National Healthcareer Association®

NHA Certified EKG Technician (CET)

Test Plan for the CET Exam

100 Scored Items / 20 Pretest Items
Exam Time: 2 hours

**Based on The Results of a Job Analysis Completed in 2026*

This document provides both a summary and detailed outline of the topics that may be covered on the CET Certification Examination. The summary examination outline specifies domains that are covered on the examination and the number of test items per domain.

The detailed outline adds to the summary outline by including task and knowledge statements associated with each domain on the test plan. Task statements reflect the duties that a candidate will need to know how to properly perform. Knowledge statements reflect information that a candidate will need to know and are in support of task statements. Items on the examination might require recall and critical thinking pertaining to a knowledge statement, a task statement, or both.

Generally, knowledge statements listed immediately after a set of tasks for a domain are only applicable to that domain. Knowledge statements listed under "Core Knowledge" are potentially applicable to any of the assessment domains.

NHA CET Summary Examination Outline

DOMAIN	# of Items on Examination	% of Items on Examination
1. Safety, Compliance, and Coordinated Patient Care	34	34
2. EKG Acquisition	40	40
3. EKG Analysis and Interpretation	26	26
Total	**100**	**100**

Foundational / Core Knowledge: The following knowledge does not represent standalone domains on the CET exam. Rather, this is necessary knowledge for an EKG technician, which could be used in the context of an assessment item, and is being provided for preparation and review purposes.

Tasks	Knowledge of:
	k1. Basic anatomy and physiology of the cardiovascular system k2. Emergencies encountered during patient interactions (e.g., syncope, chest pain, dyspnea) k3. Cardiopulmonary Resuscitation (CPR) and Basic Life Support (BLS)

Domain 1: Safety, Compliance, and Coordinated Patient Care (34 items)

Tasks	Knowledge of:
1A. Adhere to HIPAA regulations.	k4. HIPAA regulations
1B. Adhere to infection control practices (e.g., standard precautions, transmission-based precautions).	k5. Guidelines regarding infection control (e.g., standard precautions, transmission-based precautions)
1C. Adhere to scope of practice and comply with ethical standards.	k6. Scope of practice of an EKG technician
1D. Communicate effectively with patients, families/caregivers, and members of the multi-disciplinary health care team.	k7. Ethical standards related to the practice of EKG technicians (e.g., NHA Code of Ethics)
1E. Greet patient and verify identity using patient identifiers prior to cardiac testing.	k8. Elements of implied and informed (verbal and written) consent
1F. Educate patients about pre-test protocols and procedures (e.g., stress testing, ambulatory monitoring) and confirm their understanding.	k9. Patient identifiers (e.g. name, date of birth, QR code/wrist band)
1G. Obtain and document implied or informed (verbal or written) consent.	k10. Roles and responsibilities of members of interdisciplinary health care team
1H. Assess patient's overall health status.	k11. Communication methods and techniques (e.g., verbal and nonverbal, written, use of electronic devices)
1I. Measure and assess vital signs.	k12. Factors that affect communication with patients (e.g., culture, language, religion, developmental level, gender, disability)
1J. Report signs and symptoms requiring further evaluation (e.g., cardiopulmonary compromise, altered mental status, diaphoresis).	k13. Types of educational approaches and materials (e.g., demonstration, teach-back, written and illustrated pamphlets)
1K. Use proper body mechanics when moving or lifting patients.	k14. Instructions for patient use of ambulatory monitors
1L. Input patient information (e.g., patient history, medications, vitals, completed EKG) into the electronic health record (EHR).	k15. Patient preparation for stress testing
	k16. Precautions for EKG and contraindications for stress testing
	k17. Signs of cardiopulmonary compromise, low cardiac output, and distress (e.g., cyanosis, confusion, dyspnea)
	k18. Symptoms of cardiopulmonary compromise (e.g., shortness of breath, chest tightness)
	k19. Methods for obtaining vital signs
	k20. Typical and atypical vital signs across the lifespan
	k21. Body mechanics for lifting, moving, or adjusting patients
	k22. Basic elements and processes related to electronic health records (EHR) (e.g., fields, transmit or upload results)

Domain 2: EKG Acquisition (40 items)

Tasks	Knowledge of:
2A. Maintain various types of equipment (e.g., load paper, replace clips, disinfect/sterilize machines and leads). 2B. Verify equipment function and machine settings (e.g., calibration, speed, gain, lead selection). 2C. Ensure privacy and provide instructions on removing clothing or accessories that may interfere with electrode placement. 2D. Position patient for cardiac testing (e.g., supine, semi-Fowler's, prone). 2E. Prepare skin for electrode placement, including addressing factors that may cause artifacts. 2F. Review provider's order and apply electrodes to patient using anatomical landmarks and attach leads for: 1. Standard 12-lead EKG 2. Ambulatory (e.g., Holter, Event) monitoring 3. Stress testing 4. Telemetry 5. Patients who have special considerations (e.g., dextrocardia, posterior chest, amputations, pediatric, pacemaker) 2G. Verify that all leads were recorded. 2H. Identify, troubleshoot, and resolve interference and artifact(s) from tracing. 2I. Assist in monitoring patient condition during stress testing. 2J. Provide support in responding to complications during stress testing. 2K. Electronically transmit tracing to patient's chart, verifying two patient identifiers. 2L. Mount completed EKG tracing strip to patient's chart if paper system is used.	k23. Equipment and supplies needed to perform or assist in cardiac tests k24. EKG equipment maintenance and cleaning requirements (e.g., paper loading, clip replacement, machine and lead disinfection) k25. Machine settings for acquiring tracing (e.g., speed, gain) k26. Types of ambulatory monitors k27. Methods to prepare patient's skin for application of EKG and telemetry electrodes (e.g., alcohol cleansing, prep gel, abrasion, hair clipping) k28. Positioning considerations for special patient populations (e.g., patients who have had amputations, patients who have respiratory issues, patients experiencing late-term pregnancy) k29. Positioning protocols for specific cardiac tests k30. Anatomically correct electrode placement and application for a variety of cardiac tests k31. Lead placement and troubleshooting k32. Purpose(s) of various EKG tests, including differentiation of diagnostic EKGs and continuous telemetry monitoring k33. Types of EKG acquisition (e.g., 3-, 5-, 12-lead, stress test, telemetry) k34. Types of cardiac monitoring (e.g., ambulatory, telemetry/continuous monitoring) k35. Components of complete EKG tracing (e.g., rate, rhythm) k36. Types, causes, and resolution of artifacts (e.g., wandering baseline, somatic tremor, AC interference) k37. Signs of adverse reactions or complications during stress testing (e.g., chest pain, sudden change in vitals, changes to EKG) and potential risks (e.g., falls, cardiac arrest) k38. Mounting and electronic transmission of EKG strips

Domain 3: EKG Analysis and Interpretation (26 items)

Tasks	Knowledge of:
3A. Inspect EKG tracing to determine regularity of the patient's heart rhythm. 3B. Calculate patient's heart rate from the EKG tracing. 3C. Verify tracing quality and lead accuracy prior to interpretation or escalation. 3D. Identify, measure, and interpret EKG intervals and waveforms. 3E. Identify arrhythmias on EKG tracing. 3F. Recognize EKG patterns indicative of ischemia, injury, and infarction and report findings according to protocols. 3G. Recognize pacemaker spikes on EKG tracing. 3H. Take necessary action when life-threatening arrhythmias are identified.	k39. Formulas to determine maximum and target heart rate for stress testing k40. Units of measurement and time/amplitude calibration of EKG graph paper k41. Methods to calculate heart rate (e.g., 6-second method, R-R interval, 1500 method) k42. Regular, irregular, and critical cardiac rhythms k43. Electrical conduction pathway of the heart k44. Techniques for measuring intervals and segments k45. Characteristics of waveforms (e.g., morphology, symmetry, deflection, amplitude) k46. Characteristics of intervals and complexes (e.g., PR interval, QRS complex, QT interval) k47. Special considerations of waveforms (e.g., bundle branch, ST elevation, P waves, T waves) k48. Variances in waveforms related to ischemia, injury, and infarction k49. Types of arrhythmias (e.g., sinus, atrial, ventricular, junctional, heart blocks) k50. Life-threatening arrhythmias (e.g., ventricular fibrillation, ventricular tachycardia, asystole) k51. Types and meaning of spikes caused by pacemakers (e.g., atrial-paced/ventricular-paced, dual-chamber paced) k52. Effects of common electrolyte imbalances on EKG findings k53. Escalation protocols