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Patient Care Technician Exam Content Outline According to Industry Standard Needs Study

Section 1: Patient Care Technician Skills Exam Content Outline

TOPICS	Check
<u>Examination Section -Patient Care Technician</u>	
Characteristics of Patient Care Technicians: personality, appearance & behavior	
Professionalism	
Credentials of Patient Care Technicians	
Ethics and Law for Medical Facilities: Ethical concepts & Conflicts, Difference between Public & Private laws, Lawsuits, Public—Criminal- Civil Laws, Law and Professional liability, Controlled substance & Prescriptions, Federal and State laws protecting employees, HIPAA Laws, identify & respond to issues of confidentiality, Mandatory Reporting	
Patient Interaction: Verbal & non-verbal communication with patient, listening skills, Interviewing Techniques, Barriers to Effective Communication, understanding the needs of the patient, professionalism.	
<u>Examination Section - Anatomy and Physiology</u>	
Human Body:	
Relationship between Anatomy & Physiology, List the 11 organ systems of the body, and briefly describe function of each, identify body planes, body regions and relative positions using anatomic terms.	
Tissues and membranes:	
List four different types of tissues, and their functions.	
<u>Examination Section – Patient Care Skills:</u>	
Sterilization and Disinfection:	
Hazard Communication Standard:	
Inventory and labeling of hazardous chemicals, Material Safety Data Sheets, (MSDS)read and interpret an MSDS.	
Sanitization:	
Purpose of Sanitization, Guidelines for Sanitizing Instruments, Wrap items for autoclaving.	
Disinfection:	
Use of three levels of disinfection: high, intermediate, and low.	
List and describe the primary use of disinfectants in the medical field.	
Sterilization:	
Sterilization methods, Autoclave, Maintenance of the autoclave.	
Vital Signs:	
Define vital signs, explain the reason for taking vital signs	
Temperature:	
Explain how heat is produced and lost from the body, explain factors that can cause variations in the body temperature, list and describe three stages of a	



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fever, list the sites for taking body temperature, and explain why these sites are used, regulation of body temperature, body temperature range, assessment of body temperature.	
Pulse:	
Mechanism of pulse, list factors that affect the pulse-rate, identify a specific use of each of the eight pulse sites, normal range of pulse rate for each age group, assessment of pulse	
Respiration:	
Explain purpose of respiration, mechanism of respiration, normal respiratory rate for each age group, factors affecting the respiratory rate.	
Pulse Oximetry:	
Explain purpose of pulse oximetry, state normal oxygen saturation level of a healthy individual, list and describe factors that may interfere with an accurate pulse oximetry reading.	
Blood Pressure:	
Define blood pressure, state normal range of blood pressure for an adult, list and describe factors affecting blood pressure, identify Korotkoff sounds, different parts of a stethoscope and a sphygmomanometer, explain how to prevent errors in blood pressure measurement.	
Activities of daily living	
Perform foot care	
Feeding patient	
Shave patient	
Perform decubitus ulcer care	
Assist with gait training	
Assist with tub bath	
Change unoccupied bed	
Orient patient	
Position & turn patient	
Perform complete bed bath	
Perform oral hygiene	
Assist with ambulation	
Perform skin care	
Assist with shower	
Change occupied bed	
Perform passive / active ROM	
Shampoo bedridden patient	
Patient transfer	
Body mechanics	
Transfer patient to wheelchair	
Transfer patient to chair	
Transfer patient to toilet	
Turn & position patient	
Pulling & lifting patient	



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Equipment	
Oxygen mask	
Humidifier	
Bed scale	
Thermometer (electric / glass)	
Hoyer lift	
Oxygen cannula	
Ted stockings	
Blood pressure cuff - manual	
Blood pressure cuff - electric	
Specimen collection	
Stool specimen	
24 hour urine specimen	
Urine culture	
Sputum specimen	
Foley catheters specimen	
Specific gravity of urine	
Stool hemocult	
Clean voided urine	
Midstream urine catch	
Stool parasites 1	
Procedures experience	
Infection control	
Equipment cleaning	
Waste disposal	
Reverse isolation	
Respiratory isolation	
Universal precautions	
Disposal of sharps	
Restraints	
Documentation	
Observing restrained patient	
Applying soft limb restraints	
Safety guidelines	
Applying leather restraints	
Age appropriate care	
Newborn	
Infant	
Adolescents	
Older adults (64+ years)	



Section 2: Phlebotomy Exam Content Outline

TOPICS	COMMENT
<u>Examination Section - Medical Terminology</u>	
Word roots	
Combining forms	
Prefixes	
Suffixes	
Abbreviations- medical laboratory	
<u>Examination Section - Anatomy and Physiology</u>	
Cardiovascular system	
The heart & blood vessels and circulation	
The blood	
Coagulation/hemostasis	
Blood types	
<u>Examination Section - Infection Control-Safety Procedures</u>	
The infection cycle	
Breaking the chain of infection	
Isolation procedures	
Universal precautions versus standard precautions	
Isolation versus standard precautions	
Personal protective equipment (PPE)	
Gloves	
Masks, respiratory protection, protective eye wear, face shields	
Protective apparel	
Handwashing	
Medical/surgical asepsis	
Sterile techniques	
Opening a sterile package	
Laboratory safety	
Laboratory hazards	
Biological hazards	
Sharps	
Chemical, electrical, and radioactive hazards	
Blood-borne pathogens---OSHA regulations	
Prevention of occupational exposure	
Personal exposure control plan	
Follow-up treatment	
Precautions taken during follow-up period	



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Examination Section- Documentation	
Laboratory requisition forms	
Computer requisition forms	
Manual requisition forms	
Generalities of laboratory requisition forms	
Transmission of laboratory requisition forms	
Client/patient charting	
Insurance billing/private pay	
Payment for services rendered	
Health care revisions	
Billing the insurance company	
Laboratory computer	
Laboratory information management systems (LIMS)	
Examination Section- Blood Collection Equipment and Supplies	
General blood collection equipment and supplies	
Gloves	
Goggles	
Antiseptics	
Gauze pads	
Bandages	
Needle disposal equipment	
Capillary puncture equipment and supplies	
Lancets	
Spring-loaded puncture devices	
Microhematocrit tubes	
Clay sealer trays	
Microcollection system	
Venipuncture equipment and supplies	
Syringe	
Butterfly collection devices	
Tourniquets	
Evacuated tubes	
Blood-drawing trays	
Blood-drawing chair	
Test orders	
Direct access testing	
Supplies and equipment	
Tubes and additives	
Needle selection	
Syringes, tubes holders, and winged collection sets	
Equipment assembly	
Tubes holders	
Syringes	
Winged collection sets	



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Examination Section- Collection by Capillary Puncture	
Phlebotomy preparation-assembling and preparing equipment	
Client/patient identification and preparation	
Site identification	
Fingertips	
Heel and toes	
Performing the puncture	
Finger sticks	
Heel sticks	
Processing the specimen	
Order of draw	
Microcollection containers	
Blood smears	
Examination Section- Collection By Routine Venipuncture	
Preanalytical errors	
Patient identification	
Inpatient identification	
Outpatient identification	
Confirm test requests	
Position the patient	
Outpatient	
Inpatient	
Venipuncture procedures- assembling and preparing equipment	
Site selection	
Necessity for restraint	
Site identification	
Application of tourniquet	
Cleansing the venipuncture site	
Performing the puncture	
Mastectomy patients	
Availability of veins	
Collector's skill	
Presence of edema	
Injuries	
Infusion of intravenous fluids	
Vein selection	
Order of draw	
Recovering the failed venipuncture	
If using a tube holder	
If using a syringe	
If using a winged infusion set	
Specimen identification and tube labeling	
Failure to obtain blood and other considerations	
Collapsed vein	
Damaged or occluded veins	



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Obesity	
Incorrect needle and/or tubes position	
Other considerations regarding routine venipuncture	
Specimen integrity-quality assurance	
Processing a blood specimen	
Stopper removal	
Separation of plasma and serum	
Specimen rejection	
Prioritizing patients	
<u>Examination Section- Complications of Blood Collection</u>	
Introduction	
Accidental artery puncture	
Collapsed vein	
Excessive bleeding at the site	
Fainting-seizures	
Hematoma	
Never damage	
Uncooperative patient	
Fainting and nausea	
Seizures	
Hematoma formation	
Pain	
<u>Examination Section- Specialized Phlebotomy Techniques</u>	
Pediatric collection	
Restraining the child patient	
Blood cultures	
Collections of nonblood specimens	
Throat cultures	
Fecal (stool) specimens	
Gastrointestinal secretions, amniotic fluids, cerebrospinal fluid, and nasopharyngeal specimens	
Urine Specimen Collection	
Blood donor collections	
Autologous blood donation	
Special situations	
Indwelling catheters	
<u>Examination Section- Point-Of-Care Testing and Other Laboratory Tests</u>	
Hematocrit	
Hemoglobin	
Blood glucose	
Glucose tolerance test (GTT)	
Cholesterol	
Coagulation monitoring	



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Activated coagulation time (ACT)	
Prothrombin time (PT)	
Partial thromboplastin time (PTT) and	
Activated partial thomboplastin time (APTT)	
Bleeding time	
Examination Section- Difficult Draws, Alternative Sites, Pediatric Venipuncture	
Difficult draw	
Needle-phobic patients	
Age	
Mastectomy	
Skin injuries and disorders	
Edema/obesity	
Scarred and sclerosed veins	
Fistulas	
Heparin/saline locks	
IV therapy	
Drawing below an IV site	
Drawing above an IV site	
Language barriers	
Alternative sites	
Hand and wrist veins	
Veins of the ankles and feet	
Capillary blood collection	
Vascular access devices	
Femoral artery	
Arterial punctures	
Pediatric venipuncture	
Newborns and infants	
Iatrogenic anemia	
Age- 1to 3 years	
Calming fears	
Age- 4 years to adolescence	
Calming fears	
Examination Section- Special Collections- Capillary, and Blood Culture	
Collection	
Capillary blood collection	
Equipment	
Site selection	
Birth to 12 months	
1 year too adult	
Procedure	
Prewarming	
Perform the puncture	
Order of draw for capillary specimens	



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Neonatal screening	
Blood culture collection	
Preventing false negatives	
Preventing false positives	
Designated blood culture collection team	
Commercial skin prep skin kits	
Disinfectants	
Collector feed back	
Specimen collection procedure	
Syringes draws	
Vacuum-assisted draws	
Draws through vascular access devices	
<u>Examination Section- Specimen Handling, Storage and Transportation</u>	
Handling	
Centrifugation	
Serum separators	
Transfer tubes	
Analytics unstable after separation	
Handling coagulation specimens	
Handling whole blood specimens	
Add-on tests	
Effects of light	
Storage and transportation	
On-site testing facilities	
Off-site testing facilities	
EDTA tubes	
Serum tubes	
Heparin tubes	
Sodium citrate tubes	
Specimen processing reminders	
Urine specimens	
<u>Examination Section- Phlebotomy Liability</u>	
Technical errors	
Administrative errors	
Training and evaluation	
<u>Examination Section Managing Exposures to Bloodborne Pathogens</u>	
Preexposure management	
Understanding bloodborne pathogens	
Prevention	
Preexposure immunizations	
Postexposure management	
Percutaneous wound care	



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Exposure evaluation	
Postexposure prophylaxis	
Hepatitis B	
Hepatitis C	
HIV	
Postexposure testing and counseling	
Texting the employee	
Counseling the employee	
Testing and counseling the source patient	
Summary of exposure protocol	
Hepatitis B	
Hepatitis C	
HIV	
Elements of a comprehensive and functional exposure	
Control plan	
Assessing effectiveness	
<u>Examination Section- Quality Assurance/Control</u>	
Quality assurance in phlebotomy	
Quality control in phlebotomy	
Risk management	

Section 3: EKG Technician Exam Content Outline

TOPICS	COMMENT
<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	



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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	
Procedure checklist 4.1 recording the electrocardiogram	
Procedure checklist 4.2 continuous cardiac monitoring	
<u>Exam Section: Rhythm Strip Interpretation and Sinus Rhythms</u>	
Rhythm interpretation	
Identifying the components of the rhythm	
Sinus Bradycardia	
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	
Premature Junctional complex	
Junctional escape rhythm	
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	



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Exam Section: Exercise Electrocardiography	
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)	
Exam Section: Ambulatory Monitoring	
What is ambulatory monitoring?	
How is ambulatory monitoring used?	
Functions and variations	
Educating the patient	
Preparing the patient	
Applying the ambulatory monitor and reporting results	