

August 2009

[KV 073]

Sub. Code: 1502

D.M. DEGREE EXAMINATION

(Super Specialities)

Branch II - Cardiology

(Revised Regulations)

Paper III – HAEMODYNAMICS THERAPEUTICS AND INTERVENTION

Q.P. Code: 161502

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Discuss in detail the haemodynamics of constrictive pericarditis.
2. Non invasive assessment of LV end diastolic pressure.

II. Write short notes on:

10 x 6 = 60

1. Prasugrel.
2. Nebivolol.
3. Lytic protocols for pulmonary embolism.
4. Treatment of prosthetic valve thrombosis.
5. Loop recorders.
6. Non surgical closure of ductus.
7. Endovascular stenting for dissection of aorta.
8. Role of stents in acute STEMI.
9. Left main stenting.
10. Balloon atrial septostomy.

August 2011

[KZ 010]

Sub. Code: 1423

**DOCTORATE OF MEDICINE (D.M.) DEGREE EXAMINATION
(SUPER SPECIALITIES)**

BRANCH II – CARDIOLOGY

HEMODYNAMICS THERAPEUTICS AND INTERVENTION

Q.P. Code: 161423

**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. Draw and explain the Clinical, Echocardiographic features and Hemodynamic appearances of pressure curves of Pulmonary Stenosis and its interventional management. | 11 | 35 | 15 |
| 2. Discuss Bare Metal versus Drug Eluting Stent deployment and the recent advances in the Stent technology. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. Pharmacologic versus interventional management for ST segment elevation myocardial infarction. | 4 | 10 | 7 |
| 2. Management of Supraventricular tachycardia in a Fetus. | 4 | 10 | 7 |
| 3. Adjuvant therapy in Primary Percutaneous intervention for Non ST segment elevation Myocardial infarction. | 4 | 10 | 7 |
| 4. Device management of Ventricular Tachycardia. | 4 | 10 | 7 |
| 5. Ablation therapy for Atrial fibrillation. | 4 | 10 | 7 |
| 6. Intra cardiac echocardiography. | 4 | 10 | 7 |
| 7. Thrombolytic therapy for Acute Pulmonary Embolism. | 4 | 10 | 7 |
| 8. Interventional management of Saphenous Venous Graft disease. | 4 | 10 | 7 |
| 9. Focal Atrial Tachycardia. | 4 | 10 | 7 |
| 10. Cardiac resynchronization therapy. | 4 | 10 | 7 |

February 2012

[LA 010]

Sub. Code: 1423

DOCTORATE OF MEDICINE (D.M.) DEGREE EXAMINATION

(SUPER SPECIALITIES)

BRANCH II – CARDIOLOGY

HEMODYNAMICS THERAPEUTICS AND INTERVENTION

Q.P. Code: 161423

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

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

| | Pages (Max.) | Time (Max.) | Marks (Max.) |
|--|-------------------------|------------------------|-------------------------|
| 1. Discuss in detail clinical pathophysiology, echocardiogram, pressure data with diagrams the features of severe aortic stenosis and add note on its interventional management. | 16 | 35 | 15 |
| 2. Discuss in detail clinical, echo and catheterization features of Patent Ductus Arteriosus with interventional management. | 16 | 35 | 15 |

II. Write notes on :

| | | | |
|--|---|----|---|
| 1. Measurement of Coronary blood flow. | 4 | 10 | 7 |
| 2. Tandem lesions. | 4 | 10 | 7 |
| 3. Adjuvant Pharmacotherapy in Non STEMI. | 4 | 10 | 7 |
| 4. Combo Device. | 4 | 10 | 7 |
| 5. Ablation of Post Myocardial infarction ventricular tachycardia. | 4 | 10 | 7 |
| 6. Post operative intervention in congenital heart disease. | 4 | 10 | 7 |
| 7. Coronary artery dissection. | 4 | 10 | 7 |
| 8. Carotid artery stenting. | 4 | 10 | 7 |
| 9. Trans radial interventions. | 4 | 10 | 7 |
| 10. Rota blators. | 4 | 10 | 7 |

[LB 010]

AUGUST 2012

Sub. Code: 1423

D.M – CARDIOLOGY

Paper – III HEOMODYNAMICS THERAPEUTICS
AND INTERVENTION

Q.P. Code: 161423

Time: 3 hours
(180 Min)

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

| | Pages (Max.) | Time (Max.) | Marks (Max.) |
|---|-----------------|----------------|-----------------|
| 1. Discuss in detail catheter versus noninvasive assessment of left to right shunts of congenital heart diseases. | 16 | 35 | 15 |
| 2. Discuss the hemodynamics, causes and management of acute mitral regurgitation. | 16 | 35 | 15 |

II. Write notes on:

| | | | |
|--|---|----|---|
| 1. Describe the pharmacology, clinical indications and adverse effects of nesiritide. | 4 | 10 | 7 |
| 2. Write on the role of implantable cardioverter defibrillator in heart failure. | 4 | 10 | 7 |
| 3. How will you measure cardiac output in the catheterization laboratory? | 4 | 10 | 7 |
| 4. Indications, contraindications and technique of device closure of atrial septal defect. | 4 | 10 | 7 |
| 5. Give a brief account on congenital heart lesions which require Fontan procedure. | 4 | 10 | 7 |
| 6. Discuss the overall view of prosthetic tissue valves. | 4 | 10 | 7 |
| 7. Indications, technique and complications of pericardiocentesis. | 4 | 10 | 7 |
| 8. Absolute indications for endomyocardial biopsy. | 4 | 10 | 7 |
| 9. Describe the pathology, clinical presentation and management of instent restenosis. | 4 | 10 | 7 |
| 10. Describe the role of nonpharmacologic treatment of hypertension. | 4 | 10 | 7 |

(LD 010)

AUGUST 2013

Sub. Code:1423

D.M. – CARDIOLOGY
Paper – III HEOMODYNAMICS THERAPEUTICS AND
INTERVENTION
Q.P.Code: 161423

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Causes, pathology, pathophysiology, clinical presentation, diagnosis, natural history and management of Mitral Regurgitation.
2. Physiology, evaluation of hemodynamic compromise, etiologic diagnosis, management and procedures of pericardial drainage for Pericardial effusion.

II. Write notes on:

(10X7=70)

1. Radionuclear imaging to assess myocardial viability.
2. Coronary perforation-risk factors and management.
3. Natural history of venous and arterial coronary bypass grafts.
4. Surgical ventricular reconstruction in ischemic heart failure.
5. Mechanism of ischemic pre and post conditioning.
6. Genotypic variations in the efficacy of clopidogrel.
7. Facilitated versus rescue percutaneous coronary intervention in ST elevation myocardial infarction.
8. Vasodilator therapy for pulmonary arterial hypertension.
9. Indications for reoperation following surgical repair of Tetralogy of Fallot.
10. Fontan procedure requiring congenital heart diseases.

[LF 010]

AUGUST 2014

Sub. Code: 1423

D.M. – CARDIOLOGY

Paper III – HEMODYNAMICS, THERAPEUTICS AND INTERVENTION

Q. P. Code: 161423

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the present status of Bifurcation Stenting
2. What is the current status and modes of assessment of patients prior to CRT (Cardiac Resynchronisation therapy)?

II. Write notes on:

(10 x 7 = 70)

1. Dabigatran in Atrial Fibrillation - present status.
2. Indication for Rotational Atherectomy.
3. Tolvaptan.
4. Management of Post Myocardial Infarction Ventricular Septal Rupture
5. Fibrin Specific Thrombolytic agents.
6. Tilting disc valves
7. Extra Corporeal Membrane Oxygenation
8. Milrinone.
9. Potassium Channel Blocking Drugs.
10. Cangrelor.
