American Medical Certification Association

-A division of the American School of Business-

Phlebotomy Technician Certification

Exam Study Guide

American Medical Certification Association, Phlebotomy Technician Certification, (PTC), 2010

Dear Student,

This exam prep study guide is intended to be used as reinforcement for what you have already learned. It is not intended to replace classroom learning or notes that you have already taken. Instead, use what you have already learned, and the notes that you have taken and the books that you used could be a great reference while you are studying.

The exam consists of 100 multiple choice questions and you will have two hours in which to complete the exam. When taking the test, always apply these test taking strategies:

- Look for distracters in the question such as the words, **not, always, exactly, first, next,** etc.
- Read all the answers
- Eliminate the ones that you know are incorrect
- Narrow it down to 2 possible answers
- Choose the **BEST** possible answer

ON TEST DAY

1. Please bring a picture ID with you. A **valid** driver's license, county ID, and passport are all acceptable forms of ID.
2. Please bring a #2 pencil with you.
3. Fill out all registration and test answer sheets in their entirety. Your full name as you would like it to appear on your certification card, your complete SSN and mailing address are necessary. Failure to provide this information, will delay the processing of your exam.
4. **DO NOT WRITE IN THE TEST BOOKLET!** All of your answers must be recorded on the answer sheet.
5. Cheating of any kind will not be tolerated. If someone is suspected of cheating, they will be removed from the classroom. They will forfeit their right to retake the exam.
6. In order to be successful on the exam, you must achieve a 70% or better on the exam.
7. Once the exam begins, you will not be allowed to access your cell phone or any other electronic device. Please turn them to silent prior to entering the classroom.
8. Once the exam begins, you will not be allowed to use the restroom. Please use the restroom before the exam begins.

Special Accommodations

AMCA and the American School of Business pledge to comply with the provisions of the Americans with Disabilities Act. as amended (42 USCG Section 12101, et. seq.), and with Title VII of the Civil Rights Act, as amended (42 U.S.C. 2000e, et seq.), to the best of their ability.

If you need special accommodations because of a disabling condition, you may ask for special testing services. This request must be submitted in writing and included with your registration. All requests are handled on an individual basis.

If you are requesting special accommodations you must submit a letter (IEP) from an appropriate healthcare professional that is licensed to evaluate the disability. The letter must be written on the healthcare professional's letterhead and include the professional's title, address and telephone number and date. The letter must also include a diagnosis of the disabling condition and explain why special testing accommodations are necessary. The letter must have an original signature from the professional and be dated no more than 2 years prior to registration of the exam

Exam Challenges

If you have a question or believe any part of the exam was unfair or misleading, you can email customer service and your concerns will be forwarded to the appropriate department. When emailing, please include "Exam Challenge" in the subject line and email to: AMCA@AmericanMedicalCertification.com.

Good luck on your exam!

AMCA National Phlebotomy Review

The History of Phlebotomy

Hippocrates (the father of modern medicine) thought that disease was excess fluid in the body. Bloodletting became a common practice in his time. Barber surgeons were allowed to do certain practices such as bloodletting, leaching, cupping, shaving and enemas. **The Greek term for phlebotomy literally translates into *phlebos*, meaning vein, and *tome*, meaning an incision.**

Phlebotomy Today

Phlebotomy is now practiced to:

-Obtain blood for patient monitoring, and diagnostic purposes

- Remove blood from patients for blood banking and transfusion purposes

-Remove blood for therapeutic purposes

-Venipuncture procedures

-Capillary punctures

Job Settings for Phlebotomist

1.) Hospital (Inpatient) Settings

- A.) Acute-care hospitals
- B.) Specialty hospitals
- C.) Urban or rural hospitals
- D.) Hospital-based clinics
- E.) Hospital- based emergency centers

2.) Ambulatory Care (Outpatient) Settings

- A.) Health department clinics
- B.) Community health centers
- C.) Community-based mental health centers

D.) Prison health clinics

E.) Dialysis centers

F.) Home health agencies

G.) Home hospice agencies

H.) HMO's

I.) Rehabilitation centers

Professionalism Traits

1.) Code of ethics

2.) Compassion and Sincerity

3.) Maturity and emotional stability

4.) Accountability

5.) Dedication

6.) Respect

7.) Good personal hygiene and sterile techniques

8.) Pride

9.) Team work

10.) Communication and education

Communication

A.) Feedback loop

1.) Sender

2.) Receiver

3.) Feedback

B.) Basics:

1.) Empathy

2.) Respect

3.) Gaining patient trust

4.) Active listening

5.) Feedback

6.) Use simple terms patients can understand

C.) Verbal Communication

1.) Language

2.) Impairments

3.) Cultural differences

4.) Tone

5.) Bedside manner

D.) Nonverbal Communication

1.) Kinesics – the study of nonverbal communication

a.) kinesic slip – where verbal and nonverbal messages do not match

2.) Zones of comfort

-intimate space (18 inches or closer)

-personal space (18 in. to 4 ft)

-social space (4 ft to 12 ft)

-public space (12 ft or more)

3.) Active listening

4.) Culture

E.) Telephone Etiquette

Quality assurance

A.) **Pre-analytical Phase Outside the Laboratory**

1.) Patient ID and information

2.) Isolation procedures

3.) Standard precautions

4.) Correct techniques for capillary or venipuncture

5.) Correct transportation and handling of specimens

B.) Pre-analytical Phase Inside the Laboratory

1.) Patient ID and information

2.) Specimen registration and distribution

3.) Correct centrifuge process

4.) Correct storing for specimens

C.) Analytical Phase

1.) Specimen testing

D.) Post-analytical Phase

1.) Recording and reporting results

2.) Follow up procedures

Legal Issues

A.) Assault – an act or threat causing another to be in fear of immediate battery

B.) Battery – intentional harmful or offensive touching or use of force on a person without consent or legal justification

C.) Litigation Process

1.) Phase 1: Incident Occurs

2.) Phase 2: Consultation with Attorney

3.) Phase 3: The Trial

4.) Phase 4: The Appeal

D.) Standard of Care

-an implied concept that the health care worker will provide adequate care to patients

E.) Malpractice

1.) Improper care of a patient from a health care worker

2.) Responsibility can fall on health care worker or physician

F) Confidentiality

1.) All information discussed about a patient should be on a need to know basis.

2.) The most common place confidentiality is breached is in elevators.

3. All patient records and lab results should be in a secure location beyond the site of other patients or visitors.

HIPPA

A.) Patients must have written consent to have information to be disclosed to another party.

B.) All information will be kept confidential

C.) Informed Consent

1.) Voluntary consent by patient for health care provider to examine or perform procedures.

2.) Patient must be informed about procedures and given option to have procedure done.

3.) Patient will usually sign a consent form.

CLIA

A.) Agency that provides regulations to ensure the accuracy and quality of lab testing.

B.) Requires laboratory certifications by the federal government

C.) Blood collection procedures inspected regularly due to improper techniques causing false test results.

Infection Control

A.) Bloodborne Pathogens

1.) The most common occurring laboratory infection is **Hepatitis B**

2.) HIV (AIDS)

B.) Universal Precautions

1.) OSHA Standards

2.) Needlestick and Safety Prevention Act

3.) PPE

C.) Exposure Control

1.) Needlestick injury

2.) Incident report

3.) Follow up procedures

D.) Chain of Infection

1.) Infectious agent – bacteria, fungus, protozoa, and viruses

2.) Reservoir – animal, human, equipment, food, soil, water

3.) Exit pathway – blood, exudates, excretions, and secretions

4.) Means of transmission – airborne, contact, droplet, vector, and vehicle

5.) Entry pathway – body orifices, mucous membranes, and broken skin

6.) Susceptible host – elderly, newborns, acute/chronically ill, immune suppressed, and unvaccinated

E.) Breaking the Chain

1.) Proper hand hygiene

2.) Isolation Procedures

3.) Immunizations

4.) Proper nutrition

5.) Adequate rest

6.) Stress management

Fire Safety

A.) Classification of Fires

1.) Class A fire – wood, paper, or clothing and use a water based solution to extinguish

2.) Class B fire – flammable liquids and must block the source to extinguish

3.) Class C fire – electrical equipment and require nonconducting agents to extinguish

4.) Class D fire – combustible or reactive metals and must be extinguished with dry powder agents

B.) Fire Extinguishers

1.) Class A extinguishers use soda and acid or water to cool the fire

2.) Class B extinguishers use foam, or dry chemicals to smother the fire

3.) Class C extinguishers use dry chemical or nonconducting agents to smother the fire

4.) Class ABC extinguishers use dry chemical reagents to smother the fire. Can be used on Class A, B, or C fires.

C.) RACE

R – rescue

A –alarm

C – confine

E – extinguish

D.) PASS

P – pull pin

A – aim nozzle

S – squeeze trigger

S – Sweep base of fire

Electrical Safety

A.) Using Electrical Equipment

1.) avoid using damaged power chords

2.) avoid using any extension chords

3.) avoid any electrical equipment while collecting blood

4.) when available, try and use three pronged plugs

Radiation Safety

A.) Amount of radiation is determined by:

1.) time: exposed to source

2.) shielding: if anything is between you and the source of radiation

3.) distance: how far person of object is away from source

First Aid

A.) External Hemorrhage

1.) apply direct pressure to wound until bleeding stops or EMS arrives

2.) if bleeding continues, keep applying cloth or gauze over the ones already on the wound

B.) Shock

1.) common symptoms:

a.) clammy, pale, cold skin

b.) rapid weak pulse

c.) shallow or increased breathing rate

d.) staring eyes and expressionless face

2.) first aid for shock:

a.) maintain open airway

b.) call for assistance

c.) keep patient lying down with head lower than the rest of body

d.) attempt to control bleeding or other cause of shock if known

e.) keep patient warm until help arrives

C.) AHA Chain of Survival

1.) early access to care

2.) early CPR

3.) early defibrillation

4.) advanced care

Basics of Medical Terminology

A.) Word Elements

1.) Prefix – comes before the root word

2.) Root word - relating to specific body parts

3.) Suffix – comes after the root word

4.) Combining vowel- makes the word easier to say

B.) Body Direction Terms

1.) Ventral – front part of body

2.) Dorsal – back part of body

3.) Anterior – in front of

4.) Posterior – toward the back part of body

5.) Medial – towards the midline of the body

6.) Lateral – towards the side of the body

7.) Proximal – closest to the point of origin

8.) Distal – away from the point of origin

9.) Frontal plane – divides the body into front and back portions

10.) Transverse plane - divides the body into upper and lower portions

D) Body Positions

1. Normal anatomic position – standing with arms lank and palms forward
2. Supine position – lying on back
3. Prone position – lying on stomach
4. Lateral recumbent position – lying on the side

The Human Body

Homeostasis – the human body strives to maintain its internal environment in a state of equilibrium or balance. "Steady State"

A.) The cardiovascular system

1.) Heart

a.) A muscular organ the size of a fist

b.) Has four chambers, and is slightly left of the midline in the thoracic cavity

c.) Has three layers, the epicardium, myocardium, and endocardium

2. Blood

    a.) Blood is composed of water, solutes, and cells.

    b.) Adult humans contain 5 liters of blood.

    c.) Also refered to as the “river of life”

    d.) Fluid portion of blood is called plasma(55%) and the cellular portion is called formed elements (45%).

3. Formed Elements (Cells)

    a.) Erythrocyte – red blood cell (RBC)

    b.) Leukocyte – white blood cell (WBC)

    c.) Thrombocyte - also called platelets

4. Plasma (anticoagulated)

    a.) Plasma is the liquid portion of blood

    b.) Blood cells surrounded and encased by plasma

    c.) Plasma is composed of 10% dissolved solutes, and 90% water

    d.) Clear , to pale yellow colored fluid

    e.) Contains fibrinogen

5. Serum (clotted)

    a.) When a specimen is allowed to clot the blood cells mesh together in afiberous substance.

    b.) Has the same chemical composition as plasma except does not contain fibrinogen

    c.) Blood cells contained within the fibrin clot.

    d.) Sereum can be separated from the blood clot by centrifugation.

    e.) Clear, to pale yellow fluid

B) The Vessels and circulation

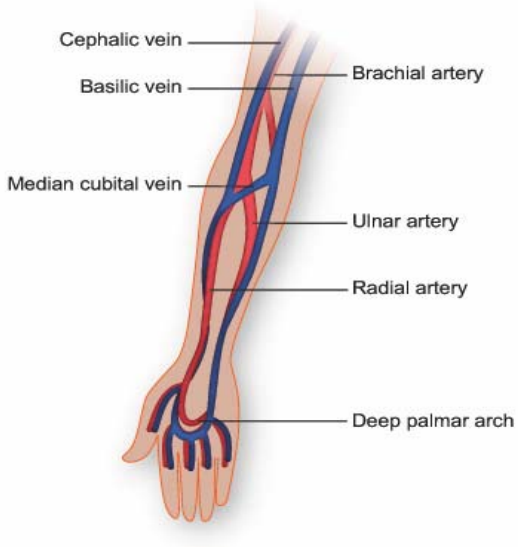
6. Arteries

   a.) Carry oxygenated blood away from heart in systemic flow

   b.) Branch into arterioles and capillaries

   c.) Normally bright red, have a pulse, and have thick elastic walls

7. Veins



   a.) Return blood to the heart

   b.) Every vein but pulmonary veins contain deoxygenated blood and are normally dark red.

   c.) Have thinner walls than arteries

   d.) Antecubital area of the forearm is used for venipuncture

   e.) Veins of the arm

      1. Median cubital is the first vein of choice

      2. The cephalic is the second vein of choice. This is the vein used for most obese patients.

      3. The Basilic vein is the third vein of choice due to the location of the nerves by the vein.

f.) There are variations in venous patterns

8. Capillaries

a.) Are microscopic one cell- thick vessels that link arterioles and venules that form a bridge between arteries and veins

b.) Only vessels that permit the exchange of CO2 and O2 between blood and other tissues

c.) Blood in the capillary bed is a mix of arterial and venous blood

II) Hemostasis and coagulation

1. Hemostasis

a.) Hemostasis is the maintenance of circulating blood in the liquid state and the retention of blood in the vascular system by preventing blood loss.

b.) Primary hemostasis

1. Vasoconstriction - a rapid constriction of the vessel to decrease blood flow to the injured area.

2. Platelet plug formation - Platelets degranulate, mesh together, and stick to injured vessel to form a plug and stop bleeding.

c.) Secondary hemostasis

1. Firbrin clot formation - coagulation factors are released and interact to form a blood clot. This seals off the damaged portion of the vessel.

2. Common pathways:

a.) Intrensic pathway

b.) Extrinsic pathway

- Hemostatic plug

3. Fibrinolysis - Final regeneration and repair of injured vessels. The clot slowly begins to dissolve while other cells continue to repair vessel.

2. Coagulation issues that effect phlebotomy

a.) Drugs like heparin and Coumadin surpress clotting and may result in patient bleeding more than normal

Documentation, specimen handling, and transportation

I) Documentation basics

   a. Components of medical or clinical record

   b. Why is documentation so important

      i. Monitoring care

      ii. Coordination

      iii. Accreditation and licensing

      iv. Legal protection

      v. Research

   c. Tips for documenting clinical information

      i. Accuracy

      ii. Objectivity

      iii. Briefly and legibility

      iv. Avoiding errors

      v. Timeliness

   d. The college of American pathologists (CAP) an accrediting agency for clinical laboratories, requires a specimen manual be available for reference at all sites where specimens are collected.

II) Laboratory test requisition forms

   a. Laboratory test requisitions

      i. Online interactive computer system

      ii. Manual system

         1. Multiple requisition forms serve as both laboratory request and report forms.

         2. The forms are easily detached and have clear copies

3. Color coding can be used for different request forms

iii. Barcodes and radio frequency identification (RFID)

1. Barcodes represent alphanumeric symbols in the form of light and dark bands

2. When bands are placed together they can correspond to a name or number

3. RFID does not require “line of sight” readers, it transmits data to wireless receivers

4. RFID are very fast and accurate

b. Specimen labels and blood collection lists

i. Regardless of the method for submitting a lab test request. The info must include:

1. Patient I.D. (name, registration, or I.D. number, location)

2. Name of physician or person ordering the test

3. Tests required

4. Time and date of specimen collection

5. Other pertinent clinical information when appropriate

c. Specimen handling and transport

i. Specimen integrity

1. Transport method

2. Timing delays

3. Temperature

4. Movement or agitation

5. Exposure to light

6. Centrifugation methods

ii. Centrifugation – must be balanced with same volume on both sides

1. Serum
2. Plasma

iii. Rule of thumb for processing blood samples

iv. Transportation of blood specimens

1. Chilled specimens
2. Photosensitive specimens
3. Microbiological specimens
4. Warmed specimens

d. Specimen delivery methods

i. Courier

ii. Hand delivery

iii. Pneumatic tube

iv. Automated transport vehicles

e. Specimen rejection

<u>Blood collection equipment</u>

I) Introduction to blood collection equipment

a. Venipuncture equipment

i. Vacuum tube system (ETS), double pointed needle, and a safety plastic holder that covers needle.)

ii. Parts of the vacuum tube system

iii. Blood collection tubes and additives

1. Vacuum tube size defined by external tube diameter and length plus the maximum amount of the specimen being drawn

2. Many coagulation factors create blood clotting, and coagulation can be stopped by different types of coagulants

3. These coagulants often contain preservatives that extend the lifespan of Red Blood Cells

4. Tops/closure codes for additives

iv. Serum, plasma or whole blood for various assays

1. Gray topped tubes

a. Contain potassium oxalate, and sodium fluoride, sodium fluoride and EDTA, sodium flouride, or lithium iodoacetate and heparin

b. Primarily used for glycolytic inhibition tests

2. Green topped tubes

a. Contain the anticoagulants sodium heparin, ammonium heparin, or lithium heparin

b. Used in various laboratory assays requiring plasma or whole blood

c. Should not be used for collection for blood smears to be stained by Wrights stain

3. Lavender topped and light blue topped tubes

a. The lavender topped vacuum tubes are used for most hematology procedures

b. The lavender topped vacuum tubes are used for molecular diagnostic testing

c. Many coagulation procedures such as APTT, and PT are done on blood collected in light blue topped vacuum tubes.

d. If a light blue topped tube is under filled, coagulation results will be wrong.

4.) Red and royal blue topped tubes

a. A red topped tube indicates a tube without a coagulant

b. The royal blue topped tubes are used for nutritional studies, toxicology, and therapeutic drug monitoring

c. The royal blue is the trace element tube

5.) Yellow topped tubes

a. The additive is sodium polyanethol sulfonate (SPS)

b.) Mostly used in the microbiology department for blood cultures

6.) Blood culture bottles

a. Anaerobic – with out air – Needles

b. Aerobic – with air – butterfly needles

7.) Serum separator tubes (SST)

a.) **contain thixotropic gel**

b.) will be a red tiger topped tube or a gold tube

Needles

A.)Parts of a multi-sample needle

1.) Bevel

2.) Shaft

3.) Threaded hub

4.) Rubber sleeve over needle

B.) Needle size

1.) The smaller the number of the needle the bigger it is.

a.) most butterfly needles are usually a 23 to 25

C.) Parts of a syringe system

1.) Bevel

2.) Shaft

3.) Hub

4.) Graduated barrel

5.) Plunger

Clinical Analysis Areas

A.) Hematology – department performs lab tests that identify diseases associated with blood and blood forming tissues. The most common test associated with this department is a CBC.

B.) Coagulation – the study of the ability of blood to form and dissolve clots. Tests are used to discover, identify, and monitor defects in the blood clotting mechanism. The most common test for this department is a PTT.

C.) Chemistry – performs most lab tests. This department is capable of performing discrete tests or metabolic panels from a single sample. Common chemistry tests are ALT, ABG,UA and CK.

D.) Serology or Immunology – tests deal with the body's response to the presence of bacterial, fungal, or parasitic diseases that stimulate antigen-antibody reactions. Most common tests are ANA, cold agglutinins, and anti-HIV.

E.) Microbiology – analyzes the body fluids and tissues for the presence of microorganisms. Most common tests include Blood cultures, occult blood, and C&S.

F.) Blood bank or Immunohematology – department that prepares blood products to be used for transfusion purposes.

G.) Reference Laboratories – large independent labs that receive different specimens from other facilities located in the same area that provide routine analysis of blood, urine, tissues, and other patient specimens.

CLSI Order of Draw

A.) Sterile tube

B.) Light Blue coagulation tube

C.) Red

D.) SST – Red tiger top or gold top

E.) PST- Light green top – Lithium Heparin

F.) Green – Dark green top – Sodium Heparin

G.) EDTA – Lavender

H.) Glycolytic inhibitor tube – Gray

Venipuncture Steps

1.) Review Test Request

2.) Approach, Identify, and Prepare Patient – 3 way id system, and explain procedures

3.) Verify Diet Restrictions and Latex sensitivity

4.) Sanitize Hands and put on gloves

5.) Position Patient, Apply Tourniquet, and Ask Patient to make a fist

6.) Select Vein, Release Tourniquet, and Ask Patient to Open Fist

7.) Clean and Air-Dry Site

8.) Prepare Equipment

9.) Reapply Tourniquet, Uncap and Inspect Needle

10.) Ask Patient to Make a Fist, Anchor Vein, and Insert Needle

11.) Establish Blood Flow, Release Tourniquet, and Ask Patient to Open Fist

12.) Fill, Remove, and Mix Tubes in Order of Draw or Fill Syringe

13.) Remove Needle, Apply Gauze, Activate Needle Safety Device, and Apply Pressure

14.) Discard Collection Unit, Syringe Needle, or Transfer Device

15.) Label Tubes

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a.) patient's first and last names

b.) patient's id number or date of birth

c.) date and time of collection

d.) phlebotomist initials

e.) additional information (ex. fasting)

16.) Observe Special Handling Instructions

a.) ammonia in a crushed ice slurry

b.) cold agglutinin in 37 degree C or other warming device

c.) bilirubin needs to be protected from light

17.) Check Patient's Arm and Apply Bandage

18.) Dispose of Contaminated Materials

19.) Thank Patient, Remove Gloves, and Sanitize Hands

20.) Transport Specimen to the Lab

Preanalytical Considerations

A.) Basal State – refers to the resting metabolic state of the body, usually early in the morning after fasting for at least 12 hours

B.) Physiologic Variables

1.) Age

2.) Altitude

3.) Dehydration

4.) Diet

5.) Diurinal Variations

6.) Drug Therapy

7.) Exercise

8.) Fever

9.) Gender

10.) Jaundice

11.) Position

12.) Pregnancy

13.) Smoking

14.) Stress

15.) Temperature and Humidity

VADS and SITES

A.) Arteriovenous Shunt or Fistula - permanent surgical fusion of an artery and a vein that is typically created to provide access for dialysis

B.) Heparin or Saline Lock - catheter or cannula connected to a stopcock or cap with a diaphragm that provides access for administering medications.

C.) Intravenous Sites – When a patient has an IV in one arm, try the other arm. If a patient has an IV in both arms try a capillary puncture if possible. If not possible then specimen may be collected below the IV site.

Capillary Puncture Equipment and Procedures

A.) Puncture Equipment

1.) Lancet

B.) Collection Devices

1.) Microcollection Containers

2.) Microhematocrit Tubes and Sealants

C.) Tests That Can Not be Preformed on Capillary Punctures

1.) ESR

2.) Coagulation studies

3.) Blood cultures

4.) Tests that require large volumes of serum or plasma

D.) Order of Draw

1.) EDTA specimens

2.) Other additive specimens

3.) Serum specimens

E.) Capillary Puncture Steps

1.) review test request

2.) approach, id, and prepare patient

3.) verify diet restrictions and latex sensitivity

4.) sanitize hands and put on gloves

5.) position patient

6.) select the puncture site – must be warm and usually middle or ring finger for adults and children over 1 year old, and the heel of infants

7.) Clean and air-dry site

8.) prepare equipment

9.) puncture site and discard lancet

a.) on finger, must puncture perpendicular to finger print whorls

b.) on heel do not puncture more than 2mm.

10.) wipe away the first drop of blood

11.) fill and mix tubes/containers in order of draw

12.) place gauze and apply pressure

13.) label specimens and observe special handling instructions

14.) check site and apply bandage

15.) dispose of used and contaminated materials

16.) thank patient, remove gloves, sanitize hands

17.) transport specimen to lab

Special Procedures

A.) 2- hour Post prenatal Glucose – (PP) means after a meal. Glucose specimen is collected 2 hours after a patient eats a meal

B.) Glucose Tolerance Test – (GTT) used to diagnose carbohydrate metabolism problems. Patient must eat well balanced meals 3 days prior to test and must fast at least 12 hours before the test. Patients must drink glucose prior to testing and have 5 minutes to finish the drink. Levels will peak within 30 minutes to an hour following glucose ingestion.

C.) Lactose Tolerance Test - same procedures as GTT but patient must drink lactose rather than glucose

D.) Bleeding Time Test - (BT) test is preformed on the forearm and uses a blood pressure cuff inflated to 40 mm Hg. Phlebotomist will use an automated incision device to puncture skin and will use filter paper to blot the blood drops. This is a timed test and phlebotomist will blot blood every 30 seconds until patient stops bleeding.

E.) Arterial Blood Gas (ABG) - most common site radial artery. Must use Modified Allen Test to see if patient has adequate circulation. Must cleanse the site with alcohol and then clean with iodine. Insert syringe needle at a 45 degree angle. When complete must apply pressure for at least 3 to 5 minutes.

Non-blood Specimens and Tests

A.) Urine- collection in temp measured cups. Check for clarity,specific gravity,color and odor. Usually a regular voided specimen is acceptable for a common UA. C&S tesing is used for UTI symptoms. Must be a mid-stream clean catch specimen. Drug screening is random sample in clean covered container. Pregnancy testing is used to identify the presence of HCG usually present in body after 10 days of conception. First morning specimen is preferred

1.) regular voided specimen

2.) midstream specimen

3.) midstream clean catch specimen

4.) catheterized specimen

5.) suprapubic specimen

B.) Cerebrospinal Fluid- (CSF) mostly obtained through a lumbar puncture and looks for cell counts, chloride, glucose, and total protein

Computers

A.) Computer networks

B.) Computer components

C.) Elements of the Computer

D.) General Computer Skills

E.) Computerization Trends

AMCA National Phlebotomy Exam Review

1.) Which of the following is not a phlebotomist's duty?

A.) Collecting blood specimens

B.) Performing laboratory computer operations

C.) Starting intravenous (IV) lines

D.) Transporting specimens to the laboratory

2.) A national organization that sets standards for phlebotomy procedures is the:

A.) ASCP

B.) NAACLS

C.) NCA

D.) CLSI

3.) Which type of contact infection transmission involves transfer of an infective microbe to the mucous membranes of a susceptible individual by means of a cough or sneeze?

A.) Direct

B.) Droplet

C.) Fomites

D.) Indirect

4.) Which of the following is a test of the respiratory system?

A.) ABGs

B.) CSF

C.) TSH

D.) UA

5.) The receiving chambers of the heart are the:

A.) Atria

B.) Chordae tendineae

C.) Vena cavae

D.) Venticles

6.) An individual's blood type is determined by the presence or absence of a certain type of

A.) Antibody present on the red blood cells

B.) Antibody present on the white blood cells

C.) Antigen present on the red blood cells

D.) Antigen present on the white blood cells

7.) Which of the following veins is not an antecubital vein?

A.) Basilic

B.) Cephalic

C.) Femoral

D.) Median cubital

8.) Which needle gauge has the largest lumen?

A.) 18

B.) 20

C.) 21

D.) 22

9.) Which government agency regulates the quality of gloves worn when performing phlebotomy procedures?

A.) CDC/HICPAC

B.) FDA

C.) JCAHO

D.) OSHA

10.) The tests performed in the following department are collected in a tube with a light blue stopper:

A.) Chemistry

B.) Hematology

C.) Coagulation

D.) Microbiology

11.) Never leave a tourniquet on for more than

A.) 30 seconds

B.) 45 seconds

C.) 1 minute

D.) 3 minutes

12.) You must draw a protime specimen from a patient with IVs in both arms. Which of the following is the best thing to do? Draw the specimen

A.) Above an IV

B.) Below an IV

C.) From an ankle vein

D.) From an IV

13.) What is PKU?

A.) A contagious condition caused by lack of phenylalanine

B.) A hereditary inability to metabolize phenylalanine

C.) An acquired condition caused by lack of phenylalanine

D.) An inherited condition caused by lack of thyroid hormone

14.) Which test requires strict skin antisepsis procedures before specimen collection?

A.) Blood culture

B.) Blood urea nitrogen

C.) Complete blood count

D.) Type and crossmatch

15.) Which of the following tests may require special "chain of custody" documentation when collected?

A.) Blood culture

B.) Crossmatch

C.) Drug screen

D.) TDM

16.) The hormone detected in positive urine pregnancy tests is:

A.) ACTH

B.) GH

C.) HCG

D.) TSH

17.) When performing the Allen test, which artery is released first?

A.) Brachial

B.) Femoral

C.) Radial

D.) Ulnar

18.) Which fluid is obtained by lumbar puncture?

A.) Cerebrospinal

B.) Peritoneal

C.) Pleural

D.) Synovial

19.) A urine C & S is typically ordered to detect:

A.) Abnormal urine pH

B.) Glucose spillage into the urine

C.) Kidney damage

D.) Presence of UTI

20.) Which statement describes proper centrifuge operation?

A.) Centrifuge serum specimens before they have a chance to clot

B.) Never centrifuge both serum and plasma specimens in the same centrifuge

C.) Place tubes of equal size and volume opposite one another

D.) Remove stoppers before placing tubes in the centrifuge

Answer Key

1.) C

2.) D

3.) B

4.) A

5.) D

6.) C

7.) C

8.) A

9.) B

10.) C

11.) C

12.) B

13.) B

14.) A

15.) C

16.) C

17.) D

18.) A

19.) D

20.) C