

# CONTENTS

## SECTION I ANATOMY

PLATE NUMBER	PAGE NUMBER
1-4. Thoracic Cage .....	2-5
5-6. Exposure of the Heart .....	6-7
7-9. Atria and Ventricles .....	8-10
10-11. Valves in Open and Closed Positions, Detailed Valvular Relationships .....	11-12
12-14. Anatomy of the Specialized Conduction System .....	13-15
15-16. Coronary Arteries and Veins .....	16-17
17-18. Innervation of the Heart I and II .....	18-19
19-20. Histology of the Myocardium I and II .....	20-21
21-28. Radiology and Angiocardiology .....	22-30
29-31. Selective Cine Coronary Arteriography .....	31-33

## SECTION II

### PHYSIOLOGY AND PATHOPHYSIOLOGY

1. Biochemistry of Cardiac Muscle .....	36-38
2. Mechanism of Cardiac Adjustment to Body- Perfusion Requirements .....	39
3. Circulatory Response to Exercise .....	40-41
4. Neural and Humoral Regulation of Cardiac Function .....	42
5-9. Cardiac Catheterization .....	43-47
10-11. Physiology of the Specialized Conduction System .....	48-49
12. The Electrocardiogram .....	50
13. Electrocardiographic Leads and Reference Lines .....	51
14-15. Cardiac Depolarization and Repolarization and Mean Instantaneous Vectors .....	52-53
16. The Spatial Vectorcardiographic Loop .....	54
17. Principles of the Vectorcardiograph .....	55
18. Normal Vectorcardiographic Loop and Derivation of the Electrocardiogram .....	56
19. Axis Deviation in a Normal Subject .....	57
20. Atrial Enlargement .....	58
21. Ventricular Hypertrophy .....	59
22. Bundle-Branch Block .....	60
23. Wolff-Parkinson-White Syndrome .....	61
24. Myocardial Ischemia, Injury, and Infarction .....	62
25. Localization of Anterior Infarcts .....	63
26. Localization of Posterior Infarcts .....	64
27. Sinus and Atrial Arrhythmias .....	65
28. Premature Contractions .....	66
29. Sinus Arrest, Block, and A-V Block .....	67
30. Tachycardia, Fibrillation, and Atrial Flutter ..	68
31. Effect of Drugs and Electrolytes on Electrocardiograms .....	69
32. Misleading Electrocardiographic Findings ...	70
33-34. Pacemaker Implantation in Treatment of Complete Heart Block .....	71-72
35-37. Auscultatory Positions and Areas; Events in Cardiac Cycle .....	73-75
38-41. Phonocardiography .....	76-80
42. Right Heart Failure and Systemic Congestion .....	81
43. Left Heart Failure and Pulmonary Congestion .....	82

## SECTION II (continued)

### PHYSIOLOGY AND PATHOPHYSIOLOGY (continued)

PLATE NUMBER	PAGE NUMBER
44-45. Pulmonary Congestion or Edema of Cardiac and Other Origins .....	83-84
46. Peripheral or Systemic Congestion or Edema of Cardiac Origin .....	85
47. Pulmonary Edema and Paroxysmal Dyspnea - Points of Therapeutic Attack .....	86
48-52. Valvular Stenosis and Insufficiency .....	87-91
53-54. Serum Enzymes in Myocardial Infarction ..	92-93
55. Shock .....	94-95
56-58. Cardiopulmonary Arrest and Treatment ..	96-98
59-61. Extracorporeal Circulation .....	99-101
62-66. Drug Action on Heart .....	102-109

## SECTION III

### EMBRYOLOGY

1. Age of the Embryo .....	112-113
2. Early Intraembryonic Vasculogenesis ....	114
3-4. Formation of the Heart Tube .....	115-116
5-6. Formation of the Heart Loop .....	117-118
7-13. Formation of the Cardiac Septa .....	119-126
14-17. Development of the Major Blood Vessels ..	127-130

## SECTION IV

### DISEASES - CONGENITAL ANOMALIES

1. Anomalies of the Great Systemic Veins ...	133
2-3. Anomalous Pulmonary Venous Connection .....	134-135
4. Anomalies of the Atria .....	136
5-6. Defects of the Atrial Septum .....	137-138
7-8. Endocardial-Cushion Defects .....	139-140
9-12. Anomalies of the Tricuspid Valve .....	141-144
13-15. Anomalies of the Ventricular Septum ...	145-147
16-20. Anomalies of the Right Ventricular-Outflow Tract .....	148-152
21-22. Anomalies of the Left Ventricular-Outflow Tract .....	153-154
23-24. Transposition of the Great Vessels .....	155-156
25. Transposition of the Great Vessels with Inversion of the Ventricles (Corrected Transposition of the Great Vessels) .....	157
26. Anomalies of the Truncus Septum .....	158
27. Anomalous Left Coronary Artery and Aneurysm of the Sinus of Valsalva .....	159
28-31. Anomalies of the Aortic-Arch System ...	160-163
32. Endocardial Fibroelastosis and Glycogen Storage Disease .....	164

## SECTION V

### DISEASES - ACQUIRED

1-2. Rheumatic Fever; Sydenham's Chorea ...	166-167
3-14. Rheumatic Heart Disease .....	168-179
15. Lupus Erythematosus .....	180
16-22. Bacterial Endocarditis .....	181-187
23. Marantic Endocarditis .....	188
24. Cystic Medial Necrosis of the Aorta .....	189

SECTION V (continued)  
DISEASES – ACQUIRED  
(continued)

PLATE NUMBER	PAGE NUMBER
25. Syphilitic Heart Disease .....	190
26–31. Surgery for Acquired Heart Disease (Valvar Replacement) .....	191–196
32–33. Insertion of Trileaflet Aortic Valve .....	197–198
34. Free-Floating Discoid Valve for Mitral and Tricuspid Replacement .....	199
35–36. Aortic-Valve Homograft .....	200–201
37. Amyloidosis .....	202
38. Septic Myocarditis .....	203
39. Diphtheritic and Viral Myocarditis .....	204
40. Myocarditis in Sarcoidosis and Scleroderma .....	205
41. Idiopathic Myocarditis .....	206
42. Endomyocardial Fibrosis .....	207
43. Löffler's Disease .....	208
44. Becker's Disease .....	209
45. Beriberi .....	210
46. Cardiac Myopathies .....	211
47. Structure of Coronary Arteries .....	212
48. Hypothesis on Pathogenesis of Human Atherosclerosis .....	213
49. Pathologic Changes in Coronary-Artery Disease .....	214
50. Critical Areas of Atherosclerosis .....	215
51. Factors in Etiology of Atherosclerosis .....	216–217
52–56. Arteriosclerotic Heart Disease .....	218–222
57. Angina Pectoris .....	223
58. Hypertension – A Disease of Regulation ..	224–225
59. Causes of Secondary Hypertension Possibly Amenable to Surgery .....	226
60. Eyegrounds in Hypertension .....	227
61–62. Occlusive Disease of Main Renal Artery ..	228–229
63. Kidneys in Hypertension .....	230–231
64–65. Heart Disease in Hypertension .....	232–233
66. Acute Cor Pulmonale .....	234–235
67–68. Chronic Cor Pulmonale .....	235–237
69–75. Surgery for Coronary-Artery Disease ....	238–244
76. Heart in Hyperthyroidism .....	245
77. Heart in Myxedema .....	246
78. Trichinosis .....	247
79. Chagas' Disease .....	248
80. Amebic Pericarditis .....	249
81. Echinococcus Cyst (Hydatid Disease) ....	250
82. Heart Tumors .....	251
83. Metastatic Heart Tumors .....	252
84–88. Penetrating Heart Wounds .....	253–257
89–90. Nonpenetrating Heart Wounds .....	258–259
91–93. Disease of Pericardium .....	260–262
94–97. Heart Transplantation .....	263–266
Glossary of Abbreviations .....	267
References .....	268
Index .....	277
Information on CIBA COLLECTION Volumes .....	295