

## **Section 1: Principles of Ultrasound and Instrumentation**

- 1. Physical Principles of Ultrasound and Generation of Images**
- 2. M-Mode Imaging**
- 3. Principles of Contrast Echocardiography**
- 4. Principles of Transesophageal Echocardiography**
- 5. Principles of 3-Dimensional Ultrasound**
- 6. Principles and Practical Aspects of Strain Echocardiography**
- 7. Understanding Imaging Artifacts**

## **Section 2: The Echocardiographic Examination**

- 8. Principles of Transthoracic Imaging Acquisition: The Standard Adult Transthoracic Echocardiographic Examination**
- 9. The Transthoracic Examination, View By View**
- 10. Three-Dimensional Echocardiography: Image Acquisition**
- 11. Optimization of the Patient and Equipment**
- 12. Utilizing Contrast Echocardiography in Practice**
- 13. Echo On-Call: Echocardiographic Emergencies**

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- 15. Left Ventricular Diastolic Function**
- 16. Assessment of Right Ventricular Structure and Function**
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- 20. Long-Term Consequences and Prognosis after Myocardial Infarction**
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- 22. Dilated Cardiomyopathies**
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- 24. Restrictive and Infiltrative Cardiomyopathies
- 25. Echocardiography in Assessment of Cardiac Synchrony
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**Appendix A: Reference Tables**

**Appendix B: Commonly Utilized Equations in Echocardiography**