



SRM
UNIVERSITY
(Under section 3 of UGC Act 1956)



M.Ch Plastic and Reconstructive surgery

Curriculum and Syllabus 2014

Branch Code: 404

SRM Medical College Hospital & Research Centre

SRM University

SRM Nagar, Kattankulathur

Kancheepuram (Dt). 603 203

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1. GOALS:

The aim of teaching postgraduate students in Plastic surgery is to prepare them to have adequate knowledge in the subject, covering both theoretical and practical knowledge, in accordance with the institutional goals.

OBJECTIVES:

KNOWLEDGE:

At the end of the course, upon successful completion of training and passing the examination the student is expected to

1. Acquire comprehensive knowledge of the basics of Plastic surgery including all allied specialties.
2. Possess a complete knowledge of all the commonly used plastic surgery procedure.
3. Possess knowledge of the recent advances in the subject of plastic surgery and all its allied specialties and working knowledge of the sophisticated and routine equipments, consumables used in plastic surgery .
4. Possess knowledge of principles of research work in the field of plastic surgery in both the Clinical and experimental field with the ability to usefully analyze data.

SKILLS

1. Diagnose and manage majority of conditions in the specialty of plastic surgery on the basis of clinical assessment, and appropriately selected and conducted investigations.
2. Possess complete Clinical Diagnostic Skills for the recognition of plastic surgical procedures.
3. Able to apply sound clinical judgement and rational cost effective investigations for the diagnosis and management of Plastic surgery cases in the OPD, Wards, Emergency Room and Intensive Care unit.

4. Able to teach undergraduate students MBBS and Post Graduate Students MS General surgery students.
5. Able to perform Clinical and Investigative studies and to present in Seminars, meetings and conferences etc.
6. Have the ability to organise specific teaching and training programmes for para medical staff, associated professionals and patient education programmes.
7. Should be able to develop good communication skills and give consultations to all other departments of the hospital.
8. Demonstrate skills in documentation of individual case details as well as morbidity and mortality data relevant to the assigned situation.
9. Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectation.
10. Develop skills as a self-directed learner, recognise continuing educational needs: select and use appropriate learning resources.
11. Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.

HIGHLIGHTS :

This curriculum has at its core MCI recommendations. An attempt has been made to incorporate newer trends in teaching methodology as well as to include recent advances in plastic surgery in the syllabus. This holistic approach is designed so that a graduate once he acquires the Degree is able to discharge the responsibility of a plastic surgeon.

Clinical subjects must essentially be based on bedside teaching. Therefore clinical posting in plastic surgery is oriented towards teaching in ward, OPD and emergency departments.

Curriculum objective has been to impart essential clinical knowledge so that he/ she becomes capable of working up and treating a plastic surgical problem in a logical way inculcating socioeconomic aspects also in care.

MCI has allocated approximately 300 hours for teaching plastic surgery including didactic lectures, demonstration and the seminars in addition to clinical postings.

These recommendations have been taken into consideration while designing the curriculum & the teaching hours have been spread over the three year course.

During the period of training, the candidates follow in-service training-cum-residency programme. He/ she works as a Senior Resident and is given gradually increasing responsibility in decision making process in the clinical and investigative aspects of plastic surgery, aesthetic surgery, oncoplastic surgery, burns, hand surgery and the faciomaxillary surgery and micro surgery.

The day-to-day work of the trainees is supervised by the Professors in the department of plastic surgery. The posting is so organized that the trainee gets posted in various areas of the department like OPD, wards, laboratories etc.

He / She participates in the consultation service provided by the department to the Institute. Besides in-service activities a programmed of bedside demonstrations, seminars, tutorials, group discussion, workshops, journal clubs and lectures is also organized. He /She will also be exposed to various surgical procedures. He/she will also be exposed to visit other plastic surgical centres where special procedures are under taken.

2. COURSE OVERVIEW.

DURATION OF THE COURSE

The period of certified study and training for Post-Graduates M.ch. Plastic Surgery shall be Three Academic Years.

COMMENCEMENT OF ACADEMIC SESSION

The academic session for the Post Graduate shall commence from August/September of the Academic Year.

DATE OF EXAMINATION

The candidates admitted up to 30th September of the academic year shall be registered for that academic year and shall take up their Final Third Year regular examination in August/September of the due year and February/March of the academic year after completion of three (3) years.

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 more than 6 months between the two examinations.

ATTENDANCE

All students joining the postgraduate training programme shall work as full time residents during the period of training, attending not less than 80% of the traing during each calendar year, and will be given full time responsibility, assignments and participation in all facets of the educational process. The period for obtaining the degree shall be three completed years including the period of examination.

BRANCH – III M.Ch. PLASTIC AND RECONSTRUCTIVE SURGERY

Scope

The qualification of M.Ch in Plastic and Reconstructive Surgery should signify adequate training and practical competence to undertake major plastic surgery with safety at the level of a prior specialist-consultant and as medical teachers. The term Plastic and Reconstructive Surgery is used in its wider sense, including all its such areas termed reconstructive surgery, craniofacial surgery, hand surgery, aesthetic surgery, micro vascular surgery and surgery for management of burns and their sequelae.

Written:

Four papers each of three hours duration:

Paper –I : Applied Basic Sciences, principles and general techniques including applications of anatomy to Plastic Surgery, Genetics physiology, Biophysics, Biochemistry, Pharmacology, Microbiology, Pathology, Anesthesiology, Radiotherapy, Orthodontics, Physiotherapy, occupational therapy, Speech therapy, Nursing, Historical aspects of plastic surgery, grafts and flaps, wound healing, asepsis, dressing techniques, infection control, suture materials, powered instruments, ventilatory support and causes of morbidity and mortality.

Paper –II: Practice of plastic surgery in burns, head injuries, maxillofacial and craniofacial injuries, methods of providing skin cover for defect, replacing loss of other tissues, analysis and planning treatment of complex deformities, oral and skin cancers and general plastic surgery.

Paper –III: Operative surgery and special aspects of reconstruction, aesthetic surgery, micro vascular, hand, cranio-maxillofacial surgery and endoscopic procedures.

Paper – IV: Recent Advances.

Clinical & Table Viva:

Long case: In one hour, the candidate should make his/her clinical assessment, diagnosis and treatment plan. The examiners should lead the discussion to test the candidate's performance as a consultant faced with full responsibility for the patient's care.

Short Case: A selection of 4 short cases covering a wide range of plastic surgical problems should be given to the candidate.

Table Viva: This covers the candidates familiarity with pathological specimens, photographs, X-rays, appliances, dental models and instruments of relevance to plastic surgical work should be tested. Surgical anatomy, operative surgery and practical details of plastic surgical procedures, his/her work record, and final evaluation of his/her competence as a plastic surgeon.

METHODOLOGY OF THE CURRICULUM

Cognitive:

1. Seminars to review a subject.
2. Journal clubs to review relevant articles.
3. Tutorials with consultants and guest lectures.
4. Providing a well-stocked library

Improving clinical judgment:

1. Comprehensive teaching and ward rounds.
2. Treatment planning sessions.
3. Collaboration with allied specialists,
Orthodontist, Speech therapist, radiotherapist,
Physiotherapist lectures to be arranged.
4. Surgical audit – monthly morbidity and mortality meeting.
5. Where a department is deficient in a sub-speciality of Plastic Surgery, it is mandatory that the trainee spends 3 months in a department having the sub-speciality under supervision of the consultant.

Developing Skills :

1. Develop daily departmental program including emergencies.
2. Graduated increasing responsibility.
3. Familiarity with construction of simple splints for hand and burn injuries and dental models and appliances.
4. Experimental micro vascular Surgery training
5. Knowledge of information retrieval using computers.
6. Knowledge of clinical photograph / documentation.
7. Knowledge of clinical epidemiology.

Develop critical faculties :

1. Maintain records and analyze data.
2. Presentations at clinical meetings, conferences.
3. Write scientific papers.
4. Thesis-research and investigate with limited objective clinical problems.
5. Ethical basis of practice of Plastic Surgery.

3. SYLLABUS for M.Ch., (Plastic and Re-constructive surgery) Course

General Principles:-

1. History of Plastic Surgery and its broad scope at the present time.
2. Anatomy and functions of skin.
3. Split skin grafts and full thickness skin grafts, their take and subsequent behaviour.
4. Local skin flaps.
5. Pedicled skin flaps and tubes.
6. Unstable scar and scar contracture.
7. Care of wounds, dressing, techniques and splints.
8. Wound healing.
9. Grafts – fat, fascia, tendon, nerve, cartilage, bone.
10. Infective skin gangrene.
11. Hospital infections
12. Suture materials.
13. Surgical instruments.
14. Implant materials used in Plastic Surgery.
15. Principles of genetics and general approach to the management of congenital malformations.
16. Flaps – Fasciocutaneous, muscle, musculocutaneous, osteomyocutaneous.
17. Local anaesthesia, nerve blocks, regional anaesthesia.
18. Principles of anaesthesia for infants, adults, hyperthermia, hypotensive anaesthesia.
19. Tissue expansion.
20. Keloid, hypertrophic scars.
21. Endoscopy in Plastic Surgery.

Face:-

1. Growth and development of face, anatomy of facial skeleton.
2. Structure and development of teeth.
3. Leprosy deformities of face.
4. Temporomandibular joint dysfunctions.

5. Fractures – nose, maxilla, mandible, zygoma, orbit – early management and treatment of sequelae.
6. Corrective Rhinoplasty.
7. Reconstructive Rhinoplasty.
8. Facial paralysis
9. Reconstruction of external ear.
10. Reconstruction of eyelids, ptosis.
11. Congenital deformities of face and jaw bone.

Cleft Lip and Palate and Craniofacial Anomalies:-

1. Embryology of head and neck (excluding central nervous system)
2. Regional anatomy of head and neck.
3. Embryogenesis of cleft lip and palate.
4. Cleft lip and palate, alveolar clefts.
5. Velopharyngeal incompetence.
6. Orthodontics, speech therapy in cleft lip and palate.
7. Principles of craniofacial surgery.
8. Rare craniofacial clefts, Tessier's clefts.
9. Craniosynostosis, hypertelorism, craniofacial microsomia.

Tumours of Head and Neck and Skin :-

1. Vasoformative lesions of the skin and adenexa.
2. Jaw tumours.
3. Cancer of upper Aerodigestive system.
4. Reconstruction of mandible.
5. Reconstruction of maxilla.
6. Malignant and benign tumours of head and neck.
7. Tumours of skin.
8. Principles of prosthetic replacement of jaw defects.

Trunk :-

1. Reconstruction of full thickness defects of the abdomen and thorax.
2. Decubitus ulcer.
3. Breast reconstruction

Aesthetic Surgery :-

1. Chemical peeling and dermabrasion.
2. Blepharoplasty
3. Face lift.
4. Abdominoplasty.
5. Body contouring, liposuction.
6. Reduction mammoplasty.
7. Augmentation mammoplasty
8. Laser therapy.
9. Aesthetic Rhinoplasty.

Lower Extremity :-

1. Functional anatomy of foot.
2. Lymphedema.
3. Reconstructive surgery of lower extremity.
4. Leprosy deformities of leg and foot.

Genito Urinary system :-

1. Embryology of the male and female external genitalia.
2. Anatomy of the male and female external genitalia.
3. Hypospadias.
4. Epispadias and ectopia vesicae.
5. Reconstruction of external genitalia.
6. Vaginoplasty.
7. Trans sexualism (intersex).

Hand:

1. Embryology of upper extremity
2. Functional anatomy of hand
3. Examination of hand.
4. General principles of hand surgery.
5. Treatment of acute hand injuries.
6. Finger tip injuries.
7. Flexor tendon injuries.
8. Extensor tendon injuries.
9. Principles of reconstruction in mutilating hand injuries.

10. Fractures of hand and dislocation of hand – metacarpal, phalanges.
11. Nail injuries, grafting.
12. Pollicisation.
13. Thumb reconstruction.
14. Peripheral nerve injuries, electro diagnostic tests
15. Brachial plexus injury
16. Innervated flaps.
17. Vascular malformations of upper extremity
18. Lymphedema in upper extremity.
19. Ischaemic conditions of upper extremity.
20. Vasospastic disorders of hands.
21. Nerve compression syndromes.
22. Surgery for spastic and tetraplegic hand.
23. Problem of small joints.
24. Dupuytren's disease.
25. Principles and treatment of old and neglected hand deformities.
26. Rheumatoid arthritis of hand.
27. Hand infections.
28. Congenital deformities of hand, finger, thumb.
29. Tendon transfers for radial, ulnar and median nerve injury.
30. Leprosy deformity of hand.
31. Benign and malignant tumours of hand.
32. Rehabilitation of hand, prosthesis.

Microvascular :-

1. Principles of microsurgery and its applications in plastic surgery.
2. Replantation and revascularization.
3. Microvascular tissue transfers.

Burns :-

1. Thermal burns.
2. Electrical burns.
3. Chemical burns.
4. Radiation burn.
5. Pathophysiology of burn shock.
6. Nutrition in burns.

7. Facial burns
8. Tangential excision and sequential excision.
9. Reconstruction of burn hand and upper extremity.
10. Post burn contractures – treatment of sequelae.
11. Burn wound infection, sepsis.
12. Principles of planning in event of burn disaster.
13. Organisation of Burns Unit.

4. MAINTENANCE OF LOG BOOK

1. The post graduate students shall maintain a record of day to day activities carried out by them and training program undergone including details of procedure carried out individually or assisted. They will also incorporate details of rare cases discussed in the clinical discussions and references from the literatures for the rare case.
2. The students shall record the details of the journals they discussed in the journal club.
3. The log book should contain various CMEs and conferences (National & International) attended by the student during the study period.
4. The students should record the teaching sessions and the topic discussed by the faculty during their visit to other centres of excellence during the second year.

5. Thesis

Every student registered as post graduate shall carry out on an assigned research project under the guidance of a recognized post graduate teacher, the result of which shall be written up and submitted in the form of a thesis.

Work for writing the thesis is aimed at contributing to the development of a spirit of enquiry, besides exposing the students to the techniques of research, critical analysis, acquaintance with the latest advances in medical science and the manner of identifying and consulting available literature. Thesis shall be submitted at least six months before the theoretical and clinical / practical examination.

The thesis shall be a bound volume of a minimum of 50 pages and not exceeding 75 pages of typed matter (double line spacing and on one side only) excluding certification, acknowledgements, annexure and bibliography.

Thesis should consist of:

- Introduction
- Review literature
- Aims and objectives
- Materials and methods
- Result
- Discussion
- Summary and conclusion
- Tables
- Annexure
- Bibliography
- Ethical committee clearance certificate

Four copies of the thesis shall be submitted six month prior to the commencement of the theory examination on the date prescribed by the Controller of Examination of this University. The thesis should be approved by the Professor of the branch and the same to be forwarded to the Controller of Examination, by the Head of the Department through the Dean of the college.

Two copies in addition are to be submitted as an electronic version of the entire thesis in a standard CD format by mentioning the details and technicalities used in the CD format.

The thesis shall be examined by a minimum of three examiners; one internal and two external examiners, who shall not be the examiners for Theory and Clinical; and on the acceptance of the thesis by examiners, the candidate shall appear for the final examination.

EVALUATION OF THESIS:

ACCEPTED/ NOT ACCEPTED

No marks will be given.

6. SCHEME OF EXAMINATIONS:

PATTERN OF EXAMINATION:

Theory – papers 100 Marks each Duration: Three hours each

Paper – I	Applied Basic Sciences and General Principles in Plastic Surgery.	100
Paper – II	Plastic Surgery Regional	100
Paper – III	Plastic Surgery Applied	100
Paper – IV	Plastic Surgery as applied to Allied Sciences and Recent Advances in Plastic Surgery.	100

DISTRIBUTION OF MARKS

EACH THEORY PAPER:

TEN SHORT NOTES	10 MARKS EACH (10 X 10)	100 MARKS
		<hr/>
TOTAL MARKS		100 MARKS
		<hr/>

PRACTICAL / CLINICAL AND ORAL EXAMINATION

MARKS	NO_OF CASES	DURATION	
LONG CASE	ONE	ONE HOUR	100
SHORT CASE	TWO	ONE HOUR (30 MIN EACH)	100
WARD ROUNDS	FOUR (MINIMUM)	ONE HOUR	100
ORAL / VIVA EXAMINATION			100
			<hr/>
TOTAL			400
			<hr/>

DISSERTATION : APPROVED / NOT APPROVED (NO MARKS)

LOG BOOK : SUBMITTED / NOT SUBMITTED (NO MARKS)

MARKS QUALIFYING FOR PASS

	MAXIMUM MARKS	PASS MARKS
THEORY	400	200
CLINICAL	300	150
ORALS	100	50
AGGREGATE	<hr/> 800 <hr/>	<hr/> 400 <hr/>

MARKS QUALIFYING FOR A PASS

MARKS QUALIFYING FOR A PASS	MAXIMUM MARKS	QUALIFYING FOR A PASS 50% MARKS
Theory Examination	400	200
Practical Including Clinical & Oral / Viva	400	200

A student shall secure not less than 50% marks in each head of passing, which shall include 1. Theory 2. Practical including clinical and viva voice examination.

* "The postgraduate medical students are required to pass theory and practical examinations separately. An examinee should obtain minimum 40% marks in each theory paper and not less than 50% marks cumulatively in all the four papers for Degree examination to be cleared as "Passed" at the said Degree examination"

**As per Medical Council of India notification date 03.09.2014 and the same approved in the 28th Academic council meet of SRM University held on 23/03/2015.*

SPECIAL POSTINGS:

	Duration	Institution
Micro surgery Training	15 days	Ethicon / Amirtha Institute
OFMS Training	15 days	SRM Dental Hospital
Hand Surgery	15 days	Govt. Stanley Hospital
Cleft lip and palate	15 days	Adenwalla Training centre, Thiruchur.
Burns Training	10 days	Kilpauk Medical College.
Paediatric Surgery	10 days	Institute of Child Health.
Speech therapy	10 days	SRM Hospital.

7. EXAMINATION AND EVALUATION

APPRAISAL:

To Improve the M.Ch Training Programme by having appraisal for Postgraduate trainees.

Accordingly, the assessment of the postgraduate, review of the progress and appraisal infrastructure and facilities will be carried out.

The Department shall conduct periodic assessment tests of the Postgraduate student as per the guidelines issued from time to time.

At the end of 3 years the appraisal report will be submitted.

(1) EXAMINERS

(a) All the post graduate examiners shall be recognized post graduate teachers holding recognized post graduate qualifications in the subject concerned.

(b) For all post graduate 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 recognized universities from outside the State and other two will be internal examiners for M.Ch.

(c) Under exceptional circumstances, examinations may be held with 3 (THREE) examiners provided two of them are External and Medical Council Of India is intimated the justification of such action prior to publication of result for approval. Under no circumstances, result shall be published in such cases without the approval of Medical Council Of India.

(d) In the event of three being more than one centre in one city, the external examiners at all the centers in that city shall be the same. Where there is more than one centre of examination, the University shall appoint a supervisor to coordinate the examination on its behalf.

(e) The guidelines regarding appointment of examiners are as follows:-

1. No person shall be appointed as an examiner in any subject unless he/she fulfils the minimum requirements for recognition as a Post Graduate teacher as laid down by the Medical Council Of India and has teaching experience of 8 (Eight) years as a Lecturer / Assistant Professor out of which he/she has not less than 5 (five) years teaching experience after obtaining Post Graduate degree. For external examiners, he/she should have minimum three years experience of examinership for Post Graduate Diploma in the concerned subject. Out of internal examiners, one examiner shall be a professor or Head of Department.

2. There shall be at least four examiners in each subjects at an examination out of which at least 50% (Fifty percent) shall be external examiners. The external examiner who fulfils the condition laid down in clause – 1 above shall ordinarily be invited from another recognized University, from outside the state: provided that in exceptional circumstances examinations may be held with 3 (three) examiners if two of them are external and Medical Council Of India is intimated with the justification of such examination and the result shall be published in such a case with the approval of Medical Council Of India.

3. An external examiner may be ordinarily been appointed for not more than three years consecutively. Thereafter he/she may be reappointed after an interval of two years.

4. The internal examiner in a subject shall not accept external examinership for a college from which external examiner is appointed in his/her subject.

5. The same set of examiners shall ordinarily be responsible for the written, practical or part of examination.

6. There shall be a Chairman of the Board of Paper – setters who shall be an external examiner and shall moderate the question papers.

7. Where there is more than one centre of examination, there shall be Co-Ordinator appointed by the University who shall supervise and Co-

Ordinate the examination of behalf of the University with independent authority.

(2). NUMBER OF CANDIDATES:

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

(3).NUMBER OF EXAMINATION:

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 examinations.

Master of Chirurgery (M.Ch) Plastic Surgery.

The Examination shall consist of: Theory and Clinical / Pratical and Oral.

(a). Theory

There shall be four theory papers; one paper out of these shall be one Basic Medical Sciences, and another paper on Recent Advances. The theory examination will be held sufficiently earlier than the Clinical and Practical examination, so that the answer books can be assessed and evaluated before the start of the Clinical / Pratical and Oral Examination.

(b). Clinical / Pratical and Oral

Practical examination shall consist of carrying out special investigation technique for Diagnosis and Therapy. Oral examination shall be comprehensive to test the candidate's overall knowledge of the subject.

A Candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory (2) Practical including clinical and viva voice examination.

EVALUATION OF ANSWER SCRIPTS

The answer books shall be valued by two examiners. One of the two examiners will be from this university and the other will be from any other university. The average of the two marks secured by the candidate will be taken into account. If the difference between two marks exceeds 20%, the answer script shall be valued by the third examiner. The average of the nearest two marks shall be considered as the final marks.

8. MODEL QUESTION PAPER

M.CH DEGREE EXAMINATIONS

(Higher Specialities)

Plastic surgery

Paper I – BASIC SCIENCES

Time: Three hours

Maximum: 100 Marks.

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essay Question: 02 x 20 = 40 Marks

1. Principles of Evidence Based Surgery.
2. Management of Scalp defects.

II. Short notes: 10 x 06 = 60 Marks

1. Extensor Apparatus
2. Properties of skin and its application in plastic surgery
3. Keloid path physiology and its management
4. Tumescence Anaesthesia
5. Autogenous fat transplantation and application
6. Assessment of VPI
7. NOMA
8. Blow out fracture
9. Anatomy of zygoma and its management
10. Nodo-venous shunt

M.CH DEGREE EXAMINATIONS

(Higher Specialities)

Plastic surgery

Paper II – REGIONAL

Time: Three hours

Maximum: 100 Marks.

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essay Questions:

02 x 20 = 40 Marks

1. Reconstruction of Maxilla.
2. Reconstruction of mandible.

II. Short notes:

10 x 06 = 60 Marks

1. Principles in tendon transfer
2. Method of optimizing outcome in abdominoplasty
3. Temporoparietal facial flap
4. Facelift methods & advantages and disadvantages
5. Cranial anatomy & the developmental anomalies
6. Principles in the treatment of craniofacial clefts.
7. Osteointegrated implants
8. Principles of eye lid reconstruction
9. Gracilis muscle for various flaps
10. Anterolateral thigh flap

M.CH DEGREE EXAMINATIONS

(Higher Specialities)

Plastic surgery

Paper III – APPLIED PLASTIC SURGERY

Time: Three hours

Maximum: 100 Marks.

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essay Questions:

02 x 20 = 40 Marks

1. Breast Reduction – (Principle; Techniques).
2. Leg defects – distal 3rd - options.

I. Short notes:

10 x 06 = 60 Marks

1. Distraction osteogenesis
2. Osseo-integrated implants
3. Fat grafting
4. Biological dressings in burns
5. Platelet rich plasma
6. Lip defects - options in reconstruction.
7. Chest wall reconstruction.
8. Prefabricated flaps
9. Principles in treatment of pan facial fractures.
10. Breast augmentation

M.CH DEGREE EXAMINATIONS

(Higher Specialities)

Plastic surgery

Paper IV – RECENT ADVANCES

Time: Three hours

Maximum: 100 Marks.

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essay Questions:

02 x 20 = 40 Marks

1. Neuromeric theory – Development of face.
2. Role of Multimedia & Communication tools in Plastic Surgery – Add a note on Robotic surgery.

I. Short notes:

10 x 06 = 60 Marks

1. Stem cells role in plastic surgery
2. Inhalation burns
3. VAC
4. Nano fat
5. Skin bank
6. Platelet derived growth factor
7. Face transplant
8. BMP
9. C-Reactive protein
10. MRSA

9.RECOMMENDED BOOKS & JOURNALS

1. Plastic Surgery- 3rd Edition Vol 1-6, Peter C. Neligan, Elsevier publisher, 2012
2. Plastic Surgery – 2nd Edition Vol 1-8, Stephen J. Mathes & Foad Nahai, Saunders, 2006
3. Listers the Hand Diagnosis and Indications – 4th Edition, Smith, Paul. Mosby, 2002
4. Maxillofacial Trauma and Esthetic Facial Reconstruction – 2nd Edition Booth, Peter Ward(Ed), Saunders, 2012.
5. Fundamental Techniques of Plastic Surgery and Their Surgical Applications - 10th Edition, Mcgregor, Alan D. Churchill Livingston, 2004.
6. Greens Operative Hand Surgery – 6th Edition Volume I. Green, David P. Elsevier, 2011.
7. Greens Operative Hand Surgery – 6th Edition Volume II. Green, David P. Elsevier, 2011.
8. Current Therapy in Plastic Surgery – 1st Edition. Mccarthy, Joseph, Saunders, 2006.
9. Langmans Medical Embryology – 12th Edition. Sadler, T W. Lippincott, 2012.
10. Lee Mcgregors Synopsis of Surgical Anatomy – 12th Edition. Decker, GAG (Ed), Varghese pub. 1986.
11. Liposuction Principles and Practice - Shiffman, Melvin A. Springer, 2006.
12. Grabb & Smiths Plastic Surgery – 7th Edition. Thorne, Charles H, Lippincott, 2013
13. Achauer and Soods Burn Surgery Reconstruction and Rehabilitation – 1st Edition, Sood, Rajiv. Saunders, 2006
14. Oculoplasty and Reconstructive Surgery – 1st Edition, Garg, Ashok. JP publisher, 2008
15. Bailey Loves Short Practice of Surgery – 26th Edition, Williams, Norman S. CRC publishing, 2013
16. Lasts Anatomy Regional and Applied – 12th Edition, Sinnatamby, Chummy S. Churchill Livingston, 2011.
17. Human Anatomy: Colour Atlas and Textbook – 5th Edition, Gosling, J.A (Et Al). Mosby, 2008.
18. Grabbs Encyclopedia of Flaps: Head And Neck - Vol I 3rd Edition Strauch, Berish (Ed)(Etal). Lippincott, 2009.
19. Grabbs Encyclopedia Of Flaps: Upper Extremities - Vol II 3rd Edition, Strauch, Berish (Ed)(Etal). Lippincott, 2009.

20. Grabbs Encyclopedia Of Flaps: Torso, Pelvis, And Lower Extremities - Vol III 3rd Edition, Strauch, Berish (Ed)(Etal). Lippincott, 2009.
21. Colour Atlas of Microsurgical Anatomy: Vasculature of Skin Flaps - Heping Zheng (Ed). Academa pub, 2008.
22. Local Flap Reconstruction: A Practical Approach - Penington, Anthony. McGraw Hill, 2007.
23. Plastic Surgery: Indications and Practical Vol I, Guyuron, Bahman. Saunders, 2009.
24. Plastic Surgery: Indications and Practical Vol II, Guyuron, Bahman. Saunders, 2009.
25. Wound Healing - Falabella, Anna.F. Taylor & Francis, 2005.
26. Surgical Wound Healing and Management - Granick, Mark.S. Informa Healthcare, 2007.
27. An Atlas of Surgical Anatomy: Surgical Commentary - Masquelet, Alain.C. Taylor & Francis, 2005
28. Flaps and Reconstructive Surgery - Wei Fu Chan. Saunders, 2009.

JOURNALS:

1. **PRS**- PLASTIC & RECONSTRUCTIVE SURGERY
2. SURGICAL CLINICS IN PLASTIC SURGERY
3. **JPRAS**- JOURNAL OF PLASTIC, RECONSTRUCTIVE AND AESTHETIC SURGERY
4. **IJPS**- INDIAN JOURNAL OF PLASTIC SURGERY
5. JOURNAL OF HAND SURGERY
6. BRITISH JOURNAL OF HAND SURGERY