



College of Physicians and Surgeons of Mumbai

Syllabus for CPS-PG-Course

DCARD-DIPLOMA IN CARDIOLOGY

College of Physicians and Surgeons of Mumbai

CPS House, Dr. E. Borges Marg, Parel, Mumbai – 400012.

DCARD-DIPLOMA IN CARDIOLOGY

COURSE DESCRIPTION

Eligibility Criteria for Candidates:

i. A candidate should possess MBBS degree/ equivalent degree as per provisions of Indian Medical Council Act.

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ii. Candidates having a recognized 3 years degree Qualification (MD/MS/DNB) in any General Medicine or 2 years Diploma Qualification in General Medicine specialty

Duration of the Course : 2 years

BASIC SUBJECTS

Teaching and attaining proficiency in applied Anatomy (including developmental anatomy), Physiology and Pathology related to the cardiovascular system.

CLINICAL CARDIOLOGY

Etiopathology, hemodynamics, clinical evaluation, noninvasive and invasive evaluation and management strategies for the following disorders:

Coronary artery disease

Rheumatic heart disease

Congenital heart disease and other paediatric cardiac disorders

Pericardial diseases

Cardiacarrhythmias

Heart failure

Peripheral vascular disorders

Pulmonary thromboembolism and pulmonary hypertension

Systemic hypertension

Systemic diseases involving heart

Heart muscle diseases

Traumatic heart disease

Tumors of heart

Genetics, molecular biology and immunology related to cardiology

Geriatric heart disease

General anaesthesia and non cardiac surgery in patients with heart disease

Pregnancy and heart disease

Epidemiology and preventive cardiology

Non-invasive Technique

To perform and interpret various non invasive techniques including:

Electrocardiography

Radiography – routine and specialized areas like CT and MRI

Stresstesting–treadmilltest, stressrelatedandothernucleartechniques

Holter monitoring for arrhythmias and ischemic disorders

Echocardiography – M-mode, Two dimensional, Doppler, color flow imaging, transesophageal echocardiography and echo directed hemodynamic studies.

Invasive Cardiology

Experience in cardiac catheterization to calculate and interpret various hemodynamic parameters

Right and left heart cath and coronary angiography procedures in adults and children

To perform temporary pacemaker insertion.

To assist in various interventions including valvuloplasty, coronary and congenital interventions.

Electrophysiology: To interpret electrophysiological data and assist in electrophysiology procedures, permanent pacemaker implantation.

Biomedical Aspects

To understanding the functional principles of various bio-medical equipment's used for the invasive and non-invasive cardiology.

Research Projects

It is recommended that the number of projects be reduced to two, however at least one of these projects must be prospective in nature. In addition, one of the projects must be submitted for publication in an indexed journal before submission. Special credit should be given for additional published case reports, published articles.

The candidates should write two reviews as the topics presented by him on seminars.

Academic and Clinical Work Requirements

Journal club readings – minimum of 4 reviews and 6 journal readings Minimum No. of Procedures

Number of Echo's done — 200 Number of TMT procedures — 100

No. of temporary pacemakers done — 30 Number of Holter analysed — 50

Number of permanent pacemakers assisted or done — 5 Number of cardiac cath procedures including Interventions assisted or done — 100

(The Head of the department should certify this)

Duration of the study program - :

Ward + CCU	12 months
Cath Lab	06 months
Echo	
TMT/Holter	
Electrophysiology/pacemaker	
Cardiac Surgery	06 months
Nuclear Cardiology	
Pediatric Cardiology	

Duration of the training programme: 2 years i.e. – 24 months.

DCARD : DIPLOMA IN CARDIOLOGY**EXAMINATION PATTERN****Theory Examination:**

PAPER I	PAPER II	PAPER III
ANATOMY& PHYSIOLOGY	THERAPEUTICS	APPLIED SCIENCES& RECENT ADVANCES
Section I	Section I	Section I
Q.1. 10 Marks	Q.1. 10 Marks	Q.1. 10 Marks
Q.2. 10 Marks	Q.2. 10 Marks	Q.2. 10 Marks
Q.3. 10 Marks	Q.3. 10 Marks	Q.3. 10 Marks
Q.4. 10 Marks	Q.4. 10 Marks	Q.4. 10 Marks
Q.5. 10 Marks	Q.5. 10 Marks	Q.5. 10 Marks
Total 50 Marks	Total 50 Marks	Total 50 Marks
Section II	Section II	Section II
Q.6. 10 Marks	Q.6. 10 Marks	Q.6. 10 Marks
Q.7. 10 Marks	Q.7. 10 Marks	Q.7. 10 Marks
Q.8. 10 Marks	Q.8. 10 Marks	Q.8. 10 Marks
Q.9. 10 Marks	Q.9. 10 Marks	Q.9. 10 Marks
Q.10. 10 Marks	Q.10. 10 Marks	Q.10. 10 Marks
Total 50 Marks	Total 50 Marks	Total 50 Marks
Total Theory = 300 Marks, Passing = 150 (i.e., 50%) Marks in aggregate		

Practical Examination:		Marks
Paper - IV	Clinical Practical	100
Paper - V	Oral & Viva	100
Paper - VI	Case	100
Total Marks	(Aggregate marks for passing is 50% out of total.)	300