

**APRIL - 2001**

**[KD 040]**

**Sub. Code : 1601**

**M.Ch. DEGREE EXAMINATION**

**(Higher Specialities)**

**Branch III — Plastic Surgery**

**(Revised Regulations)**

**Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

1. Write briefly on Transplantation immunology and describe in detail the role of transplantation in plastic surgery. (25)
2. Discuss the anatomy, arc of rotation and application of myocutaneous flaps of trunk. (25)
3. Write short notes on : (5 × 10 = 50)
  - (a) Venous flap
  - (b) Vascular malformations
  - (c) An ideal implant
  - (d) Skin bank and storage
  - (e) Planning in reverse.

**NOVEMBER - 2001**

**[KE 040]**

**Sub. Code : 1601**

**M.Ch. DEGREE EXAMINATION**

**(Higher Specialities)**

**(Revised Regulations)**

**Branch III — Plastic Surgery**

**Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

1. **What are Angiosomes? Discuss in detail their clinical applications. (25)**
2. **Discuss the principle variations and applications of Z. Plasty in detail. (25)**

**Write briefly on :**

**(5 × 10 = 50)**

- (a) **Congenital short urethra**
- (b) **Radiation injury**
- (c) **Tattoo Marks**
- (d) **Poland's syndrome**
- (e) **Foot drop.**

**MARCH - 2002**

**[KG 040]**

**Sub. Code : 1601**

**M.Ch. DEGREE EXAMINATION.**

**(Higher Specialities)**

**(Revised Regulations)**

**Branch III — Plastic Surgery**

**Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

1. Describe the anatomy of Facial Nerve. How will you manage a patient with paralysed face following excision of carcinoma of the Parotid Gland? (25)
2. Discuss the Fluid Therapy following Thermal Trauma. (25)
3. Write brief notes on : (5 × 10 = 50)
  - (a) Sturge-Weber Syndrome
  - (b) Syndactyli of fingers.
  - (c) Intersex.
  - (d) Mallet Finger
  - (e) Tuboplasty.

SEPTEMBER - 2002

[KH 040]

Sub. Code : 1601

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch III — Plastic Surgery

Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Enumerate various factors which influence the final outcome of the scar. Discuss all the factors in detail (25)

2. Define skin graft. Discuss the process of take and various factors influencing the take of skin graft in detail (25)

3. Write briefly on

(a) Distraction osteogenesis

(b) Patency tests after microvascular anastomosis

(c) Mechanism of skin expansion following use of tissue expanders

(d) Septic shock

(e) Superficial Musculo-Aponeurotic System (SMAS). (5 × 10 = 50)

APRIL - 2004

[KK 040]

Sub. Code : 1601

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Plastic Surgery

Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

A. Essay :

(2 × 15 = 30)

(1) Enumerate biologic responses to endotoxin, exotoxin and other bacterial products. How do you diagnose these responses? Classify and describe role of mediators / effectors involved in Systemic Inflammatory Response Syndrome (SIRS).

(2) What do you mean by tissue expansion? Explain mechanism of skin expansion in detail. Enumerate histopathological changes of expanded tissue. What are the indications of tissue expander?

B. Short notes :

(10 × 5 = 50)

- (1) Relaxed skin tension lines (RSTL).
- (2) Double opposing Z-plasty.
- (3) Blow-out fracture.
- (4) Ultrasound Assisted Lipoplasty (UAL).
- (5) Methods to avoid problems of vasospasm during microvascular surgery.
- (6) Articulation errors in cleft lip and palate cases.
- (7) Expression of laser output (energy, power and fluence).
- (8) General principles of tendon transfer.
- (9) Hypertonic saline formulae for burns fluid resuscitation.
- (10) Spinal cord involvement in Electrical Injury.

**AUGUST - 2004**

**[KL 040]**

**Sub. Code : 1601**

**M.Ch. DEGREE EXAMINATION.**

**(Higher Specialities)**

**(Revised Regulations)**

**Branch III — Plastic Surgery**

**Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

**Time : Three hours                      Maximum : 100 marks**  
**Theory : Two hours and                      Theory : 80 marks**  
**forty minutes**  
**M.C.Q. : Twenty minutes                      M.C.Q. : 20 marks**

**Answer ALL questions.**

**I. Essay :    (2 × 15 = 30)**

**(1) Classify fasciocutaneous flaps and describe their vascular bases, illustrating with examples. What are their advantages and disadvantages? Describe Sural Artery Flap and give its clinical application.**

**(2) Describe the pathophysiology of Burns and the recent advances in the management of acute burns.**

**II. Short notes :    (10 × 5 = 50)**

- (a) Lasers in plastic surgery**
- (b) Graft contraction and prevention**

- (c) Le Forte Fractures and their management**
- (d) Liposuction**
- (e) Tissue expanders**
- (f) Developmental anomalies of hand**
- (g) Methods of assessing speech after cleft palate repair.**
- (h) Benign masseteric hypertrophy**
- (i) Principles of microvascular surgery**
- (j) Von Recklinghausen's neurofibromatosis.**

FEBRUARY - 2005

[KM 040]

Sub. Code : 1601

**M.Ch. DEGREE EXAMINATION.**

(Higher Specialities)

(Revised Regulations)

Branch III — Plastic Surgery

**Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

(2 × 15 = 30)

(1) Describe geometrical principles of Z-plasty. Discuss variations in angles and limbs of Z-plasty in detail. What are the uses of Z-plasty?

(2) What is osseo integration? Describe biologic sequence of osseo integration. Discuss treatment planning and general principles related to craniofacial prosthesis.

II. Write short notes on : (10 × 5 = 50)

- (a) Diagnosis of nasoethmoid orbital fractures.
- (b) Classification of male pattern baldness.
- (c) Chemical face peeling.
- (d) How laser is produced?
- (e) Investigations to assess peripheral nerve injuries.
- (f) Re-education after tendon transfer.
- (g) Compromised circulation of the flap.
- (h) Factors responsible for successful take of free bone graft.
- (i) Burns prevention strategies for burns due to kerosene lamp and stoves.
- (j) Delayed effects of electrical injuries.

FEBRUARY - 2006

[KO 040]

Sub. Code : 1601

M.Ch. DEGREE EXAMINATION.

(Higher specialities)

(Revised Regulations)

Branch III — Plastic Surgery

Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay questions : (2 × 15 = 30)

(1) Classify Skin grafts. Describe the various phases of graft "take" with their clinical significance. Mention the factors affecting graft take. Discuss two important factors in detail.

(2) What are the properties of an ideal implant. Classify the various materials available for implantation, mentioning the uses of each. Discuss the possible complications and various safeguards while using alloplastic implants.

II. Write short notes on : (10 × 5 = 50)

(a) "Z" plasty.

(b) Myofibroblast.

(c) Classify wounds according to Bacteriology and discuss the role of quantitative microbiology in wound closure.

(d) Factors affecting wound healing in Diabetics.

(e) Use of skin flaps.

(f) Classify fasciocutaneous flaps according to Cormack and Lamberty giving examples of each.

(g) Various methods of hemostasis.

(h) Crane Principle.

(i) RSTLs.

(j) Graft rejection.

AUGUST - 2006

[KP 040]

Sub. Code : 1601

**M.Ch. DEGREE EXAMINATION.**

(Higher Specialities)

(Revised Regulations)

Branch III — Plastic Surgery

**Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

**I. Essay :**

(1) Describe the course of subcapular artery from its origin on axillary artery. Describe the various flaps that can be developed on subcapular artery and its branches, their vascular anatomy, design and uses.

(20)

(2) Describe the principles, geometry and uses of V-Y advancement flaps in reconstructive surgery. (15)

(3) Describe in detail the normal anatomy of palmar aponeurosis and its abnormal anatomy in Dupuytren's contracture. (15)

**II. Short notes :**

(6 × 5 = 30)

(a) Pulleys of flexor tendons on hand

(b) Overgrafting (of skin)

(c) Nasolabial flap

(d) Vacuum Assisted closure of wounds

(e) Anatomy of dorsalis pedis artery flap

(f) Tourniquet in plastic surgery.

FEBRUARY - 2007

[KQ 040]

Sub. Code : 1601

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch III — Plastic Surgery and Reconstructive  
Surgery

Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

1. Describe the surgical anatomy of antero-lateral thigh flap and its role in reconstructive surgery. (20)
2. Describe the principles, geometry and uses of Z-plasty in Plastic Surgery. (15)
3. Describe normal wound healing and factors that affect wound healing. (15)

II. Short notes :

(6 × 5 = 30)

1. Limberg flap
  2. Flexor Retinaculum
  3. Nerve graft
  4. Mesh graft
  5. Instep flap
  6. Keloid
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August-2007

**[KR 040]**

**Sub. Code : 1601**

**M.Ch. DEGREE EXAMINATION.**

**(Higher Specialities)**

**(Revised Regulations)**

**Branch III — Plastic Surgery and Reconstructive  
Surgery**

**Paper I — BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

**Time : Three hours**

**Maximum : 100 marks**

**Theory : Two hours and  
forty minutes**

**Theory : 80 marks**

**M.C.Q. : Twenty minutes**

**M.C.Q. : 20 marks**

**Answer ALL questions.**

**I. Essay questions :**

**1. Describe the functions anatomy of orbicularis oris muscle. How is it affected in cases of congenital cleft of lip of different types of unilateral, bilateral and midline? How this anatomy is restored during repair of clefts?  
(20)**

**2. How will you manage a case of glass cut injury on the volar aspect of wrist?  
(15)**

**3. Discuss the principles of management of congenital total microtia.  
(15)**

**II. Write short notes on :**

**(6 × 5 = 30)**

**(a) Posterior interosseus flap**

**(b) Boutonniere deformity**

**(c) Gynaecomastia**

**(d) Rhinophyma**

**(e) Marcus gun pupil**

**(f) Classification of Jaw Tumors.**

August 2008

[KT 040]

Sub. Code: 1601

**M.Ch. DEGREE EXAMINATION**

**(Higher Specialities)  
(Revised Regulations)**

**Branch III – Plastic & Reconstructive Surgery**

**Paper I – BASIC SCIENCES AND GENERAL  
PRINCIPLES IN PLASTIC SURGERY**

*Q.P. Code: 181601*

**Time: Three hours**

**Maximum: 100 Marks**

**ANSWER ALL QUESTIONS**

**Draw suitable diagrams wherever necessary.**

**I. Essays:**

**(2 x 20 = 40)**

1. Describe the surgical anatomy of the temporal fascia and their clinical applications.
2. Describe normal wound healing and factors that influence wound healing.

**II. Write short notes on:**

**(10 x 6 = 60)**

1. Reverse sural flap.
  2. Male pattern baldness.
  3. Allens test.
  4. Venous Flap.
  5. Tangential excision.
  6. Hazards of blood transfusion.
  7. Surgical tattooing.
  8. Functional muscle transfer.
  9. Keratinocyte culture.
  10. Sacral pressure sore.
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August 2009

[KV 040]

Sub. Code: 1601

**MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATIONS**

**(Higher Specialities)**

**(Revised Regulations)**

**Branch III – Plastic & Reconstructive Surgery**

**Paper I – BASIC SCIENCES AND GENERAL PRINCIPLES IN  
PLASTIC SURGERY**

*Q.P. Code: 181601*

**Time: Three hours**

**Maximum: 100 Marks**

**Answer ALL questions**

**Draw suitable diagrams wherever necessary.**

**I. Essays:**

**(2 x 20 = 40)**

1. Write about surgical anatomy of short muscles of hand.
2. Describe the development of face.

**II. Write short notes on:**

**(10 x 6 = 60)**

1. Planning and reverse planning.
2. Sensate flaps to finger tip.
3. Various methods of fat injection.
4. Surgery of inverted nipple.
5. Flap delay.
6. Juri flap
7. Prepuccial island flap.
8. Tangential excision.
9. Anatomy of fibrous flexor sheath.
10. Silicone implant

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February 2011

[KY 040]

Sub. Code: 1601

**MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATIONS**

**(Super Specialities)**

**Branch III – Plastic & Reconstructive Surgery**

**Revised Regulations**

**Common to all Candidates**

**Paper I – BASIC SCIENCES AND GENERAL PRINCIPLES IN  
PLASTIC SURGERY**

*Q.P. Code: 181601*

**Time: Three hours**

**Maximum: 100 Marks**

**Answer ALL questions**

**Draw suitable diagrams wherever necessary.**

**I. Essays:**

**(2 x 20 = 40)**

1. Discuss the blood supply of skin, angiosome concept and its clinical application to Flap surgery.
2. Pathophysiology of burn shock and discuss in detail the initial management of 50% flame burns in 50 yrs old person weighing 50 kg.

**II. Write short notes on:**

**(10 x 6 = 60)**

1. Development of Ear.
2. Anatomy of extensor expansion.
3. Auxillary block anesthesia.
4. Functional free muscle transfer.
5. Groin flap.
6. Cephalometric analysis.
7. Aesthetic units of face.
8. Suture materials.
9. Tourniquet.
10. Local flap.

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August 2011

[KZ 040]

Sub. Code: 1601

**MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATION  
(SUPER SPECIALITIES)**

**BRANCH III – PLASTIC & RECONSTRUCTIVE SURGERY**

**BASIC SCIENCES AND GENERAL PRINCIPLES IN PLASTIC SURGERY**

*Q.P. Code: 181601*

**Time : 3 hours  
(180 Min)**

**Maximum : 100 marks**

**Answer ALL questions in the same order.**

**I. Elaborate on :**

**Pages Time Marks  
(Max.) (Max.) (Max.)**

- |  |    |    |    |
|--|----|----|----|
| 1. Describe in detail the blood supply of skin, concepts of angiosomes and its clinical applications.      | 11 | 35 | 15 |
| 2. Describe the development of face. How is the principle of transplantation used in Face transplantation? | 11 | 35 | 15 |

**II. Write notes on :**

- |  |   |    |   |
|--|---|----|---|
| 1. How do you plan to cover a defect? Write in detail on pedicle flap for the finger tip.  | 4 | 10 | 7 |
| 2. Describe the various methods of Excision of Burn Wound. What is Tangential Excision?  | 4 | 10 | 7 |
| 3. Describe in detail the Anatomy of fibrous flexor sheath. write in detail reconstruction of the Flexor Sheath while treating cut Injury of the Index finger. | 4 | 10 | 7 |
| 4. Describe the various methods of excision. Write in detail on circular excision and wound closure.   | 4 | 10 | 7 |
| 5. What do you understand by Flap delay? Write in detail on axial pattern flap.  | 4 | 10 | 7 |
| 6. What do you understand by the term, "Aesthetics of the flap cover"? How do you follow the principles of aesthetics in reconstructions?                      | 4 | 10 | 7 |
| 7. Classify implant material. What are the textile materials used as implant?  | 4 | 10 | 7 |
| 8. Describe the Anatomy of the Scalp. Enumerate scalp defects and how do you reconstruct them.   | 4 | 10 | 7 |
| 9. Write in detail about the Cartilage frame work of the Ear. What are the principles of EAR reconstruction?   | 4 | 10 | 7 |
| 10. Write in detail on the Physiology of the Lymphatics. How do you explain the isolated Lymphoedema of the Penis?   | 4 | 10 | 7 |

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[LB 040]

AUGUST 2012

Sub. Code: 1601

M.Ch – PLASTIC & RECONSTRUCTIVE SURGERY

Paper – I BASIC SCIENCES AND GENERAL PRINCIPLES IN PLASTIC  
SURGERY

Q.P. Code: 181601

Time : 3 hours  
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages Time Marks  
(Max.) (Max.) (Max.)

- |  |    |    |    |
|--|----|----|----|
| 1. Describe classification of fasciocutaneous flap. Define perforator flap. Discuss deep inferior epigastric artery perforator flap. | 16 | 35 | 15 |
| 2. Discuss principle, biomechanics and types of craniofacial distraction. Discuss Mandibular distraction in detail.                  | 16 | 35 | 15 |

II. Write notes on :

- |   |   |    |   |
|---|---|----|---|
| 1. Discuss moist wound healing. Describe hydrocolloid and hydrogel dressings.   | 4 | 10 | 7 |
| 2. Classify nerve injuries. Describe techniques of nerve repair and methods to measure degree of nerve regeneration after nerve repair. | 4 | 10 | 7 |
| 3. Discuss compartment syndrome. Describe treatment of compartment syndrome of leg.   | 4 | 10 | 7 |
| 4. Discuss viscoelastic properties of skin.   | 4 | 10 | 7 |
| 5. Describe anatomy of eye lid. Discuss treatment of 75% loss full thickness defect of lower eye lid.                                   | 4 | 10 | 7 |
| 6. Bone graft substitutes; past, present, future.   | 4 | 10 | 7 |
| 7. Nutritional assessment and nutrition support strategies in burn patients.  | 4 | 10 | 7 |
| 8. Speech in cleft palate.  | 4 | 10 | 7 |
| 9. Classify nerve injuries. Discuss nerve repair techniques.  | 4 | 10 | 7 |
| 10. Define sensate flap. Discuss one sensate flap.  | 4 | 10 | 7 |

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[LC 040]

FEBRUARY 2013

Sub.Code:1601

**M.Ch-PLASTIC & RECONSTRUCTIVE SURGERY**

**Paper – I BASIC SCIENCES AND GENERAL PRINCIPLES IN PLASTIC SURGERY**

**Q.P. Code:181601**

**Time: 3 hours  
(180 Min)**

**Maximum :100 marks**

**I.Elaborate on:**

**(2X15=30MARKS)**

1. Describe the phenomenon of wound healing in skin – phases, factors influencing epithelisation and contraction and after effects of healing.
2. Describe the Physical properties of skin and their clinical application in reconstructive surgery.

**II.Write notes on:**

**(10x7marks=70marks)**

1. Discuss Historical aspects of skin grafting
2. Write about Enemies of Plastic surgeon
3. What are the Pharmacological Aspects of Xylocaine
4. What is the Scope of Plastic Surgery
5. Discuss Dermal Over Grafting
6. Write about Rotation Flap
7. Discuss Flap monitor
8. Applications and importance of Fascia Transplantation
9. Discuss The Lines of Skin
10. Write about Artistic Anatomy

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**(LD 040)**

**AUGUST 2013**

**Sub. Code:1601**

**M.Ch. – PLASTIC & RECONSTRUCTIVE SURGERY**  
**Paper – I BASIC SCIENCES AND GENERAL PRINCIPLES IN PLASTIC**  
**SURGERY**

*Q.P.Code: 181601*

**Time: Three Hours**

**Maximum: 100 marks**

**I. Elaborate on:**

**(2X15=30)**

1. Discuss the pathophysiology and surgical management of lymphoedema of lower limb.
2. Describe the anatomy of Facial Nerve. How will you manage a patient with paralysed face following excision of carcinoma of the Parotid gland?

**II. Write notes on:**

**(10X7=70)**

1. Mallet Finger.
2. Syndactyli of Fingers.
3. Calvarial bone graft.
4. Septic Shock.
5. Blow-out fracture.
6. Lasers in plastic surgery.
7. Graft contraction and prevention.
8. Classification of male pattern baldness.
9. Pulleys of flexor tendons of hand.
10. Negative pressure wound therapy.

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