes, maintaining problem oriented records, progress notes, and presentation of cases during ward rounds, planning investigations and making a treatment plan should be taught.

(2) Bedside procedures & Investigations:

- Therapeutic skills: Venepuncture and establishment of vascular access, Administration of fluids, blood, blood components and parenteral nutrition, Nasogastric feeding, Urethral catheterization, Administration of oxygen, Cardiopulmonary resuscitation, Endotracheal intubation.

Clinical Teaching

General, Physical and specific examinations of Maxillofacial & Hand Injuries should be mastered. The resident should be able to analyze history and correlate it with clinical findings. He should be well versed with all radiological procedures like CT Angio, CT Face with 3D Reconstruction and X-Ray of face. He should present his daily admissions in morning report and try to improve management skills, fluid balance, and choice of drugs. He should clinically analyse the patient & decide for pertinent Investigations required for specific patient.

Teaching Programme

(1) General Principals

Acquisition of practical competencies being the keystone of post-doctoral medical education, post-doctoral training is skills oriented. Learning in post-doctoral program is essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are merely meant to supplement this core effort.

(2) Teaching Sessions

The teaching methodology consists 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 inter-departmental meetings i.e clinico-pathological and clinico-radiological meetings that are organized regularly.

Trainees are expected to be fully conversant with the use of computers and be able to use databases like the Medline, Pubmed etc.

They should be familiar with concept of evidence based medicine and the use of guidelines available for managing various diseases.

(3) Teaching Schedule

Following is the suggested weekly teaching programme in the Department of Plastic & Reconstructive Surgery:

Sr. No.	Description	Frequency
1.	Central Teaching / Faculty lecture	Once a week
2.	Seminar / Journal club / Recent advances	Once a week
3.	Case Presentation	Once a week
4.	CCR	Once a week
5.	Grand Round/ Teaching Round	Once a week
6.	File Audit Meet	Once month
7.	Grand Round/Interdepartmental Meet	Once a month

Schedule of Posting

OPD: thrice a week

OT: thrice a week

Emergency: everyday

- The M Ch resident should do the dressings of the patient that have been operated/assisted by them and of patients in Burns ICU.
- The M Ch resident should note down the History and examination of admitted patients and should daily put progress notes in files.
- The normal working hours will be from **9.00 AM to 4.00 PM**. When on emergency duty, the resident is supposed to stay overnight in the resident room.

Conferences and Papers/posters/publications

- A resident must attend at least one conference per year.
- One Paper must be presented in at least 3 years.
- One Poster presentation in National/ State conference in at least 3 years
- One Publication - Published / Accepted / sent for publication in indexed journal.

Log Book : All the work done in department during the three year course will be recorded by the candidate in his/ her log book duly signed by consultant from time to time.

Assessment

All the MCh residents are assessed on daily basis as well as periodically on their academic

activities through written tests and practical tests periodically.

General Principles

- The assessment is valid, objective and reliable
- It covers cognitive, psychomotor and affective domains.
- Formative, continuing and summative (final) assessment is also conducted in theory as well as practical.

Formative Assessment

- The formative assessment is continuous as well as at the end of term.
- The former is based on the feedback from the consultants concerned.
- Formative assessment will provide feedback to the candidate about his/her performance and help to improve in the areas they lack.

Internal Assessment

The performance of the resident during the training period should be monitored throughout the course and duly recorded in the **log book as evidence of the ability and daily work of the student.**

Sr. No.	Items
1.	Personal Attributes
2.	Clinical Work
3.	Academic activities
4.	End of term theory examination
5.	End of term practical examination

Personal attributes:

- **Behaviour and Emotional Stability:** Dependable, disciplined, dedicated, stable in emergency situations, shows positive approach.
- **Motivation and Initiative:** Takes on responsibility, innovative, enterprising, does not shirk duties or leave any work pending.
- **Honesty and Integrity:** Truthful, admits mistakes, does not cook up information, has ethical conduct, exhibits good moral values, loyal to the institution.
- **Interpersonal Skills and Leadership Quality:** Has compassionate attitude towards patients and attendants, gets on well with colleagues and paramedical staff, is respectful to seniors, has good communication skills.

Clinical Work:

- **Availability:** Punctual, available continuously on duty, responds promptly on calls and takes proper permission for leave.
- **Diligence:** Dedicated, hardworking, does not shirk duties, leaves no work pending, does not sit idle, competent in clinical case work up and management.
- **Academic ability:** Intelligent, shows sound knowledge and skills, participates adequately in academic activities, and performs well in oral presentation and departmental tests.
- **Clinical Performance:** Proficient in clinical presentations and 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 bed side procedures and handling emergencies and surgical procedures .

Academic Activity:

- Performance during presentation at Journal club/ Seminar/ Case discussion meeting and other academic sessions. Proficiency in skills as mentioned in job responsibilities.

Summative Assessment

- Ratio of marks in theory and practical will be equal.
- The pass percentage will be 50%.
- Candidate will have to pass theory and practical examinations separately.

(A) Theory examination / Scheme

Sr. No.	Title	Marks
Paper –I	Basic Sciences as related to Plastic & Reconstructive Surgery	100
Paper-II	Clinical Plastic & Reconstructive Surgery	100
Paper-III	Operative Plastic & Reconstructive Surgery	100
Paper-IV	Recent advances in Plastic & Reconstructive Surgery	100
	Total	400

(B) Practical & Viva-Voce Examination

Sr. No.		Marks
1	Long Case (1)	150
2	Short Cases (2) 75 marks each	150
3	Instruments/Radiology/Pathology/Bones & Splints / Operations (5 marks each)	25
4	Grand Viva	75
	Total	400

Period of training**Magister of Chirurgiae (M.Ch.)**

The period of training for obtaining these degrees shall be three completed year (including the examination period) after obtaining M.S. degrees in General Surgery or its equivalent MCI recognized qualification. The training programme shall be on the same pattern as for M.D. / M.S. in clinical disciplines; practical training including advanced Diagnostic, Therapeutic and Laboratory techniques, relevant to the subject of Super-specialisation. For M.Ch. Candidates, there shall be participation in surgical operations.

JOB RESPONSIBILITIES**Outdoor Patient (OPD) Responsibilities**

- The working of the residents in the OPD should be fully supervised.
- They should evaluate each patient and write the observations on the OPD card with date and signature.
- Investigations should be ordered as and when necessary using prescribed forms.
- Residents should discuss all the cases with the consultant and formulate a management plan.
- Patient requiring admission according to resident's assessment should be shown to the consultant on duty.
- Patient requiring immediate medical attention should be sent to the casualty services with details of the clinical problem clearly written on the card.

- Patient should be clearly explained as to the nature of the illness, the treatment advice and the investigations to be done.
- Resident should specify the date and time when the patient has to return for follow up.

In-Patient Responsibilities

- Each resident should be responsible and accountable for all the patients admitted under his care. The following are the general guidelines for the functioning of the residents in the ward:
 - Detailed work up of the case and case sheet maintenance:
 - He/She should record a proper history and document the various symptoms.
- Perform a proper patient examination using standard methodology. He should develop skills to ensure patient comfort/consent for examination. Based on the above evaluation he/she should be able to formulate a differential diagnosis and prepare a management plan. Should develop skills for recording of medical notes, investigations and be able to properly document the consultant round notes.
 - To organize his/her investigations and ensure collection of reports.
 - Bedside procedures for therapeutic or diagnostic purpose.
 - Presentation of a precise and comprehensive overview of the patient in clinical rounds to facilitate discussion with senior residents and consultants.
 - To evaluate the patient twice daily (and more frequently if necessary) and maintain a progress report in the case file.
 - To establish rapport with the patient for communication regarding the nature of illness and further plan management.
 - To write instructions about patient's treatment clearly in the instruction book along with time, date and the bed number with legible signature of the resident.
 - All treatment alterations should be done by the residents with the advice of the concerned consultants and senior residents of the unit.

Admission day

- Following guidelines should be observed by the resident during admission day.
 - Resident should work up the patient in detail and be ready with the preliminary necessary investigations reports for the evening discussion with the consultant on duty.
 - After the evening round the resident should make changes in the treatment and plan out the investigations for the next day in advance.

Doctor on Duty

- Duty days for each Resident should be allotted according to the duty roster.
- The resident on duty for the day should know about all sick patients in the wards and relevant problems of all other patients, so that he could face an emergency situation effectively.
- In the morning, detailed over (written and verbal) should be given to the next resident on duty. This practice should be rigidly observed.
- If a patient is critically ill, discussion about management should be done with the consultant at any time.
- The doctor on duty should be available in the ward throughout the duty hours.

Resuscitation skills

- At the time of joining the residency programme, the resuscitation skills should be demonstrated to the residents and practical training provided at various work stations.

- Residents should be fully competent in providing basic and advanced cardiac life support.
- They should be fully aware of all advanced cardiac support algorithms and be aware of the use of common resuscitative drugs and equipment like defibrillators and external cardiac pacemakers.
- The resident should be able to lead a cardiac arrest management team.

Discharge of the Patient

- Patient should be informed about his/her discharge one day in advance and discharge cards should be prepared 1 day prior to the planned discharge.
- The discharge card should include the salient points in history and examination, complete diagnosis, important management decisions, hospital course and procedures done during hospital stay and the final advice to the patient.
- Consultants and DM Residents should check the particulars of the discharge card and counter sign it.
- Patient should be briefed regarding the date, time and location of OPD for the follow up visit.

In Case of Death

- In case it is anticipated that a particular patient is in a serious condition, relatives should be informed about the critical condition of the patient beforehand.
- Residents should be expected to develop appropriate skills for breaking bad news and bereavements.
- Follow up death summary should be written in the file and case sheet notes must be filled up and the sister in charge should be requested to send the body to the mortuary with respect and dignity from where the patient's relatives can be handed over the body.
- In case of a medico legal case, death certificate has to be prepared in triplicate and the body handed over to the mortuary and the local police authorities should be informed.
- Autopsy should be attempted for all patients who have died in the hospital especially if the patient died of an undiagnosed illness.

Bedside Procedures

The following guidelines should be observed strictly:

- Be aware of the indications and contraindications for the procedure and record it in the case sheet. Rule out contraindications like low platelet count, prolonged prothrombin time, etc.
- Plan the procedure during routine working hours, unless it is an emergency. Explain the procedure with its complications to the patient and his/her relative and obtain written informed consent on a proper form. Perform the procedure under strict aseptic precautions using standard techniques. Emergency tray should be ready during the procedure.
- Make a brief note on the case sheet with the date, time, nature of the procedure and immediate complications, if any.
- Monitor the patient and watch for complications(s).

OT responsibilities

- The 1st year resident observes the general layout and working of the OT, understands the importance of maintaining sanctity of the OT, scrubbing, working and sterilization of all the OT Instrument, know how to make use of microscopes. He/ She is responsible for shifting of OT patients, for participating in surgery as 2nd assistant and for post operative

management of patient in recovery and in ward. The 2nd year resident is responsible for pre op work up of the patient, surgical planning and understanding the rationale of surgery. He/she is the first assistant in surgery and is responsible for anticipating intra op and post op complications and managing them. The final year resident should be able to perform minor/medium/major surgeries independently and assist in medium/major/extra major surgeries. He/she should be able to handle all emergencies and post op complications independently and is responsible for supervision and guidance of his/her juniors.

Medico-Legal Responsibilities of the Residents

- All the residents are given education regarding medico-legal responsibilities at the time of admission in a short workshop.
- They must be aware of the formalities and steps involved in making the correct death certificates, mortuary slips, medico-legal entries, requisition for autopsy etc.
- They should be fully aware of the ethical angle of their responsibilities and should learn how to take legally valid consent for different hospital procedures & therapies.
- They should ensure confidentiality at every stage.

SUGGESTED BOOKS & JOURNALS:

Suggested Books

- Mathes: Principles & Practices of Plastic surgery
- Grabb & Smith: Plastic surgery
- Mc Gregor: Fundamental techniques of Plastic surgery
- Mc Carthy: Current therapy in Plastic surgery
- Rees: Aesthetic plastic surgery
- Green's: Operative Hand surgery
- Grab's: Encyclopedia of flaps

Suggested Journals

- Plastic and Reconstructive Surgery journal
- Journal of Plastic Reconstructive and Aesthetic Surgery
- Burns
- Plastic Surgery Clinics
- Hand Clinics

MODEL PAPER

M.Ch.-9361

Plastsurg.-I

**M.Ch. Examination Month, Year
PLASTIC AND RECONSTRUCTIVE SURGERY**

**Paper-I
Basic Sciences as Related to Plastic and Reconstructive Surgery**

Time : Three Hours
Maximum Marks : 100

Attempt all questions
All questions carry equal marks (**10 marks each**)
Draw diagrams wherever necessary

- Q.1 Describe anatomical basis of Le Fort Fractures
- Q.2 Write a note on structure of skin and explain basis of graft “take”.
- Q.3 Describe LASER as applicable to hair reduction.
- Q.4 What is the role of orthodontist in the management of Cleft lip and Palate?
- Q.5 What is the structure of silicone? Describe its various forms and discuss its applications.
- Q.6 Describe the applied anatomy of Temporo-parietal fascial flap. What are its uses?
- Q.7 Tissue adhesives in Plastic Surgery
- Q.8 ARDS.
- Q.9 Enumerate the muscles supplied by Median nerve. How do you manage a case of “Carpal Tunnel Syndrome”?
- Q.10 Burn Sepsis

MODEL PAPER

M.Ch.-9362

Plastsurg.-II

**M.Ch. Examination Month, Year
PLASTIC AND RECONSTRUCTIVE SURGERY**

**Paper-II
Clinical Plastic and Reconstructive Surgery**

**Time : Three Hours
Maximum Marks : 100**

Attempt all questions
All questions carry equal marks (**10 marks each**)
Draw diagrams wherever necessary

- Q.1 Discuss surgical management of Carinoma of Buccal mucosa.
- Q.2 Discuss the etiopathology, clinical features and management of Temporo Mandibular Joint [TMJ] ankylosis.
- Q.3 Describe the relevant surgical anatomy, mechanism of injury, clinical features and management of avulsion injury of Scalp.
- Q.4 Use of various forms of Silver in burns.
- Q.5 Storage of skin grafts.
- Q.6 Post burn reconstruction of moustache.
- Q.7 Classification according to burn depth.
- Q.8 Classify syndactyly. How to manage Complex syndactyly
- Q.9 Discuss management of Comminuted fracture of manible
- Q.10 Delto pectoral flap

MODEL PAPER

M.Ch.-9363

Plastsurg.-III

**M.Ch. Examination Month, Year
PLASTIC AND RECONSTRUCTIVE SURGERY**

**Paper-III
Operative Plastic and Reconstructive Surgery**

**Time : Three Hours
Maximum Marks : 100**

Attempt all questions
All questions carry equal marks (**10 marks each**)
Draw diagrams wherever necessary

- Q.1 Discuss the rationale and technique of Alveolar bone grafting and management of Palatal fistula.
- Q.2 Discuss Pathological anatomy and various options for correction of unilateral hair lip nose.
- Q.3 Describe the resuscitation of a child with burn injuries.
- Q.4 Discuss methods for estimation of size and depth of burn wounds and prognostic factors in a burn patient.
- Q.5 Bleparoplasty
- Q.6 Double opposing Z Plasty
- Q.7 Full thickness graft
- Q.8 Swan neck deformity of the digits.
- Q.9 Monitoring free flap
- Q.10 Protruding pre maxilla

MODEL PAPER

M.Ch.-9364

Plastsurg.-IV

**M.Ch. Examination Month, Year
PLASTIC AND RECONSTRUCTIVE SURGERY**

**Paper-IV
Recent Advances in Plastic and Reconstructive Surgery**

**Time : Three Hours
Maximum Marks : 100**

Attempt all questions
All questions carry equal marks (**20 marks each**)
Draw diagrams wherever necessary

Write an essay on:

- Q.1 Fat grafting :uses, methods and recent trends in body contouring .
- Q.2 Endoscopic plastic surgery
- Q.3 Wound healing phases , various factors affecting healing and newer techniques to facilitate the process
- Q.4 Alloplastic implant types uses and recent methods in use
- Q.5 Face transplant history methods use of stimulators with ethical and medicolegal issues and cosmetic aspects .