

August-2007

[KR 062]

Sub. Code : 1853

II. Short notes :

(6 × 5 = 30)

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VIII — Vascular Surgery

Paper III — VASCULAR AND ENDOVASCULAR 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 various types of endoleaks. (20)
2. Discuss the clinical utility of intravascular ultrasound. (15)
3. Describe the indications and technique of axillo-femoral bypass. (15)

- (a) Self-expandable stents.
- (b) Endovascular stent graft in vascular trauma.
- (c) Virtual angiography.
- (d) Cervical rib.
- (e) Raynaud's phenomenon.
- (f) Popliteal artery entrapment syndrome.

August 2008

[KT 062]

Sub. Code: 1853

M.CH DEGREE EXAMINATIONS

(Higher Specialities)

(Revised Regulations)

Branch VIII – VASCULAR SURGERY

Paper III – VASCULAR & ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays: **(2 x 20 = 40)**

1. Discuss endovascular treatment of aortic aneurysms.
2. Discuss type of percutaneous mechanical thrombectomy devices.

II. Write short notes on: **(10 x 6 = 60)**

1. Selective catheters in endovascular procedures.
 2. Catheter directed venous thrombolysis.
 3. Angioplasty for CLI.
 4. Cutting ballon angioplasty.
 5. Retrievable IVC filters.
 6. Thrombin.
 7. Intra operative thrombolytic therapy.
 8. Endovascular management of acute PE.
 9. Role of endovascular treatment in vascular injury.
 10. Prevention of contrast induced nephropathy.
-

August 2009

[KV 062]

Sub. Code: 1853

MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATIONS

(Super Specialities)

Branch VIII – VASCULAR SURGERY

(Revised Regulations)

Paper III – VASCULAR & ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

(2 x 20 = 40)

1. Discuss the endovascular management of acute, complicated type B aortic dissection.
2. Discuss the failure modes of thoracic endografts and describe the methods of prevention and their management.

II. Write short notes on:

(10 x 6 = 60)

1. Types of vena caval filters and their indications.
2. Vascular access for total parenteral nutrition.
3. Trans jugular intra hepatic portosystemic shunt (TIPS).
4. Endovascular management of aorto enteric fistula
5. Endovascular stent graft infection.
6. Madding – Kennedy intra canal shunt.
7. Arterial assist device.
8. Endo leak.
9. Amplatzer vascular plug.
10. Operative vs interventional treatment of ostial renal artery occlusive disease.

August 2011

[KZ 062]

Sub. Code: 1853

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

BRANCH VIII – VASCULAR SURGERY

VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code:181853

**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. Discuss in detail about the etiopathogenesis and management of visceral artery aneurysms. | 11 | 35 | 15 |
| 2. Outline the mechanisms of injury to the retro peritoneal blood vessels and discuss the management. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Endotension. | 4 | 10 | 7 |
| 2. Renovascular renal insufficiency. | 4 | 10 | 7 |
| 3. Endograft devices. | 4 | 10 | 7 |
| 4. Complications of Carotid artery stenting and its management. | 4 | 10 | 7 |
| 5. Pre operative vein mapping. | 4 | 10 | 7 |
| 6. Negative Pressure wound therapy. | 4 | 10 | 7 |
| 7. Angioplasty Balloon characteristics. | 4 | 10 | 7 |
| 8. Non thrombotic complications of Hemodialysis Access. | 4 | 10 | 7 |
| 9. Pelvic Venous Congestion Syndrome. | 4 | 10 | 7 |
| 10. VATS. | 4 | 10 | 7 |

[LB 025]

AUGUST 2012

Sub. Code: 1853

M.Ch – VASCULAR SURGERY

Paper – III VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

**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. Discuss the indications for Surgical Repair and Endo Vascular Repair of Abdominal Aortic Aneurysm and outline the merits and demerits of each. | 16 | 35 | 15 |
| 2. Outline the Mechanisms of injury to Retro Peritoneal Blood Vessels and discuss the Management. | 16 | 35 | 15 |

II. Write notes on:

- | | | | |
|--|---|----|---|
| 1. Endotension. | 4 | 10 | 7 |
| 2. Atherectomy devices. | 4 | 10 | 7 |
| 3. Infra-Genicular Angioplasty. | 4 | 10 | 7 |
| 4. Trans-Jugular Intrahepatic Porto Systemic Shunt (TIPS). | 4 | 10 | 7 |
| 5. Vascular Access for Total Parenteral Nutrition. | 4 | 10 | 7 |
| 6. Endoleak. | 4 | 10 | 7 |
| 7. Vascular Staplers. | 4 | 10 | 7 |
| 8. Renal Revascularisation. | 4 | 10 | 7 |
| 9. Drug Eluting Stents. | 4 | 10 | 7 |
| 10. Venous Stenting. | 4 | 10 | 7 |

M.Ch. – VASCULAR SURGERY
Paper – III VASCULAR AND ENDO VASCULAR SURGERY
Q.P.Code: 181853

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Formulate an endovascular strategy for the treatment of patients with Type B aortic dissections.
2. Endovascular Treatments of the Lower Extremity ischemia: Discuss multiple options for treating chronic total occlusions.

II. Write notes on:

(10X7=70)

1. Steps to reduce Radiation Dose and obtain quality images.
2. Indications and embolization techniques for AV malformation.
3. Catheter based interventions for acute DVT.
4. Biology of in - stent restenosis.
5. Carotid angioplasty and stenting.
6. Consequences and cures of angioplasty.
7. Organ specific contrast related toxicity.
8. Vessel puncture equipment and techniques.
9. Anatomical information required for endovascular AAA repair.
10. Endoluminal ablation of varicose vein.

[LF 027]

AUGUST 2014

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR SURGERY AND ENDO VASCULAR SURGERY

Q. P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 30)

1. Describe the endovascular aneurysm repair and discuss the advantages and disadvantages.
2. What are the fibrinolytic agents currently available?
Give their pharmacology and their application in regional thrombolytic therapy in vascular surgery.

II. Write notes on:

(10 x 7 = 70)

1. Describe the various types of endoleaks.
2. Discuss the clinical utility of intravascular ultrasound.
3. Self-expandable stents.
4. Endovenous management of varicose veins.
5. Intravascular stents.
6. Fibrinolytic treatment of deep vein thrombosis.
7. Operative angiography.
8. Balloon angioplasty.
9. Retrievable IVC Filters.
10. Role of endovascular treatment in vascular injury.

[LH 027]

AUGUST 2015

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

PAPER III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Classify the endovascular stents. Discuss the intra-procedural and post-procedural complications of intra-arterial stents.
2. Classify the vascular grafts. Describe the features of ideal graft and management of late graft failure.

II. Write notes on :

(10 x 7 = 70)

1. Insitu by-pass.
2. Tibial Angioplasty.
3. Instent Restenosis.
4. Klippel Trenaunay syndrome.
5. Multiple Aneurysms.
6. Deep vein Thrombosis in extremes of age.
7. Superior Vena Cava Syndrome.
8. Periarteritis Nodosa.
9. SOX 18 Gene Mutations.
10. Snuff-box Arterio Venous fistula.

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P.Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Management of critical limb ischemia of lower limb with multi level arterial occlusion.
2. Management of type III and type IV endoleak following Endovascular Aneurysm Repair (EVAR).

II. Write notes on:

(10 x 7 = 70)

1. Complications of PTA to superficial femoral artery.
2. CDT in acute arterial thrombosis.
3. Small vessel vasculitis.
4. Visceral artery aneurysms.
5. Thrombo philia.
6. Duplex guided interventions in vascular patients.
7. Cadaver organ harvesting.
8. Options in No Option Critical limb Ischemia.
9. Endo phlebectomy.
10. Fibromuscular dysplasia.

(LL 027)

AUGUST 2017

Sub. Code:1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P.Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss types of percutaneous mechanical thrombectomy devices.
2. Elaborate on advantages / disadvantages of distal bypass in comparison to tibial angioplasty.

II. Write notes on:

(10 x 7 = 70)

1. Prevention of contrast induced nephropathy.
2. Atherectomy perforation.
3. Ambulatory phlebectomy.
4. IPC (Intermittent Pneumatic Compression) and foot compression devices.
5. IVUS (Intra Vascular Ultra Sound).
6. Reentry devices.
7. Cryopreserved arterial allografts.
8. Absorbable stents.
9. Platelet derived growth factors.
10. Nuclear imaging.

(LN 027)

AUGUST 2018

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P.Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the endovascular management of Arterio Venous Malformations.
2. Classify the Abdominal Aortic Aneurysms. Discuss the management of Juxta-Renal Aortic Aneurysms.

II. Write notes on:

(10 x 7 = 70)

1. Carotid shunts.
2. Protection devices.
3. Cutting Balloons.
4. Fenestrated Grafts.
5. Foam Sclerotherapy.
6. Septic Thrombophlebitis.
7. Phlegmasia alba dolens.
8. Nerve injuries in Vascular Surgical procedures.
9. Central Retinal Vein Occlusion.
10. Fibromuscular dysplasia of Bilateral Renal Arteries.

(LP 027)

AUGUST 2019

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Management of right upper limb acute ischemia with proximal right subclavian 90% stenosis.
2. Management of chronic mesenteric ischemia.

II. Write notes on:

(10 x 7 = 70)

1. Covered stent.
2. Catheter directed thrombolysis in acute deep vein thrombosis.
3. Iodinated contrast agents.
4. Adjunct procedures to augment revascularisation.
5. Evaluation of limb ischemia in diabetic patient with peripheral Neuropathy.
6. Management of deep vein reflux.
7. Bleeding varicose veins.
8. Acute thrombosis of AV fistula.
9. Immediate post operative thrombosis following femoro popliteal RSV bypass.
10. Permanent central venous catheter insertion.

(LR 027)

**NOVEMBER 2020
(AUGUST 2020 SESSION)**

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the management options of a patient with femoro popliteal occlusion presenting with great toe gangrene.
2. Evaluation and treatment of a patient with ruptured aortic aneurysm

II. Write notes on:

(10 x 7 = 70)

1. Assessment of carotid plaque morphology
2. Angiosome targeted revascularization
3. Stem cell therapy
4. Techniques of lymphatic reconstruction
5. Ischaemic reperfusion injury
6. Pelvic congestion syndrome
7. Transplant renal artery stenosis
8. Hyperbaric oxygen therapy
9. Renal vein thrombosis
10. Retrograde open mesenteric stenting

(MCH 0821)

AUGUST 2021

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the Aortic Debranching of arch Arce techniques.
2. Discuss the treatment option of a patient with recurrent TIA who has already undergone Radical Neck Dissection.

II. Write notes on:

(10 x 7 = 70)

1. Catheter directed thrombolysis in acute limb ischemia.
2. Penetrating aortic ulcer.
3. No option critical limb ischemia.
4. Endovascular management of Iliac vein occlusion.
5. Role of intravascular ultrasound in venous diseases.
6. Aortoenteric fistula.
7. Pelvic congestion syndrome.
8. TIPS.
9. Management of renal artery fibro muscular dysplasia.
10. Calf vein DVT.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MCH 0222]

FEBRUARY 2022

Sub.Code :1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss management of juxta renal aorta occlusion with chronic threatened limb ischaemia.
2. Discuss the risk factors, clinical presentation, investigation, treatment and prophylaxis for acute deep vein thrombosis of lower extremity.

II. Write notes on:

(10 x 7 = 70)

1. Pelvic congestion syndrome.
2. Anti-Phospho Lipid Antibody Syndrome.
3. Stent graft.
4. Cryoplasty.
5. Endoleak.
6. In situ Vein bypass.
7. Mulliken classification.
8. Buerger's disease.
9. Bowel ischemia after Aortic surgery.
10. Recombinant Plasminogen activators.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0822)

AUGUST 2022

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

Paper III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Indications and Patient Selection for Iliocaval Venous Stenting.
2. Visceral protection strategies during Thoraco abdominal aortic Interventions.

II. Write notes on:

(10 x 7=70)

1. Intra luminal devices to cross chronic total occlusion (CTO).
2. Cerebral hyper perfusion syndrome.
3. Endovascular management of ostial renal artery stenosis.
4. Superior Vena Cava filters.
5. Endovascular management of popliteal artery aneurysm.
6. Raynaud's phenomenon.
7. Endovascular management of Subclavian -Axillary vein thrombosis.
8. Valvulotome.
9. Role of Antiplatelets in vascular surgery.
10. Interventions for Thrombosed arterio venous access.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0124)

JANUARY 2024

Sub. Code: 1853

M.Ch. – VASCULAR SURGERY

PAPER III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Etiology, diagnosis and management of Thoracic outlet syndrome
2. Patient Selection and Techniques of EVAR.

II. Write notes on:

(10 x 7 = 70)

1. Intra-operative hemostatic agents.
2. Ticagrelor.
3. Vascular PET.
4. Embolic protection device.
5. Complications of EVAR.
6. Cutting balloon.
7. Stent graft.
8. Atherectomy.
9. Diabetic foot ulcer.
10. Intravascular Ultrasound.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0225)

FEBRUARY 2025

Sub. Code: 1853

M.Ch. BRACH VIII – VASCULAR SURGERY

PAPER III – VASCULAR AND ENDO VASCULAR SURGERY

Q.P. Code: 181853

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Carotid aortic stenting – indications, type of stents, role of embolic protection device, technique, complications.
2. Drug coated balloon in angioplasty – drugs used, indications, technique.

II. Write notes on:

(10 x 7 = 70)

1. Diagnostic catheters vs guide catheters.
2. Stents – types, design and indications.
3. Guide wires – construction and use in endovascular surgery.
4. What are the desired qualities of an ideal venous stent?
5. Catheter types and use of each (at least 5 types).
6. Non-compliant angioplasty balloon – design and indications for use.
7. Ishimaru zones of the aorta and usefulness in planning thoracic endovascular aneurysm repair.
8. Subintimal angioplasty – definition, technique and complications.
9. Pedal access options, technique and role in endovascular surgery.
10. Removal of Inferior vena cava filter – technique and complications.
