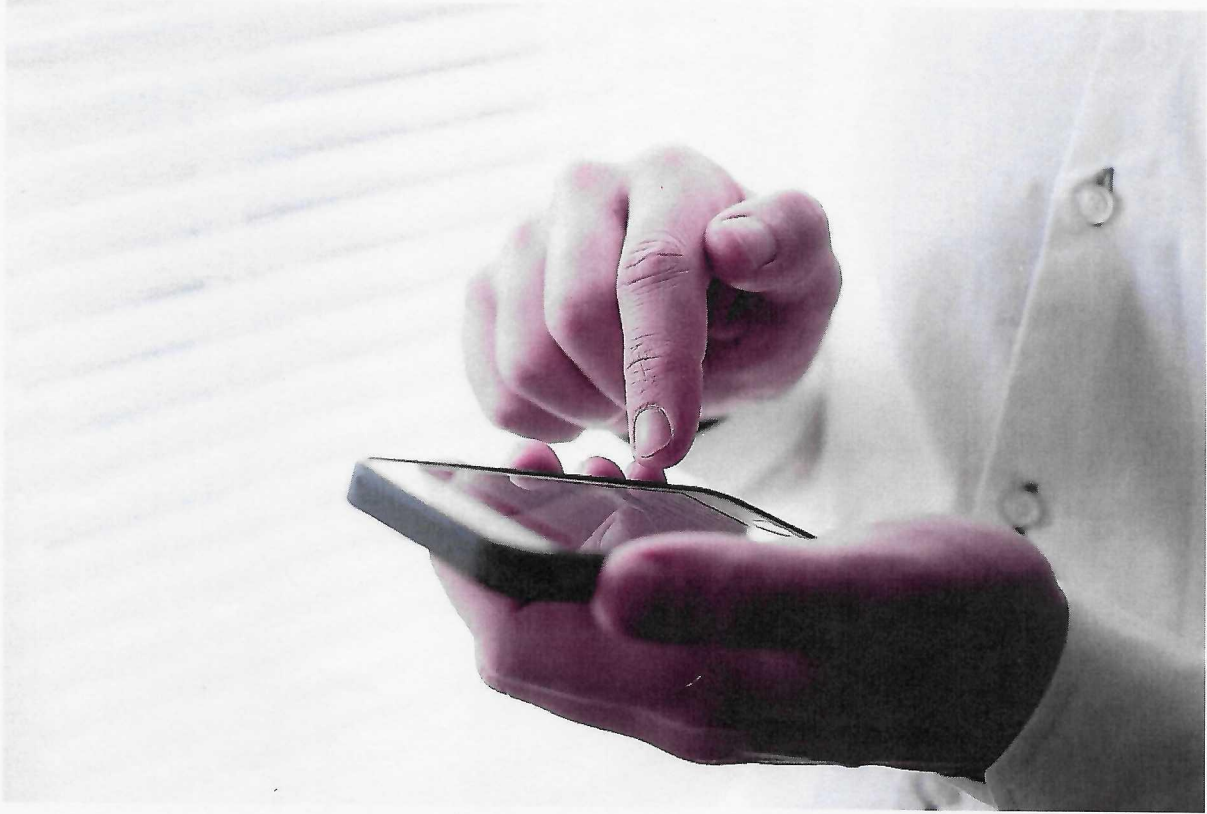


Syllabus for DM (Cardiology) Programme



Guru Gobind Singh Indraprastha University

A State University established by the Govt. of NCT of Delhi

University School of Medicine and Allied Health Sciences

Syllabus for DM (Cardiology) of GGS IP University

(As prepared by the sub-committee)

Basic Subjects:

Anatomy, Physiology, Biochemistry, Immunology, Genetics, Pharmacology, Pathology and Microbiology as related to Cardiovascular System.

Clinical Cardiology:

Etiopathology, Hemodynamics, Clinical evaluation, noninvasive and invasive evaluation and management strategies for the following disorders:

1. Coronary Artery Disease
2. Rheumatic Heart Disease.
3. Congenital Heart Disease and other pediatric cardiac disorders
4. Pericardial diseases
5. Cardiac arrhythmias
6. Heart failure
7. Peripheral Vascular Disorders
8. Pulmonary thromboembolism and pulmonary hypertension
9. Systemic hypertension
10. Systemic disease involving heart
11. Heart muscle disease
12. Traumatic heart disease
13. Tumours of heart
14. Geriatric Heart Disease
15. General Anaesthesia and non cardiac surgery in patients with heart disease.
16. Pregnancy and heart disease.
17. Epidemiology and preventive cardiology with particular emphasis to Indian subcontinent.

Non Invasive Techniques

To perform and interpret various non invasive techniques including:

1. Electrocardiography
2. Radiography – Routine and specialized areas like CT and MRI

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3. Stress Testing
4. Holter monitoring
5. Echocardiography

Invasive Cardiology

1. Experience in cardiac catheterization with ability to calculate and interpret various hemodynamic parameters, in adults and children
2. Coronary Angiography and Peripheral Angiography
3. Ability to perform temporary pacemaker insertion
4. To assist in various interventions including valvuloplasty, coronary and congenital interventions
5. Electrophysiology-To assist in electrophysiological procedures and implantation of various devices like permanent pacemakers etc. Ability to interpret electrophysiological data.

Biomedical Equipments

To understand functional principles of various biomedical equipments used for the invasive and non invasive cardiology.

Research Projects:

1. One thesis- To be submitted six months before final examination
2. One project which must be submitted for publication in any indexed medical journal before the date of final examination.
3. The candidate should write two reviews on the topics presented by him in the seminars.

Academic and Clinical Work requirements

(Log book to be maintained and certified by HOD)

1. Journal Presentations in Journal Club- 10 Journal Presentations
2. Review Club presentations- 6 Reviews
3. Case presentations- 12 Clinical case presentations.
4. Invasive procedures and non- invasive procedures – Log book to be maintained.
5. Clinical Postings: Total duration of 3 years to be split as under:
 - a. CCU and Wards- One Year
 - b. Invasive cardiology- One year
 - c. Non invasive Lab- 11 months
 - d. Cardiac Surgery- 1 month

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Meeraj Pandey

Syllabus for DM (cardiology) Pass-out Examination

THEORY EXAMINATION

The DM (Cardiology) pass-out examination will consist of Four theory papers and two days of practical examination. Each theory paper will have questions in the following patterns for a total of 100 marks. Pass marks for theory will be a total of 200 out of 400.

Theory Papers:

- Question 1. Long question carrying 20 marks
- Question 2. Long question carrying 20 marks
- Question 3. Two short questions carrying 10 marks each
- Question 4. Four short notes carrying 5 marks each
- Question 5. Four short notes carrying 5 marks each

Theory Syllabus

Paper 1. Basic cardiac sciences including cardiac anatomy, physiology; non-invasive cardiac investigations and congenital & inherited cardiac disorders. Medical diseases with relevance in cardiology.

Paper 2. Atherosclerotic cardiovascular, cerebrovascular and peripheral vascular disease; arrhythmia; preventive cardiology.

Paper 3. Pediatric cardiology; valvular heart disease; heart failure; endocardial, myocardial, pericardial, aortic and pulmonary diseases.

Paper 4. Recent advances in cardiology including diagnostic, therapeutic, interventional procedures; cardiac research and miscellaneous.

PRACTICAL EXAMINATION

The practical examination will be conducted in two days. Total of 200 marks will be there for practical examination. Pass mark for practical will be a total of 100 out of 200. The distribution of marks for practical examination is as given below:

- Day 1. One long case carrying 50 marks
Two short cases carrying 25 marks each
- Day 2. Ten spotting carrying 5 marks each
Viva-voce carrying 50 marks

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BOOKS

1. BRAUNWALD'S HEART DISEASE
2. HURST'S THE HEART
3. THE CLINICAL RECOGNITION OF CONGENITAL HEART DISEASE - JOSEPH PERLOFF
4. MOSS AND ADAMS' HEART DISEASE IN INFANTS, CHILDREN AND ADOLESCENTS
5. GROSSMAN'S CARDIAC CATHETERIZATION, ANGIOGRAPHY AND INTERVENTION
6. FEIGENBAUM'S ECHOCARDIOGRAPHY
7. THE ECHO MANUAL - JAMIL TAJIK , JAE OH
8. TOPOL TEXTBOOK OF CARDIOVASCULAR MEDICINE
9. AN INTRODUCTION TO ELECTRO CARDIOGRAPHY - LEO SCHAMROTH
10. VALVULAR HEART DISEASE - ALPERT AND DALEN
11. CARDIAC SURGERY IN THE ADULT - LAWRENCE H. COHN
12. PEDIATRIC CARDIAC SURGERY - MAVROUDIS AND BACKER
13. CARDIAC ELECTROPHYSIOLOGY - FROM CELL TO BEDSIDE BY DOUGLAS ZIPES
14. HUTCHISON'S CLINICAL METHODS - AN INTEGRATED APPROACH TO CLINICAL PRACTICE
15. HARRISON'S PRINCIPLES OF INTERNAL MEDICINE

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JOURNALS

1. INDIAN HEART JOURNAL
2. JOURNAL OF AMERICAN COLLEGE OF CARDIOLOGY
3. HEART
4. EUROPEAN HEART JOURNAL
5. JOURNAL OF ASSOCIATION OF PHYSICIANS OF INDIA
6. NEW ENGLAND JOURNAL OF MEDICINE
7. THE LANCET
8. JOURNAL OF AMERICAN MEDICAL ASSOCIATION
9. PEDIATRIC CARDIOLOGY
10. PEDIATRICS
11. CIRCULATION
12. BRITISH MEDICAL JOURNAL
13. CATHETERIZATION AND CARDIOVASCULAR INTERVENTIONS
14. JOURNAL OF AMERICAN SOCIETY OF ECHOCARDIOGRAPHY
15. PACING AND CLINICAL ELECTROPHYSIOLOGY
16. EUROPEAN JOURNAL OF CARDIAC PACING AND ELECTROPHYSIOLOGY

