



Physiology: Understanding Medical Terminology & Functions

Medical Terminology Basics

- 1: Which of the following is NOT a word part that medical terms are built from?
(A): Prefix (B): Interjection (C): Suffix (D): Combining form vowel
- 2: In the medical term "osteoarthritis", what does the combining form "oste/o" mean?
(A): Joint (B): Muscle (C): Bone (D): Cartilage
- 3: What should you do when defining a medical word?
(A): Start with the prefix first (B): Start with the word root first
(C): Start with the combining form vowel first (D): Start with the suffix first
- 4: What does the prefix "hyper-" mean?
(A): above, excessive (B): below, under (C): before (D): against, opposing
- 5: The suffix "-penia" refers to which of the following?
(A): An abnormal increase in number (B): An abnormal decrease in number
(C): A normal increase in size (D): A normal decrease in size
- 6: Which of the following is the correct order of structural organization from simplest to most complex?
(A): Tissue, organ, cell, organelle, molecule, atom
(B): Atom, molecule, organelle, cell, tissue, organ
(C): Organ, tissue, cell, organelle, molecule, atom
(D): Cell, tissue, organ, organelle, molecule, atom
- 7: Which directional term describes a position farther from the surface of the body?
(A): Superior (B): Deep (C): Distal (D): Superficial
- 8: What is the sagittal plane?
(A): Divides the body vertically into anterior and posterior portions
(B): Divides the body horizontally into upper and lower portions
(C): Divides the body vertically into right and left sides
(D): None of the above
- 9: The thoracic cavity contains which of the following organs?
(A): Lungs and heart (B): Stomach and liver
(C): Kidneys and bladder (D): Brain and spinal cord
- 10: Which body cavity is the largest in the human body?
(A): Cranial cavity (B): Thoracic cavity (C): Abdominal cavity (D): Spinal cavity
- 11: Which of the following is the smallest independently functioning unit of a living organism?
(A): Atom (B): Organelle (C): Molecule (D): Cell
- 12: Which of the following is NOT a type of tissue membrane?
(A): Connective tissue membrane (B): Epithelial membrane
(C): Muscular membrane (D): Synovial membrane
- 13: The parietal layers of serous membranes line which of the following?
(A): The walls of body cavities
(B): The surface of organs
(C): The outer layer of the skin

(D): None of the above

14: Which serous membrane surrounds the heart?

(A): Pleura (B): Pericardium (C): Peritoneum (D): Perichondrium

Physiology Introduction

15: Physiology is the study of how organisms perform which of the following?

(A): Their vital functions (B): Their structure (C): Their behavior (D): Their genetics

16: Which of the following is NOT one of the seven characteristics of life?

(A): Cells (B): Metabolism (C): Photosynthesis (D): Reproduction

Homeostasis

17: What is the term for the body's attempt to maintain a constant internal environment?

(A): Homeostasis (B): Metabolism (C): Thermoregulation (D): Osmosis

18: Homeostatic regulation involves which of the following?

(A): Only the receptor
(B): Only the control center
(C): The receptor and the effector
(D): None of the above

19: Which type of feedback reverses the direction of change in response to a stimulus?

(A): Positive feedback (B): Negative feedback (C): Neutral feedback (D): No feedback

20: What is an example of positive feedback?

(A): Sweating to cool down body temperature (B): Blood clotting to stop bleeding
(C): Insulin release in response to high blood sugar (D): Pupil constriction in bright light

21: Disease and cellular malfunction can be caused by which of the following?

(A): Only toxicity (B): Only deficiency
(C): Both toxicity and deficiency (D): Neither toxicity nor deficiency

22: Which body system is responsible for maintaining homeostasis by controlling and regulating the other parts of the body?

(A): Endocrine system (B): Muscular system (C): Nervous system (D): Skeletal system

23: Which system transports hormones and nutrients to maintain homeostasis in other systems?

(A): Lymphatic system (B): Digestive system
(C): Cardiovascular system (D): Respiratory system

24: Which system releases carbon dioxide as a waste product to help maintain proper blood pH levels?

(A): Urinary system (B): Endocrine system
(C): Respiratory system (D): Reproductive system

25: Which system rids the body of nitrogenous wastes and helps maintain proper blood volume and ion concentration?

(A): Digestive system (B): Urinary system (C): Nervous system (D): Reproductive system

26: The lymphatic system helps maintain the volume of which of the following?

(A): Body fluids (B): Bone density (C): Blood pressure (D): Muscle strength

27: Which of the following is NOT a method of heat loss during thermoregulation?

(A): Radiation (B): Conduction (C): Convection (D): Digestion

28: In dehydration, what happens to cell volume?

(A): Cell volume increases.
(B): Cell volume decreases.

- (C): Cell volume stays the same because water is only lost from the plasma.
(D): Cell volume stays the same because water is not lost.

29: What hormone causes increased water retention by the kidneys?
(A): Aldosterone (B): Cortisol (C): Vasopressin (D): Oxytocin

30: Which ion has a much higher concentration inside cells compared to outside?
(A): Sodium (B): Potassium (C): Calcium (D): Chloride

31: Which of the following directly controls parathyroid hormone secretion?
(A): Plasma phosphate levels (B): Plasma calcium levels
(C): Blood sugar levels (D): Blood pressure

32: In which compartment is most of the body's water located?
(A): Intracellular (B): Interstitial (C): Plasma (D): Transcellular

33: Which organ has capillaries that are the most permeable?
(A): Brain (B): Muscle (C): Liver sinusoids (D): Lungs

34: What happens to the resting membrane potential when the external potassium concentration is increased?
(A): It becomes more negative (B): It stays the same
(C): It becomes less negative (D): It becomes neutral

The Nervous System

35: The central nervous system includes which of the following?
(A): Brain and spinal cord (B): Heart and lungs
(C): Muscles and bones (D): Stomach and intestines

36: The brain is held in the _____ of the skull.
(A): cranial cavity (B): vertebral column (C): thoracic cavity (D): abdominal cavity

37: Which of the following are the three main functions of the nervous system?
(A): Sensory input, integration of data, and motor output
(B): Sensory input, digestion, and motor output
(C): Motor output, respiration, and digestion
(D): None of the above

38: Neurons have _____ membranes, which allow them to generate and propagate electrical impulses.
(A): insulated (B): excitable (C): permeable (D): regenerative

39: The two major subdivisions of the nervous system are:
(A): Somatic and autonomic (B): Sensory and motor
(C): Central and peripheral (D): Sympathetic and parasympathetic

40: The autonomic nervous system controls which of the following?
(A): Voluntary movements of the body
(B): Internal organs, blood vessels, smooth and cardiac muscles
(C): Skeletal muscles
(D): Reflexes only

41: The _____ is the largest part of the nervous system.
(A): peripheral nervous system (B): limbic system
(C): central nervous system (D): autonomic nervous system

42: The soma (cell body) of a neuron contains which of the following, where most protein synthesis occurs?
(A): Dendrites (B): Axon (C): Nucleus (D): Synapse

- 43: The _____ is the most easily-excited part of the neuron.
(A): axon hillock (B): dendrites (C): soma (D): axon terminal
- 44: Which type of neurons transmit signals from the central nervous system to effector cells?
(A): Sensory neurons (B): Interneurons (C): Efferent neurons (D): Afferent neurons
- 45: The neurons of the brain release _____ neurotransmitters far more than excitatory neurotransmitters.
(A): inhibitory (B): modulatory (C): fast-acting (D): slow-acting
- 46: The longitudinal sulcus separates the cerebrum into which of the following?
(A): Upper and lower parts
(B): Inner and outer layers
(C): Right and left hemispheres
(D): None of the above
- 47: The _____ is the part of the brain responsible for coordination, balance and posture.
(A): cerebrum (B): pons (C): cerebellum (D): medulla oblongata
- 48: The limbic system is responsible for:
(A): Emotion and higher mental functions (B): Motor coordination
(C): Processing sensory information (D): Controlling autonomic functions
- 49: The amygdala is responsible for identifying which of the following and is important for self-preservation?
(A): Pleasure (B): Danger (C): Hunger (D): Sleep
- 50: Which of the following is NOT part of the limbic system?
(A): Hypothalamus (B): Hippocampus (C): Cerebellum (D): Amygdala
- 51: There are _____ basic types of memory.
(A): two (B): three (C): four (D): five
- 52: Which of the following is NOT a type of long term memory?
(A): Episodic memory (B): Semantic memory
(C): Short term memory (D): Procedural memory
- 53: Which of the following is a phase of long-term potentiation (LTP)?
(A): Induction
(B): Maintenance
(C): Expression
(D): All of the above
- 54: Broca's area is responsible for which of the following functions?
(A): Understanding language
(B): Assembling motor sequences for speech and writing
(C): Processing visual information
(D): Controlling balance and coordination
- 55: Which of the following is a symptom of depression?
(A): Intense sadness and despair
(B): Loss of ability to concentrate
(C): Insomnia or hypersomnia
(D): All of the above
- 56: The peripheral nervous system includes:
(A): 10 cranial nerves (B): 12 cranial nerves and 31 pairs of spinal nerves
(C): 14 cranial nerves (D): 31 spinal nerves

57: In the peripheral nervous system, which cells provide the myelin insulation for axons in nerves?
(A): Schwann cells (B): Astrocytes (C): Oligodendrocytes (D): Microglia

The Muscular System

58: What controls the muscular system in vertebrates?

(A): Skeletal system (B): Circulatory system
(C): Nervous system (D): Endocrine system

59: Muscle tissue is derived from which of the following embryonic germ layers?

(A): Endoderm (B): Ectoderm (C): Mesoderm (D): Epidermis

60: Muscle cells are bound together by perimysium into bundles called what?

(A): Fascicles (B): Fibers (C): Tendons (D): Ligaments

61: Which of the following is NOT a type of muscle in the human body?

(A): Smooth muscle (B): Cardiac muscle (C): Skeletal muscle (D): Visceral muscle

62: Skeletal muscle contraction is stimulated by the binding of which neurotransmitter?

(A): Dopamine (B): Serotonin (C): Acetylcholine (D): Glutamate

63: Which type of muscle is striated in structure and appearance?

(A): Smooth muscle (B): Cardiac muscle (C): Skeletal muscle (D): Both B and C

64: During isotonic contraction, what happens to the muscle fibers as the muscle contracts?

(A): They shorten (B): They stay the same length
(C): They lengthen (D): They stop moving

65: In smooth muscle contraction, calcium binds directly to myosin to initiate contraction.

(A): True (B): False

66: Which of the following diseases is characterized by inflammation of the muscles?

(A): Muscular dystrophy (B): Myasthenia gravis (C): Dermatomyositis (D): Tetanus

The Cardiovascular System

67: The heart is a hollow, muscular organ about the size of which of the following?

(A): A fist
(B): A foot
(C): A head
(D): None of the above

68: The heart is composed of _____ muscle tissue.

(A): smooth (B): skeletal (C): cardiac (D): involuntary

69: The inner most layer of the heart is called:

(A): Myocardium (B): Epicardium (C): Endocardium (D): Pericardium

70: What is the pericardium?

(A): A thick muscle layer around the heart
(B): A thin, membranous sac that surrounds the heart
(C): A blood vessel connected to the heart
(D): A valve inside the heart

71: The heart has _____ chambers.

(A): two (B): three (C): four (D): five

72: The _____ is a thick wall separating the ventricles of the heart.

(A): septum (B): atrium (C): vena cava (D): aorta

- 73: How many valves does the heart have to ensure blood flows in the correct direction?
(A): Two (B): Three (C): Four (D): Six
- 74: The most common congenital abnormality of the heart is:
(A): Septal defect (B): Bicuspid aortic valve
(C): Coarctation of the aorta (D): Tetralogy of Fallot
- 75: Blood flows through the heart in the following order:
(A): RA, RV, lungs, LA, LV, body (B): RA, LA, RV, lungs, LV, body
(C): RA, lungs, LA, LV, body, RV (D): LA, LV, body, RA, RV, lungs
- 76: Arteries carry blood away from the heart.
(A): True (B): False
- 77: Exchange of oxygen and carbon dioxide takes place in the:
(A): Arteries (B): Veins (C): Capillaries (D): Venules
- 78: In the pulmonary circuit, oxygenated blood is carried to the heart's left atrium via which of the following?
(A): Pulmonary arteries (B): Pulmonary veins (C): Aorta (D): Superior vena cava
- 79: The _____ is the largest artery in the systemic circuit.
(A): Vena cava (B): Aorta (C): Pulmonary artery (D): Coronary artery
- 80: The coronary arteries supply blood to the:
(A): Brain (B): Lungs (C): Heart muscle itself (D): Kidneys
- 81: Systole refers to which action of the heart ventricles?
(A): Relaxing (B): Contracting (C): Filling with blood (D): Stopping
- 82: The "Lub-Dub" sounds of the heart are caused by:
(A): Blood flow (B): Heart valves closing
(C): Cardiac muscle contracting (D): Electrical conduction
- 83: Which of the following is NOT part of the heart's electrical conduction system?
(A): SA node (B): AV node (C): Bundle of His (D): Coronary sinus
- 84: Fibrillation is an uncoordinated contraction of which muscle?
(A): Skeletal muscle (B): Smooth muscle (C): Cardiac muscle (D): Abdominal muscle
- 85: An ECG measures the _____ activity of the heart.
(A): muscular (B): chemical (C): electrical (D): mechanical
- 86: Blood pressure is typically measured in units of:
(A): ml/min (B): beats/min (C): mmHg (D): L/min
- 87: Hypertension is chronically low blood pressure.
(A): True (B): False
- 88: Atherosclerosis involves the buildup of _____ inside arteries.
(A): Plaque
(B): Blood clots
(C): Cholesterol
(D): All of the above
- 89: A myocardial infarction is commonly known as which of the following?
(A): Stroke (B): Heart attack (C): Seizure (D): High blood pressure

90: Angina pectoris refers to:

- (A): Chest pain (B): Abnormal heart rhythm (C): Heart failure (D): Heart murmur

91: Congestive heart failure is when:

- (A): The heart stops beating completely (B): There is a blockage in a coronary artery
(C): The heart cannot pump enough blood (D): There is a hole between heart chambers

92: An aneurysm is a bulge in which of the following?

- (A): The wall of a blood vessel (B): The heart muscle (C): A nerve (D): A bone

93: Which of the following is NOT a type of stroke?

- (A): Ischemic (B): Hemorrhagic (C): Embolic (D): Cardiac

94: The cardiovascular system plays a crucial role in maintaining homeostasis in the body.

- (A): True (B): False

The Urinary System

95: What is the main function of the urinary system?

- (A): To produce hormones
(B): To filter out excess fluid and substances from the bloodstream
(C): To digest food
(D): To transport oxygen to cells

96: The kidneys are the main organs of homeostasis because they maintain the acid-base balance and water-salt balance of the blood.

- (A): True (B): False

97: Which of the following is NOT a function of the kidneys?

- (A): Regulation of plasma ionic composition (B): Regulation of plasma volume
(C): Regulation of blood sugar levels (D): Removal of metabolic waste products

98: The kidneys are located:

- (A): In the thoracic cavity (B): At the front of the abdominal cavity
(C): At the rear of the abdominal cavity (D): In the pelvic cavity

99: The left renal vein is generally longer than the right renal vein.

- (A): True (B): False

100: The ureters are:

- (A): Tubes that carry urine from the kidneys to the bladder
(B): Tubes that carry blood to the kidneys
(C): Part of the nephron
(D): Located in the renal pelvis

101: The urethra is longer in females than in males.

- (A): True (B): False

102: The basic structural and functional unit of the kidney is the:

- (A): Renal pelvis (B): Ureter (C): Nephron (D): Renal pyramids

103: Which part of the nephron is impermeable to water?

- (A): Proximal convoluted tubule (B): Loop of Henle descending limb
(C): Loop of Henle ascending limb (D): Distal convoluted tubule

104: Urine is formed in which of the following steps?

- (A): Filtration, Reabsorption, and Secretion
(B): Filtration, Absorption, and Excretion
(C): Filtration, Diffusion, and Secretion
(D): None of the above

105: Antidiuretic hormone (ADH) causes the collecting ducts to be:
(A): Impermeable to water (B): Permeable to water
(C): Impermeable to salt (D): Permeable to urea

106: Aldosterone promotes the reabsorption of potassium ions.
(A): True (B): False

107: Hypernatremia refers to:
(A): Decreased plasma sodium levels (B): Increased plasma sodium levels
(C): Decreased blood volume (D): Hypotension

108: Kidney stones are also known as:
(A): Pyelonephritis (B): Glomerulonephritis (C): Nephrolithiasis (D): Uremia

The Respiratory System

109: The respiratory system is vital for human life outside the womb.
(A): True (B): False

110: The respiratory tract is divided into:
(A): Upper and Lower Respiratory Tracts (B): Trachea and Lungs
(C): Nose and Mouth (D): Pharynx and Larynx

111: Which of the following is NOT one of the four processes of respiration mentioned in the text?
(A): Breathing or ventilation (B): External respiration
(C): Internal respiration (D): Pulmonary respiration

112: Inspiration is initiated by:
(A): Relaxation of the diaphragm
(B): Contraction of the diaphragm
(C): Relaxation of the external intercostal muscles
(D): Contraction of the internal intercostal muscles

113: Which of the following is the driving force for breathing?
(A): Oxygen (B): Carbon dioxide (C): Nitrogen (D): Water vapor

114: Gas exchange takes place in the:
(A): Trachea (B): Bronchi (C): Bronchioles (D): Alveoli

115: Normal blood pH is:
(A): 6.4 (B): 7.0 (C): 7.4 (D): 8.4

116: Asthma is an obstructive pulmonary disorder.
(A): True (B): False

117: Respiratory distress syndrome is most commonly seen in:
(A): Premature infants (B): Elderly patients
(C): Teenagers (D): Middle-aged adults

118: Which of the following is the most common treatment for obstructive sleep apnea?
(A): Surgery (B): Medication (C): CPAP (D): Oxygen therapy

The Gastrointestinal System

119: The two main processes that occur during digestion are:
(A): Absorption and secretion (B): Mechanical and chemical digestion
(C): Ingestion and excretion (D): Filtration and assimilation

120: The four layers of the GI tract are, from the inside out:
(A): Mucosa, submucosa, muscularis, serosa (B): Serosa, muscularis, submucosa, mucosa

(C): Submucosa, mucosa, serosa, muscularis (D): Muscularis, serosa, mucosa, submucosa

121: Which of the following is NOT an accessory organ of the gastrointestinal system?

(A): Salivary glands (B): Liver (C): Pancreas (D): Spleen

122: The esophagus is lined by:

(A): Simple squamous epithelium (B): Simple cuboidal epithelium
(C): Simple columnar epithelium (D): Stratified squamous epithelium

123: The small intestine consists of the:

(A): Cecum, colon, rectum (B): Duodenum, jejunum, ileum
(C): Esophagus, stomach, duodenum (D): Ileum, cecum, appendix

124: The large intestine is about 10 feet long.

(A): True (B): False

125: The pancreas produces enzymes that help digest:

(A): Proteins only (B): Fats only
(C): Carbohydrates only (D): Proteins, fats, and carbohydrates

126: The liver produces:

(A): Bile (B): Insulin (C): Glucagon (D): Somatostatin

127: The gallbladder stores:

(A): Bile (B): Pancreatic enzymes (C): Hydrochloric acid (D): Pepsin

128: Helicobacter pylori is a bacteria that can cause:

(A): Gallstones (B): Stomach ulcers (C): Appendicitis (D): Hemorrhoids

129: Diverticulitis involves inflammation of:

(A): The liver (B): The stomach (C): The large intestine (D): The pancreas

130: Cystic fibrosis primarily affects the:

(A): Lungs and pancreas (B): Heart and blood vessels
(C): Kidneys and bladder (D): Skin and eyes

131: Hepatitis is a viral condition that inflames the pancreas.

(A): True (B): False

132: IBS stands for:

(A): Indigested Bowel Syndrome (B): Intolerant Bile Secretion
(C): Irritable Bowel Syndrome (D): Infected Bile Stones

133: GISTs are uncommon cancers of the:

(A): Liver (B): Pancreas (C): Gallbladder (D): GI tract

134: GERD stands for:

(A): Gastrointestinal Esophageal Reflux Disease (B): Gastric Enzyme Restriction Disorder
(C): Gallbladder Endocrine Related Dysfunction (D): Gut Ecology Restoration Deficiency

The Endocrine System

(Random answers): 0

135: What are the two types of hormones secreted by the endocrine system?

(A): Steroidal and non-steroidal (B): Lipid-based and water-based
(C): Protein-based and carbohydrate-based (D): Exocrine and endocrine

136: Which of the following is NOT an endocrine gland?

(A): Pituitary (B): Thyroid (C): Adrenal (D): Salivary

- 137: Which of the following stimuli does NOT cause endocrine glands to release hormones?
(A): Hormones from other endocrine glands (B): Chemical characteristics of the blood
(C): Neural stimulation (D): Atmospheric pressure changes
- 138: The pituitary gland is referred to as the "master gland" of the endocrine system.
(A): True (B): False
- 139: Which of the following is NOT a function of the thyroid gland?
(A): Regulates metabolism (B): Stimulates red blood cell production
(C): Helps regulate calcium levels (D): Plays a role in growth and development
- 140: Calcitonin is a hormone produced by the:
(A): Pituitary gland (B): Thyroid gland (C): Parathyroid glands (D): Adrenal glands
- 141: The adrenal glands are located below the kidneys.
(A): True (B): False
- 142: Which of the following is NOT a function of cortisol?
(A): Reduces inflammation (B): Stimulates glucose production
(C): Lowers blood pressure (D): Involved in stress response
- 143: Insulin and glucagon have opposite effects on blood sugar levels. Insulin _____ blood sugar, while glucagon _____ it.
(A): raises; lowers (B): lowers; raises
(C): stabilizes; destabilizes (D): has no effect on; doubles
- 144: The main hormone produced and secreted by the pineal gland is:
(A): Insulin (B): Melatonin (C): Thyroxine (D): Cortisol
- 145: Prolactin stimulates milk production in females.
(A): True (B): False
- 146: Which of the following is an example of an antagonistic hormone pair?
(A): Insulin and glucagon (B): Estrogen and progesterone
(C): Thyroxine and calcitonin (D): Cortisol and epinephrine

The Male Reproductive System

- 147: What is the male gamete involved in human reproduction?
(A): Egg (B): Sperm (C): Oocyte (D): Ovum
- 148: Where are sperm produced in the male reproductive system?
(A): Epididymis (B): Prostate (C): Testes (D): Urethra
- 149: What is the function of the scrotum?
(A): To produce sperm (B): To store sperm
(C): To keep the testes cooler than body temperature (D): To produce testosterone
- 150: Which muscle is responsible for wrinkling the scrotum in cold weather?
(A): Cremaster muscle (B): Dartos muscle
(C): Abdominal muscle (D): Epididymis
- 151: What is the main function of Sertoli cells?
(A): To produce testosterone (B): To transport sperm
(C): To nurture developing sperm cells (D): To produce seminal fluid
- 152: Where do sperm mature and become mobile?
(A): Testes (B): Epididymis (C): Vas deferens (D): Urethra
- 153: What do the seminal vesicles secrete to provide energy for sperm?

(A): Glucose (B): Fructose (C): Protein (D): Zinc

154: What is the function of the prostate gland during ejaculation?

(A): To store sperm (B): To produce testosterone
(C): To contract and expel semen (D): To produce sperm

155: What is the role of the bulbourethral glands?

(A): To produce sperm (B): To secrete an alkaline fluid
(C): To produce testosterone (D): To store sperm

156: What is the name of the tube that carries both urine and semen in males?

(A): Vas deferens (B): Urethra (C): Epididymis (D): Seminal vesicle

157: What hormone stimulates Leydig cells to produce testosterone?

(A): FSH (B): LH (C): GnRH (D): Estrogen

158: What is the main male sex hormone?

(A): Estrogen (B): Progesterone (C): Testosterone (D): LH

159: What is the term for the process of sperm production?

(A): Spermatogenesis (B): Oogenesis (C): Fertilization (D): Ejaculation

160: Where does spermatogenesis take place?

(A): Epididymis (B): Seminiferous tubules (C): Prostate gland (D): Urethra

161: What is the function of the acrosome in a sperm cell?

(A): To produce energy (B): To store DNA
(C): To release enzymes that help penetrate the egg (D): To propel the sperm

162: What is the term for the first physical sign of puberty in boys?

(A): Spermatogenesis (B): Gonadarche (C): Menarche (D): Ejaculation

The Female Reproductive System

163: The two gametes involved in human reproduction are:

(A): Sperm and egg (B): Sperm and ovum (C): Egg and ovum (D): Both A and B

164: Which of the following is NOT a part of the vulva?

(A): Labia majora (B): Clitoris (C): Cervix (D): Mons pubis

165: The cervix is located:

(A): At the top of the uterus
(B): At the bottom of the uterus, connecting to the vagina
(C): In the ovaries
(D): In the fallopian tubes

166: Fertilization of the egg by the sperm normally occurs in the:

(A): Ovaries (B): Uterus (C): Fallopian tubes (D): Vagina

167: Mammary glands are:

(A): Modified sweat glands
(B): Present in both males and females at birth
(C): Only functional in females after pregnancy
(D): All of the above

168: The menstrual cycle is controlled by hormones produced by the ovaries and pituitary gland.

(A): True (B): False

169: Ovulation typically occurs how many days before the start of the next menstrual period?

(A): 7 days (B): 14 days (C): 21 days (D): 28 days

170: Which of the following is NOT a common symptom of premenstrual syndrome (PMS)?
(A): Acne (B): Fatigue (C): Fever (D): Mood changes

171: Which of the following is the most effective form of reversible birth control?
(A): Condoms (B): Birth control pills
(C): IUDs (intrauterine devices) (D): Withdrawal method

172: Human papillomavirus (HPV) can cause:
(A): Genital warts (B): Cervical cancer (C): Both A and B (D): Neither A nor B

173: Endometriosis is a condition in which:
(A): The lining of the uterus grows outside the uterus (B): The ovaries produce too many eggs
(C): The fallopian tubes are blocked (D): The cervix is inflamed

174: The most common treatment for severe endometriosis is:
(A): Pain medication (B): Hormone therapy (C): Surgery (D): Hysterectomy

Pregnancy and Birth

175: Fertilization is the joining of a sperm and an egg.
(A): True (B): False

176: How many chromosomes does each gamete (sperm or egg) contain?
(A): 23 (B): 46 (C): 69 (D): 92

177: After fertilization, the zygote begins dividing by:
(A): Meiosis (B): Mitosis (C): Cleavage (D): Gastrulation

178: The three primary germ layers formed during embryonic development are:
(A): Ectoderm, mesoderm, endoderm (B): Ectoderm, endoderm, trophoblast
(C): Mesoderm, trophoblast, ectoderm (D): Endoderm, trophoblast, mesoderm

179: Amniotic fluid allows the fetus to:
(A): Move freely without the uterine walls being too tight (B): Breathe in utero
(C): Receive nutrition (D): Eliminate waste

180: At 4 weeks gestation, which of the following is true about the embryo?
(A): All major organs are fully formed (B): The heart is beating
(C): The embryo is about the size of a full term baby (D): The embryo has a prominent tail

181: 'Quickening' refers to:
(A): The first fetal movements felt by the mother
(B): The process of the fetus' bones hardening
(C): Rapid fetal growth
(D): Both A and B

182: The first sign of pregnancy is usually:
(A): Nausea (B): Weight gain (C): Missed menstrual period (D): Fetal movement

183: Which of the following is NOT a sign of true labor?
(A): Contractions that become stronger and more frequent
(B): Contractions that stop with rest or change in position
(C): Bloody show
(D): Water breaking

184: An episiotomy is a surgical incision of the perineum to facilitate childbirth.
(A): True (B): False

185: Which of the following is the most common type of birth defect?

- (A): Cleft palate (B): Down syndrome (C): Spina bifida (D): Congenital heart defects

186: The APGAR score assesses the baby's:

- (A): Reflexes and muscle tone
(B): Breathing effort
(C): Heart rate
(D): All of the above

187: Which of the following is a benefit of breastfeeding?

- (A): Immune system boost for the baby
(B): Faster weight loss for the mother
(C): Reduced risk of breast cancer for the mother
(D): All of the above

188: In vitro fertilization involves:

- (A): Fertilization of the egg outside the body
(B): Implantation of the embryo into the uterus
(C): Use of fertility medications to stimulate ovulation
(D): All of the above

Integumentary System

189: What is the most obvious function of the skin in the integumentary system?

- (A): To protect underlying tissues (B): To produce sweat
(C): To help with digestion (D): To produce hair

190: What is the function of sebaceous glands in the integumentary system?

- (A): To produce sweat (B): To produce oil that keeps skin and hair from drying out
(C): To produce earwax (D): To produce milk

191: Which of the following is NOT a function of the skin?

- (A): Insulation (B): Vitamin D synthesis
(C): Blood circulation (D): Protection against pathogens

192: What is the main type of cell found in the epidermis?

- (A): Melanocytes (B): Keratinocytes (C): Fibroblasts (D): Adipocytes