



National Medical Certifications Services, Inc.

**MEDICAL ASSISTANT
COMPETENCY EXAMINATION PROGRAM**



MEDICAL ASSISTANT (MA) RECERTIFICATION

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Medical Office Management

- **Law and Ethics**

1. Right and wrong conduct is known as **ethics**.
2. The most common type of medical tort liability is **negligence**.
3. A person being sued is called the **defendant**.
4. The withdrawal of a physician from the care of a patient without reasonable notice of such discharge from the case by the patient is **abandonment**.
5. An unlawful threat or attempt to do bodily injury to another is **assault**.
6. The health worker is protected by law if it can be determined that he or she acted reasonable as compared with fellow workers. This is called **reasonable care**.
7. Negligence by a professional person is called **malpractice**.
8. An act that violates criminal law is called a **crime**.
9. The breaking of a law, promise, or duty is called a **breach**.
10. The ability to see things from another person's point of view is **empathy**.
11. The time established for filing law suits is the **statute of limitations**.
12. A write that commands a witness to appear at a trial or other proceeding and to give testimony is a **subpoena**.
13. A wrong committed against another person or the person's property is a **tort**.
14. Holding or detaining a person against his will is **false imprisonment**.
15. A violation of a person's right not to have his or her name, photograph or private affairs exposed or made public without giving consent is an **invasion of privacy**.
16. A major crime for which greater punishment is imposed other than a misdemeanor is a **felony**.
17. One who institutes a lawsuit is a **plaintiff**.
18. A legal statement of how an individual's property is to be distributed after death is a **will**.
19. Information given by a patient to medical personnel which cannot be disclosed without consent of the person who gave it is **privileged communication**.
20. A rule of conduct made by a government body is a **law**.
21. Failure to do something that reasonable person would do under ordinary circumstances that ends up causing harm to another person or a person's property is **negligence**.
22. Permission granted by a person voluntarily and in his right mind is **consent**.
23. Injuring the name and reputation of another person by making false statements to a third person is **defamation**.

24. An agreement between two or more parties for the doing or not doing of some definite thing is a **contract**.
25. Lack of physical or mental fitness is known as **incompetence**.
26. The final decision of a court in an action or suit is a **judgment**.
27. Responsibility of an employer for the acts of an employee is **respondent superior**.
28. A Latin term signifying that a person is not of sound mind is **non compos mentis**.
29. A person who is no longer under the care, custody, or supervision of a parent is called an **emancipated minor**.
30. An impartial panel established to listen and to investigate patient's complaints about medical care or excessive fees is called a **medical grievance** committee.
31. Latin for "things done; deeds"; the facts and circumstances attendant to the act in question would be called **res gestae**.
32. Testimony of a witness under oath and written down before trial for possible use when the case comes to trial is **deposition**.
33. A statute that enforces private rights and liabilities, as differentiated from criminal law is called a **civil law**.
34. Violation or omission of a legal or moral duty is called **breach of duty**.
35. A deliberate physical attack upon a person is called **battery**.
36. Latin for "he who acts through another acts for himself" is called **qui facit per alium facit per se**.
37. The branch of study of moral issues, questions and problems arising in the practice of medicine and biomedical research is called **bioethics**.
38. A statement given concerning some scientific, technical or professional matter by an expert, such as a physician is called **expert testimony**.
39. A **patient's** failure to act prudently and reasonably or doing that which a reasonable person would not do under similar circumstances is called **contributory negligence**.
40. Consent to treatment based on a full understanding of all possible risks of unpreventable results of that treatment is called **assumption of risk**.
41. Conduct, courtesy and manners that are customarily used in a medical office by medical professionals are known as **medical etiquette**.
42. An intentional perversion of truth for the purpose of inducing another in reliance upon it to part with some valuable thing belonging to him or to surrender a legal right is called **fraud**.

43. To interrupt or discontinue a suit temporarily with the intention or resumption at a later date, or to ask for a continuance is called a **suspension**.
44. Latin for “things decided” – that is a matter already decided by a judicial authority is called **res judicata**.
45. That which in natural and continuous sequence, unbroken by any new independent cause, produces an event, and without which the injury would not have occurred is called **proximate cause**.
46. The presumption or inference of negligence when an accident is otherwise unable to be explained in terms of ordinary and known experience is called **res ipsa loquitur**.
47. Failure to achieve an agreed upon result, even when the highest degree of skill has been used, is called **breach of contract**.
48. A physician must have a **narcotic license** to dispense, prescribe or administer controlled substances.
49. Unauthorized disclosure of information regarding any patient to a third party may result in **invasion of privacy**.
50. Medical research is often published in medical journals that are evaluated by members of the medical community through a process known as **peer review**.
51. Under the Peer Review Improvement Act of 1982, Peer Review Organizations are responsible for the review of the appropriateness and necessity of putting a patient into the hospital by a process known as **admissions** review.
52. A fraudulent signature is called **forgery**.
53. **Ethics** are defined as what are right and wrong.
54. **The use of fetal tissue transplantation for research** might involve a decision based upon bioethics.
55. A physician must have the patient’s permission in writing to reveal any confidential information except in the instance of **gunshot wound(s)**.
56. It is **unethical** to deny treatment to HIV infected patients.
57. **HIPAA** is a federal regulation that requires health care professionals to protect the privacy and confidentiality of patients’ health information.
58. In the health care field the acronym HIPAA stands for **Health Insurance Portability and Accountability Act**.
59. The statement “*A physician shall respect the law*” is a part of the **AMA Code of Ethics**.
60. **Breach of confidentiality** generally results from an act of carelessness, without an intent to harm.

- **Communication, Equipment and Supplies**

1. A system whereby large quantities of data can be accessed, searched, sorted and arranged rapidly by computer is called a database **management** system.
2. A computer monitor, hard drive and printer are known as **hardware**.
3. The term for the technology that tells a computer what to do is known as the **software**.
4. The computer key DEL means **delete**.
5. The computer's directional arrow keys **move the cursor, right, left, up, or down**.
6. Referring to computers, the term "user friendly" refers to **how easy the system is to operate**.
7. The process of changing words into numbers so that computers can be used in processing insurance claims is called **coding**.
8. A business letter written in full block style will have all lines **at the left hand margin**.
9. Making a duplicate file to protect computer information from being lost is called making a **backup**.
10. When writing a business letter, the salutation of a letter should be followed by a **colon**.
11. A newsletter that weighs less than one pound would be considered **third** class mail.
12. **A fax machine** is designed to receive and send printed documents via the telephone.
13. Business or handwritten mail that weighs less than 11 ounces is known as **first** class mail.
14. Parcel post or **fourth** class mail is used for bound printed matter, film, and sound recordings.
15. Before placing a telephone caller on hold, it is appropriate to:
 - a. **ask if you may put the caller on hold**
 - b. **wait for the caller to confirm they can wait**
 - c. **obtain a return phone number**.
16. An incoming call should be answered by the **third** ring.
17. When taking a routine phone message obtain:
 - a. **caller's name**
 - b. **caller's return phone number**
 - c. **current day's date**

18. Prior to answering an incoming call, the medical assistant should **smile**.
19. When handling incoming mail, the medical assistant should **attach the envelope to the correspondence**.
20. A letter should be folded in **thirds face-up** using a #10 envelope.
21. **Grammar** is the study of words and their relationship to other words in a sentence.
22. When handling a patient complaint, **take all complaints seriously and take thorough notes**.
23. When working with patients from a culture different from your own, **show respect for their culture**.
24. Body language, body posture, space and distance are all examples of **non-verbal communication**.
25. When caring for patients with physical disabilities:
 - a. **do not rush them**
 - b. **ask if they need assistance before giving assistance**
 - c. **provide ample room for patients with assistive devices**

- **Financial Management**

1. A bed patient in a hospital is called **inpatient**.
2. A person who represents either party of an insurance claim is the **adjuster**.
3. A request for payment under an insurance contractor bond is called a **claim**.
4. Payment made periodically to keep an insurance policy in force is called **premium**.
5. A person or institution that gives medical care is a **provider**.
6. Benefits that are made in the form of cash payments are known as **indemnities**.
7. An amount the insured must pay before policy benefits begins is called **deductible**.
8. An organization that offers health insurance at a fixed monthly premium with little or no deductible and works through a primary care provider is called **health maintenance organization**.
9. Health insurance that provides protection against the high cost of treating severe or lengthy illnesses or disabilities is called **catastrophic**.
10. A patient receiving ambulatory care at a hospital or other health facility without being admitted as a bed patient is called an **outpatient**.
11. An injury that prevents a worker from performing one or more of the regular functions of his or her job would be known as a **partial disability**.

12. A previous injury, disease or physical condition that existed before the health insurance policy was issued is called **preexisting condition**.
13. One who belongs to a group insurance plan is called **subscriber**.
14. A sum of money provided in an insurance policy, payable for covered services is called **benefits**.
15. To prevent the insured from receiving a duplicate payment for losses under more than one insurance policy is called **coordination of benefits**.
16. When a patient has health insurance, the percentage of covered services that is the responsibility of the patient to pay is known as **coinsurance**.
17. Insurance that is meant to offset medical expenses resulting from a catastrophic illness is called **major medical**.
18. An unexpected event which may cause injury is called **accident**.
19. A doctor who agrees to accept an insurance company's pre-established fee as the maximum amount to be collected is called **participating physician**.
20. Insurance plans that pay a physician's full charge if it does not exceed his normal charge or does not exceed the amount normally charged for the service is called **usual, customary and reasonable**.
21. A notice of insurance claim or proof of loss must be filed within a designated **time limit** or it can be denied.
22. A health program for people age 65 and older under social security is called **Medicare**.
23. A civilian health and medical program of the uniformed services is called **Tri-Care**.
24. A form of insurance paid by the employer providing cash benefits to workers injured or disabled in the course of employment is called **Worker's Compensation**.
25. A recap sheet that accompanies Medicare or Medicaid check, showing the breakdown and explanation of payment on a claim is called **explanation of benefits**.
26. A type of insurance whereby the insured pays a specific amount per unit of service and the insurance pays the rest of the cost is called **co-payment**.
27. In insurance, greater coverage of diseases or an accident, and greater indemnity payment in comparison with a limited clause is called **comprehensive**.
28. A rider added to a policy to provide additional benefits for certain conditions is called **dread disease rider**.

29. An interval after a payment is due to the insurance company in which the policy holder may make payments, and still the policy remains in effect is called **grace period**.
30. An agreement by which a patient assigns to another party the right to receive payment from a third party for the service the patient has received is called **assignment of benefits**.
31. A skilled nursing facility for patients receiving specialized care after discharge from a hospital is called **extended care facility**.
32. Payment for hospital charges incurred by an insured person because of injury or illness is called **hospital benefits**.
33. An agent of an insurance company who solicits or initiates contracts for insurance coverage and services, and is the policyholder for the insurer is called **insurance agent**.
34. A method of charging whereby a physician presents a bill for each service rendered is called **fee-for-service**.
35. The Tri-Care fiscal year is from **October 1 to September 30**.
36. The number on the Employees Withholding Exemption Certificate is **W-4**.
37. FICA provides benefits for **social security**.
38. As part of the office bookkeeping procedures, the physician's bank account should be reconciled with the **checkbook**.
39. A record of debits, credits, and balances is referred to as a patient's **ledger**.
40. A signature on the reverse side of a check is called **endorsement**.
41. A form to itemize deposits made to savings or checking accounts is called **deposit slip**.
42. To correct a handwritten error in a patient's chart it is only acceptable to **draw a line through the error, insert the correct information, date and initial it**.
43. Low income patients can be covered by **Medicaid**.
44. The reference procedural code book that uses a numbering system developed by the AMA is called a **current procedural terminology**.
45. **Pre-certification** is a method used for determining whether a particular service or procedure is covered under a patient's policy.
46. The International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM) is used to code **diagnoses**.
47. In insurance coding using an "E" designates **classification of environmental events, such as poisoning**.
48. E/M codes are located in the **CPT** manual.

49. **CPT** codes can modifiers be added to, to indicate that a procedure or service has been altered.
50. The **CMS-1500** form is used by non-institutional providers and suppliers to bill Medicare, Part B covered services.

- **Medical Terminology**

1. The suffix-*emia* means blood.
2. The medical term for:

expanding or opening wider.....	dilate
group of cells with same function.....	tissue
basic unit of body structure.....	cell
time when menstruation begins	menarche
time when menstruation stops.....	menopause
involuntary movement.....	reflex
paralysis from the waist down.....	paraplegia
paralysis from the neck down.....	quadriplegia
paralysis on one side of the body.....	hemiplegia
circular movement around a central point.....	rotation
turning the palm forward, as applied to the hand.....	supination
decrease in size or a wasting.....	atrophy
straightening of a body part.....	extension
moving a body part away from the body.....	abduction
bending a body part.....	flexion
turning the palm backward.....	pronation
bending backward.....	dorsiflexion
abnormal shortening of a muscle.....	contracture
moving a body part toward the midline of the body.....	adduction
loss of appetite	anorexia
tube feeding.....	gavage
sugar in the urine.....	glucosuria
decubitis ulcer; a pressure sore.....	bedsore

3. The abbreviation for:
- | | |
|--|-------------------|
| temperature, pulse, and respiration..... | TPR |
| urinalysis..... | UA |
| below or low..... | hypo |
| gastrointestinal..... | GI or G.I. |
| by mouth..... | po |
| dressing..... | dsg |
| postprandial blood sugar..... | PPBS |
| laboratory..... | lab |
| discontinue..... | d/c |
| bedtime or hour of sleep..... | hs |
| above or high..... | hyper |
| hour..... | hr or h |
| electroencephalogram..... | EEG |
| Papanicolaou smear..... | pap smear |
| cancer..... | CA |
| toxic shock syndrome..... | TSS |
| carbohydrate..... | carb |
| chief complaint..... | CC |
| grain..... | gr |

4. The meaning of the word element:
- | | |
|---------------------|--------------------------|
| phlebo..... | vein |
| pneumo..... | air, lungs |
| adeno..... | gland |
| algia, algesia..... | pain |
| cardio..... | heart |
| cranio..... | skull |
| ectomy..... | surgical removal. |
| emesis..... | vomiting |
| cise..... | cut |
| centesis..... | puncture |
| renal..... | kidney |
| post..... | after |
| osis..... | condition of |

rhino..... **nose**
 stomato..... **mouth or the ostium uteri**
 super..... **above**

5. Erythema refers to **red skin**.
6. The opposite of deep is **superficial**.
7. High blood pressure is referred to as **hypertension**.
8. Neoplasm refers to **new growth**.

● **Pharmacology**

1. A physician must have a **narcotics license** to dispense, prescribe or administer controlled substances.
2. Physicians with a narcotics license are required to register on June 30 of each year with **Drug Enforcement Agency**.
3. Types of drugs and description
diuretic..... causes urination; increases urinary output
antitussive..... relieves a cough
antacid..... neutralizes acidity
appetite suppressor..... controls appetitie
anticoagulant..... prevents blood from clotting
antipyretic..... controls temperature
tranquilizer..... reduces anxiety
vasodilator..... causes dilation of blood vessels
decongestant..... decreases congestion
mydriatic.....causes the pupil of the eye to dilate
nitroglycerine..... treatment of angina pectoris
hydrocortisone.....inflammation
4. A date on a bottle of medication that provides a “use until” date is the **outdate or expiration date**.
5. A liquid preparation which mixes fine droplets of an oil in water, such as castor oil, is called an **emulsion**.
6. Schedule I drugs include **substances that have no accepted medical use and a high potential for abuse**.
7. Schedule IV drugs include **minor tranquilizers and hypnotics that have a lesser potential for abuse**.

8. A small adhesive patch or disc used for administration of drugs is called a **transdermal patch**.
9. The buccal method of administering a drug is done by **placing the medication between the gum and cheek**.
10. Oxygen is ordered as percentage of oxygen concentration and its rate of delivery is written as **liters per minute**.
11. A drug that produces sleep is called a **hypnotic**.
12. An inactive substance substituted in place of the actual drug to satisfy the patient is called a **placebo**.
13. The abbreviation for:

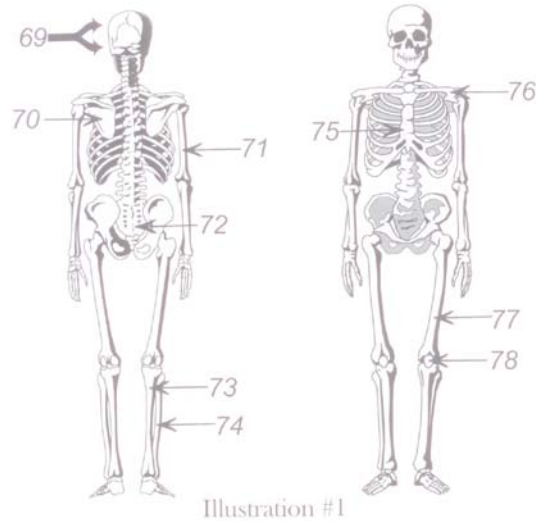
elixir.....	elix
emulsion.....	emul
fluid.....	fl or fld
ointment.....	oint or ung
solution.....	sol
suppository.....	supp
syrup.....	syr
tablet.....	tab
tincture.....	tinc
intramuscular.....	IM
injection.....	inj
right ear.....	AD
both ears.....	AU
drops.....	gtt
two times a day.....	bid
14. When mixing reagents always read the label **twice**.
15. The **pink** pages of the Physician's Desk Reference is where a medical assistant would be able to locate a medication by brand or generic name.
16. Medications can be located in the Physician's Desk Reference under all of the following categories EXCEPT **composition**.
17. The physician has ordered 500 mg. of medication. The amount on hand is 250 mg per tablet, therefore, **2 tabs** will be given to the patient.
18. The physician has ordered 0.2 Gm of medication. The amount on hand is 400 mg tabs, therefore, **0.5 tab** will be given to the patient.
19. The physician has ordered 50 mg of Demerol be given to a patient. The amount on hand is 100 mg/ml, therefore, **0.5 cc** of Demerol will be injected.

- **Anatomy & Physiology**

1. The sebaceous glands, hair, and nails make up the **integumentary system**.
2. The heart, lymphatic organs, and blood vessels are in the **cardiovascular system**.
3. The liver, stomach, mouth and pancreas are in the **digestive system**.
4. The bladder, urethra, kidneys, and ureters are in the **urinary sytem**.
5. In the human body, the senses include all of the following EXCEPT **teeth**.
6. The brain, nerves, and spinal cord are in the **nervous system**.
7. The trachea, nose, lungs, and pharynx are in the **respiratory system**.
8. Tendons, joints, bones, and cartilages are in the **skeletal system**.
9. The upper middle area of the abdomen is called the **epigastric region**.
10. The lower middle are of the abdomen is called the **hypogastric region**.
11. The central middle area of the abdomen is called the **umbilical region**.
12. The humerus is located in the **arm**.
13. The pubis is located in the **pelvis**.
14. The femur is located in the **leg**.
15. The patella is located in the **knees**.
16. The ulna is located in the **arm**.
17. The tibia is located in the **leg**.
18. The fibula is located in the **leg**.
19. The radius is located in the **arm**.
20. The maxilla is located in the **head**.
21. The metatarsals are located in the **foot**.
22. The metacarpals are located in the **hand**.
23. The name for the collar bone is **clavicle**.
24. The smaller of the lower leg bones is called **fibula**.
25. The zygomatic bone is located in the **head**.
26. The mandible bone is located in the **head**.
27. The sphenoid bone is located in the **head**.
28. The vertebrae are located in the **back**.
29. Bones are **built to provide support and structure**.
30. The study of bones is called **osteology**.
31. The majority of the bones in the arms and legs are **long bones**.
32. Bones of the wrist and ankle are called **short bones**.
33. The muscle that flexes and supinates the forearm is called **biceps brachii**.
34. The major artery to the head is called the **carotid**.

35. One of the arteries that supplies the hand and forearm is called the **ulnar**.
36. The major artery that supplies the abdomen is called the **celiac artery**.
37. The major artery that supplies the thorax is called the **intercostal artery**.
38. The major artery that supplies the kidney is called the **renal artery**.
39. The major artery that supplies the bladder, rectum, and some reproductive organs is called the **iliac**.
40. The major artery that supplies the upper arm is called the **brachial**.
41. The major artery that supplies the knee is called the **popliteal**.
42. The major artery that supplies the foot is called the **dorsalis pedis**.
43. The major vein that drains the upper arm is called the **brachial**.
44. The major vein that drains the head and brain called the **jugular**.
45. The major vein that drains the liver is called the **hepatic**.
46. The major vein that drains the kidneys is called the **renal**.
47. The major vein that drains the pelvis is called the **common iliac**.
48. The point at which air enters the respiratory tract is called the **nasal cavity**.
49. The wind pipe which conducts air between the larynx and lungs is called the **trachea**.
50. The divisions of the trachea which enter the lungs are called the **bronchi**.
51. Located between the pharynx and trachea, and containing the vocal cords is the **larynx**.
52. A condition of the nasal septum turning away from midline is called a **deviated septum**.
53. The medical name for nose bleed is called **epistaxis**.
54. Inflammation of the sinus cavity is called **sinusitis**.
55. Inflammation of the pleura is called **pleurisy**.
56. Escape of fluid into the thoracic cavity is called **pleural effusion**.
57. Inflammation of the nasal mucosa results in **rhinitis**.
58. An accumulation of air in the pleural cavity after the lungs collapse is known as **pneumothorax**.
59. Whooping cough is another name for **pertussis**.
60. Inflammation of the mucus lining of the vagina is called **vaginitis**.
61. Inflammation of the gums is called **gingivitis**.
62. Lesions of the mucus membrane of the stomach are called **gastric ulcers**.
63. A serious chronic disease of the liver is called **cirrhosis**.
64. Chronic inflammation of the colon is called **colitis**.
65. Inflammation of the gallbladder is called **cholecystitis**.

66. Inflammation of the pancreas is called **pancreatitis**.
67. Inflammation of the appendix is called **appendicitis**.
68. Dilated veins that occur in the rectum is known as **hemorrhoids**.



Referring to Illustration #1, each number represents:

69. **Temporal**
70. **Scapula**
71. **Humerus**.
72. **Sacrum**
73. **Tibia**
74. **Fibula**
75. **Sternum**
76. **Clavicle**
77. **Femur**
78. **Patella**
79. When the internal environment of the body is functioning properly, a condition of **homeostasis** exists.
80. The science of the function of cells, tissues, and organs of the body is called **physiology**.
81. The lateral movement of the limbs away from the median plane of the body is called **abduction**.

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82. An extrauterine pregnancy in which the fertilized ovum begins to develop outside the uterus is called **ectopic**.
83. The second portion of the small intestine is called the **jejunum**.
84. One of the vital functions of long bones is the formation of **red blood cells**.
85. A unilateral paralysis that follows damage to the brain is called **hemiplegia**.

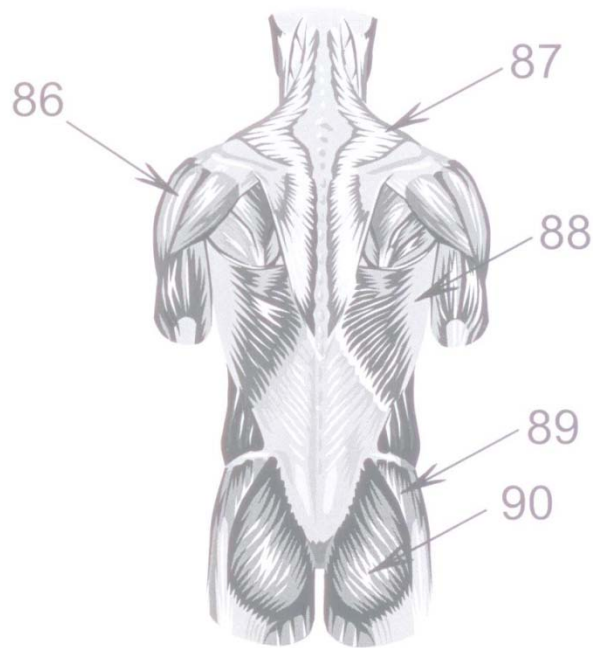


Illustration #2

Referring to Illustration #2, each number represents:

86. **Deltoid**
87. **Trapezius**
88. **Latissimus dorsi**
89. **Gluteus medius**
90. **Gluteus maximus**

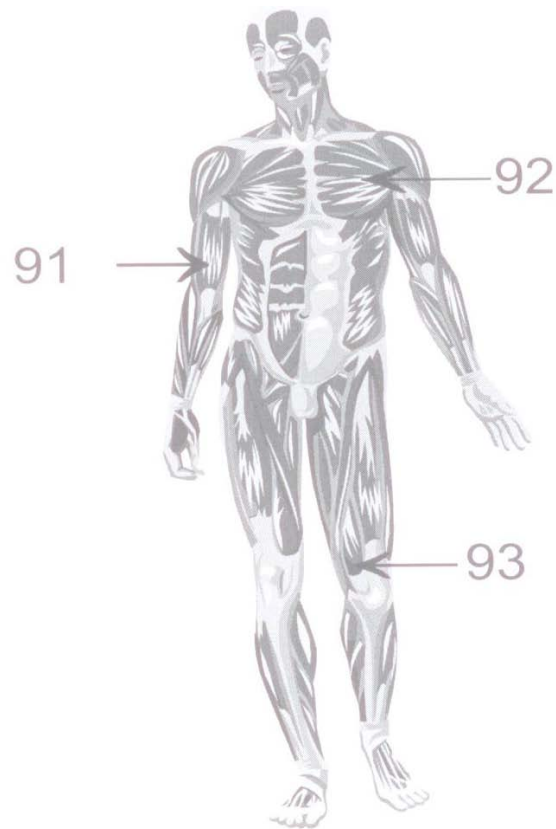


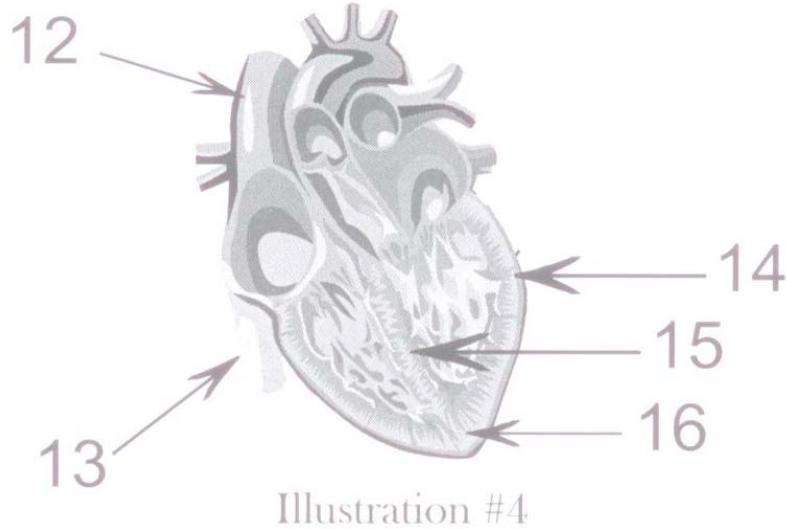
Illustration #3

Referring to Illustration #3, each number represents:

91. **Biceps brachii**
92. **Pectoralis major**
93. **Quadriceps femoris**
94. The use of ultrasound to produce a picture of the structure of the heart is called **echocardiography**.
95. Digestion begins in the mouth, where food is chewed and mixed with a substance called **saliva**.
96. The lining of the duodenum is composed of thousands of tiny finger-like projections called **villi**.
97. Infected pressure sores on the skin are called **decubitus ulcers**.
98. Varicose veins of the anal canal or outside the external sphincter are called **hemorrhoids**.
99. Carcinogenic means **cancer** causing.

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100. A weakness in the walls of muscle that allows underlying tissue to push through it is called a **hernia**.
101. A gallbladder disorder involving stones in the gallbladder is **cholelithiasis**.
102. Inflammation of the retina is **retinitis**.
103. Foods that are mild in flavor and easy to digest (non-spicy) comprise a **bland diet**.
104. A tube inserted into one of the patient's nostrils and down the back of the throat, through the esophagus until the end reaches the patient's stomach is a **nasogastric tube**.
105. Washing out of the stomach through a nasogastric tube is called **lavage**.
106. The healthy adult excretes daily approximately **1000 to 1500 milliliters of urine**.
107. The inability to control the passage of urine in the bladder is called **urinary incontinence**.
108. Painful voiding is called **dysuria**.
109. If the septum of the heart has an abnormal opening it is referred to as a **septal defect**.
110. Branches of the bundle branches, which transmits the impulses to the walls of the ventricles, causing the ventricles to contract are called **purkinje fibers**.
111. A coronary occlusion causing a condition that produces chest pain which may radiate to the left arm, jaw or neck due to lack of blood supply to the heart is called **angina pectoris**.
112. An obstruction of a coronary artery causing death of an area of the myocardium due to blockage of blood supply and oxygen supply is called **myocardial infarction**.
113. Deoxygenated blood enters the right atrium of the **heart**.
114. When the right atrium contracts it forces blood through the tricuspid valve into the **right ventricle**.
115. The right ventricle pumps the used blood to the lungs by way of the **pulmonary artery**.



Referring to Illustration #4, each number represents:

- 116. **Aorta**
- 117. **Inferior vena cava**
- 118. **Purkinje Fibers**
- 119. **Interventricular septum**
- 120. **Apex**

Medical Procedures

- **Infection Control, Exposure Control, and Safety**

1. Every medical facility is required by OSHA to have an **exposure control plan**.
2. The exposure control plan shall be made available to the **Assistant Secretary and the Director of OSHA upon request for examination and copying**.
3. **“HIV”** means **human immunodeficiency virus**.
4. **“Contaminated Sharps”** mean any contaminated objects that can penetrate the skin including, but not limited to needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.
5. Reasonable anticipated skin, eye, mucous membrane, or parenteral contact with blood, or other potentially infectious materials that may result from the performance of an employee’s duties is called **occupational exposure**.

6. Any individual, living or dead, whose blood, or other potentially infectious materials may be a source of occupational exposure to the employee is called a **source individual**.
7. To use a physical chemical procedure to destroy all microbial life including highly resistant bacterial endospores is to **sterilize**.
8. **Blood** is the single most important source of HIV and HBV in the workplace.
9. The risk of infection with HIV following one needle-stick exposure to blood from a patient known to be infected with HIV is approximately **.050%**.
10. General infection-control procedures are designed to prevent transmission of a wide range of **microbiological agents** and to provide a wide margin of safety in the varied situations encountered in the health-care environment.
11. "Contact with blood, or other body fluids to which universal precautions apply through percutaneous inoculation, or contact with an open wound, non-intact skin, or mucous membrane during the performance of normal duties" this definition (found in the Federal Register) applies to **human exposure**.
12. All workers whose jobs involve participation in tasks, or activities with exposure to blood, or other body fluids to which universal precautions apply, should be vaccinated with **hepatitis B vaccine**.
13. **Serologic testing** should be made available by the employer to all workers who maybe concerned they have been infected with HIV through an occupational exposure.
14. Studies suggest that the potential for salivary transmission of HIV is **remote**.
15. After they are used, disposable syringes and needles, scalpel blades, and other sharp items should be placed in **puncture resistant** containers for disposal.
16. Broken glassware which may be contaminated shall not be picked up directly with the hands, but by mechanical means, such as a **brush and dust pan**.
17. Contaminated laundry shall be **bagged or containerized at the location** where it was soiled.
18. All spills of blood-contaminated fluids should be promptly cleaned up using an **EPA** approved germicide, or a 1:10 solution of household bleach.
19. In cases of blood contamination, shoe covering and gloves should be disposed of in **orange-red** biohazard plastic bags.
20. It is recommended that protective masks and eye wear, or face shields, be worn by laboratory technicians or housekeeping personnel **when cleaning up blood or body fluids**.

21. Blood from all individuals should be considered **infective or infectious**.
22. When taking vital signs, a medical assistant **is not required** to wear gloves, gowns and eye wear.
23. A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood, or other potentially infectious materials that result from the performance of an employee's duties is called **exposure incident**.
24. The term "Universal Precautions" is an **overall approach to infection control**.
25. Vaccinations against HBV infection provide 90% protection against hepatitis B for **seven** or more years following vaccinations.
26. The first line of defense in preventing disease is **the medical hand wash**.
27. Biohazard labels must be colored **orange-red**.
28. **Occupational Safety and Health Administration (OSHA)** requires the use of Sharps Containers.
29. Viruses can reproduce only in **living cells**.
30. The process of killing all microorganisms in a certain area is called **sterilization**.
31. The autoclave sterilizes or completely destroys microorganisms by combining **heat with steam under pressure**.
32. Microorganisms grow best in **dark and warm environments**.
33. A disease state that results from the invasion and growth of microorganisms in the body is called **an infection**.
34. Practices to achieve asepsis is known as **medical asepsis and clean technique**.
35. The process by which an object or area becomes unclean is **contamination**.
36. You should wash your hands for approximately **1 to 2 minutes**.
37. When you wash your hands, you should stand **so your clothes do not touch the sink**.
38. The faucet is turned off with **a paper towel**.
39. A health care worker who unconsciously transports harmful bacteria but is not ill is called a **carrier**.
40. Groups or clusters of bacteria taken for laboratory study are called **cultures**.
41. The patient with an infection may have:
 - **loss of appetite and fatigue**
 - **fever, nausea, rash and vomiting**
 - **pain, redness or swelling**
42. Disease that can be communicated from one person to another are called **contagious**.

43. When using a fire extinguisher the hose should be directed to the **base of the fire**.
44. Aerobic bacteria prefer **oxygen** to grow well.

- **Patient Examination and Clinical Skills**

1. An electronic thermometer measures body temperature in **2 to 60 seconds**.
2. **Radial pulse** is usually used for taking a pulse.
3. A normal adult pulse rate is **60 – 100**.
4. The radial pulse is located in the **wrist**.
5. The least reliable measurement of body temperature is **axillary**.
6. The most accurate and reliable measurement of body temperature is **rectal**.
7. A normal adult respiration is **14 to 20 per minute**.
8. A respiratory rate greater than 24 per minute is called **tachypnea**.
9. Persistent increased systolic and diastolic pressures are indicative of **hypertension**.
10. The blood pressure should not be taken:
 - **if the patient has had breast surgery on that side**
 - **on an arm with an IV infusion**
 - **on an arm with a cast**
11. To measure a blood pressure, the medical assistant will need a **stethoscope and sphygmomanometer**.
12. **The point where the first sound is heard** is recorded as the systolic blood pressure.
13. When measuring blood pressure
 - **the cuff should be applied to the bare upper arm**
 - **room should be quiet so blood pressure can be heard**
 - **sphygmomanometer needs to be clearly visible**
14. With vital signs, any abnormal measurement must be immediately reported to the **physician**.
15. A medical assistant would measure the patient's temperature, pulse, and respiration when the physician asks him or her to **take vital signs**.
16. **A security thermometer** is used to take an infant's rectal temperature.
17. Never clean a glass thermometer with **hot water**.
18. When the patient is breathing with only the upper part of this lungs this is referred to as **shallow respiration**.
19. When the patient makes abnormal noises like snoring when s/he is breathing, it is called **stertorous respiration**.

20. When the heart is contracting, the pressure is highest. This pressure is called the **systolic pressure**.
21. When listening to the brachial pulse, you will use a **stethoscope**.
22. The main type of sphygmomanometers used in a clinical setting is the **aneroid type**.
23. When the pressure is lowest, this pressure is called **diastolic pressure**.
24. The process of inhaling and exhaling is called **respiration**.
25. When the depth of breathing changes and the rate of rise and fall of the chest is not steady, it is called **irregular respiration**.
26. When taking the pulse, you must be able to report accurately the
 - **rhythm of pulse beats**
 - **rate (number of pulse beats per minute)**.
 - **force of the beat**
27. The balance between the heat produced and the heat lost is the **body temperature**.
28. A rubber or plastic tube used to drain or inject fluid through body opening is called **catheter**.
29. The process of inserting a catheter is called **catheterization**.
30. When you use an autoclave, fill the water reservoir with **distilled water**.
31. A patient positioned on her back with feet in stirrups is said to be in the **lithotomy position**.
32. A stethoscope is used to listen to body sounds by **auscultation**.
33. When the physician feels with fingers or hands to determine the physical characteristics of tissues or organs it is called **palpitation**.
34. Body temperature measured under the arm of a patient is called the **axillary temperature**.
35. Listening to the sounds produced while tapping the patient with fingers is called **percussion**.
36. The instrument used to examine the eyes is called the **ophthalmoscope**.
37. An instrument used for auditory and sensory perception is called the **tuning fork**.
38. An apical pulse is the method of choice for **infants and young children**.
39. **Third degree burn** is the most serious.
40. On a visual acuity reading of 20/60, the 20 represents **distance between patient and test chart**.

41. Some clinical signs for head injury could be:
 - **vomiting**
 - **headache**
 - **confusion**
42. Lying flat on one's back with arms at one's side is the **supine position**.
43. Lying supine with knees sharply flexed and separated is known as the **dorsal recumbent position**.
44. When a patient's feet are placed in stirrups and the buttocks are positioned at the edge of the exam table, the patient is in the **lithotomy position**.
45. When a patient is positioned on the abdomen, arms under the head, with the head turned to one side the patient is in the **prone position**.
46. When the patient kneels and places his/her head and chest on the table with buttocks elevated, it is called the **knee-chest position**.
47. An otoscope is used for examination of the **ears**.
48. When measuring blood pressure, the bottom number is called **diastolic pressure**.
49. With vital signs, any abnormal measurement must be immediately reported to the **doctor**.
50. A **history and physical examination report** includes information relating to the patient's main reason for scheduling an appointment to see the physician.

- **Phlebotomy and Diagnostics**

1. The blood lancet is used for the collection of blood specimens by **skin puncture**.
2. The standard point of the lancet to be used when collecting blood from a newborn heel is **2.4 mm** in length. (Note: Check current guidelines, as this changes.)
3. The most important step in the performance of a venipuncture is **positively identifying the patient**.
4. When cleansing the venipuncture site, it is good practice to **cleanse the site from the inside out and allow it to air dry**.
5. To determine the size of the needle remember that the higher the gauge number the **smaller the needle**.
6. An instrument called a centrifuge **separates the cellular and liquid portion of the blood**.
7. Rubber sleeves on an evacuated tube system make it possible for **multiple use**.

8. Preparing for a glucose tolerance test **ten** hours before or during the test, the patient should not eat, smoke, drink coffee or alcohol.
9. In the evacuated blood collection system, the evacuated glass tubes come in different sizes, and the stoppers are **color coded** to denote the type of additive or lack of one.
10. During a venipuncture, to secure the needle during insertion into the tube stopper, you need a **holder**.
11. The gauge of needle most commonly used for venipuncture is **22 gauge**.
12. When performing a venipuncture, the tourniquet should be wrapped around the arm about three to four inches from where you are going to **feel a vein**.
13. When performing a venipuncture, if you have the patient **make a fist**, the veins will become more prominent.
14. Veins **do not pulsate**.
15. Use your index finger when you **palpate** for a vein.
16. Arterioles are the smallest type of **arteries**.
17. The maximum time a tourniquet should be tied on the upper arm while drawing blood is **1 minute**.
18. To cleanse the typical venipuncture site begin at the intended site of the draw and **work in a circle to the periphery**.
19. The venipuncture site should be cleansed with **an alcohol prep**.
20. When using a centrifuge, make sure equal weights are **opposite each other**.
21. The lid to the centrifuge should be kept **closed** when in use.
22. When using an evacuated tube for collection of electrolytes use a **red-top tube**.
23. When collecting blood for a hematocrit use a **lavender-top evacuated tube**.
24. When collecting blood for cholesterol tests use a **red top evacuated tube**.
25. The primary anticoagulative additive EDTA removes calcium by forming insoluble or un-ionized calcium salts. It has an advantage of preventing platelet clumping and the formation of artifacts, therefore, good for the preparation of **blood films**.
26. Sodium citrate is an anticoagulant of choice for coagulation studies because it protects certain of the **pro-coagulants**.
27. The tube to collect whole blood with an additive in it has a **lavender** stopper.
28. The color coding for a stopper of a tube with no additives (for collection of serum) is **red**.
29. At the location where you are going to feel for a vein, wrap the tourniquet around the arm approximately **three to four inches** above the area.

30. The cephalic, medial cubital, and basilica veins are **primarily** used for venipuncture.
31. When doing a venipuncture the syringe or tube should be **below** the venipuncture site to prevent back-flow.
32. When anticoagulated blood is centrifuged **plasma** goes to the top of the tube.
33. When anticoagulated blood is centrifuged **red blood cells** goes to the bottom of the tube.
34. When collecting blood by skin puncture on an infant, you should use a **lancet**.
35. The tube used to collect a blood sample for a Complete Blood Count (CBC) is **lavender top, ethylenediaminetetraacetic acid additive**.
36. **PT and PTT** are lab tests to monitor anticoagulation therapy.
37. **Red evacuated tubes** are drawn first.
38. Making sure that a tube is correctly labeled with the patient's complete name and identification number is part of the facilities **quality control plan**.
39. When performing a venipuncture if no blood flows into the tube, you can correct by:
 - **gently insert the needle a little deeper, or**
 - **gently pull the needle out just a little, or**
 - **remove the needle and tourniquet and prepare another site**
40. If during a venipuncture, a patient has a syncopal episode, **remove the needle and tourniquet and lower the patient's head and arms**.
41. The most appropriate site for performing a capillary puncture in a healthy adult is the **fingers**.
42. It is very important when performing a capillary stick to **wipe away the first drop of blood**.
43. Performing a **hematocrit** as part of a complete blood count determines the ratio of the volume packed red blood cells to that of whole blood.
44. **Erythrocyte sedimentation rate values** are increased in infections and inflammatory disease.
45. **EDTA blood sample** will be needed to perform a hemoglobin test.
46. **Two hematocrit tubes** should be collected from the patient.
47. A **capillary blood sample** is needed when performing a PKU.
48. A **lancet** is a small sterile needle like a piece of metal used to make small punctures in the dermis.
49. In drug testing the **chain of custody** regulates/describes how evidence is to be collected and handled.

50. A **glucose tolerance test** requires the patient to be fasting and then blood is taken every hour for a predetermined time.

- **Diagnostic Test, Lab Procedures and Electrocardiography**

1. In the positioning of the electrodes, if the electrodes are placed too close together, the amplitude will be **small**.
2. The large squares on the ECG paper are equal to **0.20 sec**.
3. A “V wave” will **never** be seen in a normal EKG.
4. The **sensitivity switch** controls the gain or amplitude on the EKG.
5. When preparing for lead placement you should first care for **skin preparation**.
6. Conversion of a dysrhythmia to a normal rhythm by applying electric shock to the chest is called **defibrillation**.
7. The criteria for skin preparation for lead placement is:
 - **clean the skin with an alcohol wipe**
 - **shave the hair from the skin**
 - **roughen the skin for better dermis contact**
8. The electrode site should be **clean, smooth, and dry**.
9. An ECG tracing measures the **amount of voltage and the time it takes** for the voltage to travel throughout the heart.
10. In the application of electrodes, secure the electrode by rubbing your finger around the **adhesive area**.
11. When there is no variation of R – R intervals is called **absolutely regular**.
12. Ventricular depolarization produces an electrical force or vector with 2 components:
 - **magnitude or force**
 - **direction or shape**
13. A downward or negative wave of an electrocardiogram following the P wave is the **Q wave**.
14. A premature ventricular contraction (PVC) where the QRS have the same configuration each time they appear is called **uniform**.
15. When applying leads, apply the V1 lead **to the fourth intercostals space right sterna border**.
16. **Duration of the P wave is not greater than 0.11 sec** and **height-deflection is small, not more than 3 mm**.

17. When PVC's fall on the T wave, occur in pairs, runs of 3 or more, or are multiform in nature, these conditions are called **life threatening**.
18. When a vector travels away from the positive electrode, a **negative** deflection results.
19. The combination of sensors or electrodes used for lead #1 is **left arm, right arm**.
20. Considering ECG's, for irregular rhythms, any method of rate calculation that depends on intervals between complexes is **unreliable**.
21. The **P wave** represents atrial depolarization.
22. While the duration of the ST segment is not generally of clinical significance, it is an exceedingly important portion of the ECG because of **shifts up or down from the baseline**.
23. A QRS measurement of less than **0.12 seconds** indicates a supraventricular pacemaker.
24. The area between waves is referred to as **intervals**.
25. A terminal lethal dysrhythmia, a dying heart, is called **agonal**.
26. When the heart rhythm is abnormal, it is referred to as **an arrhythmia**.
27. A rapid, irregular succession of chaotic bizarre waves; wide, irregular oscillations of the baseline is called **ventricular fibrillation**.
28. The absence of one or more complete cardiac cycles where the rhythm is interrupted is referred to as **sinus arrest**.
29. A special device called a "regulator" or "flow meter" is necessary when using **oxygen**.
30. Oxygen is administered to the patient by way of a
 - **catheter, or**
 - **cannula, or**
 - **tent**
31. The clean-catch urine specimen is also called
 - **clean-voided specimen, or**
 - **mid-stream specimen**
32. A 24-hour specimen should be **chilled/refrigerated**.
33. The fresh-fractional urine specimen is used to test urine for **sugar**.
34. Another term for acetone in the urine is **ketone bodies (ketones)**.
35. **Keto-diaistix** measures both sugar and acetone in the urine.
36. To help classify bacteria into two groups; gram-positive and gram-negative is a special stain called **gram stain**.

37. When preparing a blood smear from a skin puncture you should **wipe away the first drop**.
38. When you pull the second slide apart from the first slide, let them **air dry**.
39. When preparing a blood smear, the spreader slide must be made of **glass**.
40. When a drop of blood is placed on a slide, place a second slide **on top** of the first slide.
41. The glucose tolerance test is a **timed-test**.
42. While ordering procedures may vary, generally a type and RH are ordered on all pregnant women. This normally is called a **prenatal** screen.
43. Certain types of cultures, such as deep wound cultures could contain anaerobic pathogens. **Absence of oxygen** is required for their growth.
44. To obtain a specimen for a throat culture the **nasopharynx and tonsillar area** must be swabbed.
45. A CLIA waived pregnancy test is based on the detection of **human chorionic gonadotropin**.
46. When performing any CLIA waived tests, it is important to **perform quality control testing with every new kit and routinely thereafter**.
47. Performing routine maintenance on laboratory equipment is critical. The maintenance plan should include:
 - **regularly scheduled check-ups**
 - **daily examination of equipment for frayed cords or broken parts**
 - **routine cleaning of the outside of the equipment with a damp cloth**
48. When testing for occult blood a **stool sample** is required.
49. When providing a patient instructions on the collection of a sample for occult blood testing, **dietary modifications must occur for 48 hours prior to collection of the specimen**.
50. In the medical office, the most frequently performed pulmonary function test is **spirometry**.