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EKG Technician Exam Content Outline According to Industry Standard Needs Study

TOPICS	Check
<u>-Exam Section: The Cardiovascular System</u>	
Circulation and the EKG	
Anatomy of the heart	
Principles of circulation	
The cardiac cycle	
Conduction system of the heart	
Electrical stimulation and the EKG waveform	
<u>-Exam Section: The Electrocardiography</u>	
Producing the EKG waveform	
EKG machines	
EKG controls	
Electrodes	
EKG graph paper	
Calculating heart rate	
<u>-Exam Section: Performing an EKG</u>	
Preparation for the EKG procedure	
Communicating with the patient	
Identifying anatomical landmarks	
Applying the electrodes and leads	
Safety and infection control	
Operating the EKG machine	
Checking the EKG tracing	
Reporting EKG results	
Equipment maintenance	
Pediatric EKG	
Cardiac monitoring	
Special patient considerations	
Handling emergencies	
3 LEAD Application	
5 LEAD Application	
10 LEAD Application	
12 LEAD Application	
15LEAD Application	
<u>-Exam Section: Rhythm Strip Interpretation and Sinus Rhythms</u>	
Rhythm interpretation	
Identifying the components of the rhythm	
Rhythms originating from the sinus node	
Sinus Bradycardia	



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Sinus dysrhythmia	
Sinus arrest	
<u>-Exam Section: Atrial Dysrhythmias</u>	
Introduction to atrial dysrhythmias	
Premature atrial complexes	
Flutter	
Atrial fibrillation	
<u>-Exam Section: Junctional Dysrhythmias</u>	
Introduction of Junctional dysrhythmias	
Supraventricular tachycardia	
<u>-Exam Section: Heart Block Dysrhythmias</u>	
Introduction to heart block dysrhythmias	
First degree atrioventricular (AV) block	
Second degree atrioventricular (AV) block, mobitz I (type I or wenckebach)	
Second degree atrioventricular (AV) block, type 2 (mobitz 2)	
Third degree atrioventricular (AV) block (complete)	
<u>-Exam Section: Rhythms Originating from the Ventricles</u>	
Introduction to ventricular dysrhythmias	
Premature ventricular complexes (PVCs)	
Ventricular tachycardia	
Ventricular fibrillation	
Asystole	
<u>-Exam Section: Exercise Electrocardiography</u>	
What is exercise electrocardiography?	
Why is exercise electrocardiography used?	
Variations of exercise electrocardiography	
Preparing the patient for exercise electrocardiography	
Providing safety	
Performing exercise electrocardiography	
Common protocols	
Following exercise electrocardiography	
Procedure checklist assisting with exercise electrocardiography (stress testing)	
<u>-Exam Section: Ambulatory Monitoring</u>	
What is ambulatory monitoring?	
How is ambulatory monitoring used?	
Functions and variations	
Educating the patient	



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Preparing the patient	
Applying the ambulatory monitor and reporting results	