


Syllabus of Diploma in Cath Lab Technology First Year

S. No	Subject	Distribution of Marks			
		Th	PR	Viva-voce	Total
Paper I	Basic Anatomy	100	75	25	200
Paper II	Physiology & Pathology	100	75	25	200
Paper III	Pharmacology	100	75	25	200
Paper IV	Preventive Cardiology	100	75	25	200
Paper V	Microbiology	100	75	25	200
Total					1000

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S.No.	Subject	Distribution of Marks			
		Th	PR	Viva-voce	Total
Paper I	Radiology	100	75	25	200
Paper II	ECG	100	75	25	200
Paper III	Defibrillation	100	75	25	200
Paper IV	Diseases of Heart	100	75	25	200
Paper V	Catheters and Instruments	100	75	25	200
Total					1000


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 वरिष्ठ आचार्य (इकाई डॉ. अनुप जैन)
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Syllabus of Diploma in Cath Lab. Technology

FIRST YEAR

Sr. No.	Subjects
1	Anatomy
2	Physiology
3	Pharmacology
4	Preventive Cardiology
5	Microbiology

Anatomy

1. Basic cells and tissues
2. Heart : Pericardium, chambers, valves, conduction system great vessels.
3. Circulation : Major arteries and veins.
4. Lungs and pleura, Diaphragm
5. Liver, spleen, kidney, brain.

Physiology

1. Circulatory systems
2. Autonomic nervous system
3. Action potential muscles contraction
4. Gas exchange
5. Thrombosis, platelet function
6. Rennin angiotensin system
7. Kidney : Physiology

Pharmacology

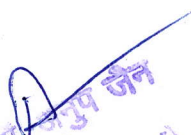
1. General pharmacology
2. Sedatives
3. Anaesthetics agents
4. Analgesics
5. Drugs used for heart disease : Antianginal, Antiarrhythmic, Anti failure, Vessopressor, Vasodilators, Cardiac imaging agents, Anti thrombotics

Preventive Cardiology (Patient care and Hospital Practice)

1. Diet and nutrition
2. Smoking
3. Exercise and heart

Microbiology

1. Specimen collection : Blood, Urine sputum etc.
2. Bacteria and viruses in CVS
3. Serology and immunolog


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Syllabus of Diploma in Cath Lab. Technology

SECOND YEAR (PAPER SCHEME)

Radiology (Basic phy of radiology)

1. Principles of X-ray
2. Protection form radiation
3. Description and recognition of chest X-rays
4. Different views of chest for identification of cardiopulmonary structures
5. Ultrasonography : Principles
6. Basic of Echocardiography

ECG

1. ECG Machine : Parts
2. Technical of taking an ECG
3. Pitfalls in taking ECGs
4. Recognition of normal ECG waves
5. Abnormal ECG

Defibrillation

1. Technique
2. Indication
3. Complications

Diseases of Heart

1. Congenital
2. Rheumatic
3. Myocardial and pericardial
4. Coronary artery diseases
5. Hypertension
6. Pulmonary thromboembolism and pulmonary hypertension
7. Respiratory failure

Catheters and Instruments

1. Arterial blood cases : Techniques and interpretation
2. Haemodynamic monitoring technique, recognition, indication, complications.
3. Fluid and electrolytes
4. X-ray imaging in lab
5. Intra Aortic balloon pulsation : Indication, Technique and complications
6. Artifician ventilation
7. Extra corporeal membrane oxygenator
8. Afferent views of cardiac catheterization
9. F...fransducer, outline of C-arm, cineangio machine oxymetry.

REFERENCE BOOKS :

1. Invasive cardiology : A manual for cath lab personnel
2. Invasive cardiology : A manual for cath lab personnel
3. The cardiac catheterization Handbook
4. The interventional cardiac catheterization Handbook
5. Complications in the Cath lab : Risk factors, management and bailout techniques
6. Cardiac catheterization in congenital Heart Disease : Pediatric and Adult

Jones & Bartlett
Watson
Morton J. Kern
Morton J. Kern

Mauro Moscucci

Charles E. Mullins

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