

**Instructions:** There are 50 questions; each is worth 2 pts. Write down the *best* answer for each one. Please make sure that you fill out your scantron correctly. In case of discrepancy, the answer on the scantron will be considered your answer. When you're finished, please hand in the scantron. You may keep the exam. Good luck!

- a \_\_\_ 1) Simple cuboidal epithelial tissue has how many layers?  
a) one      b) two      c) three      d) four      e) impossible to tell
- c \_\_\_ 2) Epithelial tissue where the cells are flattened in shape:  
a) cuboidal    b) columnar    c) squamous    d) platykurtic
- d \_\_\_ 3) Tissue type that conducts signals throughout the body:  
a) muscle      b) epithelial    c) connective    d) nervous      e) none of the above
- d \_\_\_ 4) You have no voluntary control over these muscles:  
a) striated      b) skeletal      c) voluntary      d) smooth
- c \_\_\_ 5) Blood is what kind of tissue type?  
a) muscle      b) epithelial    c) connective    d) nervous      e) vascular
- a \_\_\_ 6) True or false: in general, all four tissue types are found in every organ:  
a) True      b) False
- d \_\_\_ 7) You stand in the sun to warm up on a cold day. You are absorbing heat through:  
a) convection      b) conduction      c) evaporation      d) radiation      e) insulation
- a \_\_\_ 8) Wind chill is an example of heat being exchanged through:  
a) convection      b) conduction      c) evaporation      d) radiation      e) insulation
- b \_\_\_ 9) Humans are:  
a) ectothermic and homeothermic    b) endothermic and homeothermic  
c) ectothermic and poikilothermic    d) endothermic and poikilothermic
- a \_\_\_ 10) A lizard is:  
a) ectothermic      b) endothermic      c) mesothermic
- a \_\_\_ 11) An animal that is truly hibernating (such as a chipmunk or many bats) is (while hibernating):  
a) ectothermic      b) endothermic      c) mesothermic
- d \_\_\_ 12) An example of a suspension feeder:  
a) human      b) mosquito      c) caterpillar      d) blue whale
- b \_\_\_ 13) An animal that only eats other animals is termed a:  
a) herbivore    b) carnivore    c) omnivore    d) frugivore
- b \_\_\_ 14) Humans are:  
a) autotrophic      b) heterotrophic      c) homeotrophic

- a \_\_\_ 15) A molecule that has about twice as much energy as most others:  
a) fats      b) proteins      c) carbohydrates      d) none of the above
- a \_\_\_ 16) In the short term, excess energy in the body is stored as:  
a) glycogen      b) starch      c) fat      d) protein      e) carbohydrates
- c \_\_\_ 17) Scurvy is caused by insufficient Vitamin:  
a) A      b) B      c) C      d) D      e) E
- d \_\_\_ 18) Insufficient vitamin D causes:  
a) scurvy      b) blindness      c) deafness      d) rickets      e) memory loss
- b \_\_\_ 19) True or false: amylase is released in the esophagus and helps break down proteins:  
a) True      b) False
- d \_\_\_ 20) The epiglottis closes the (choose best answer):  
a) nasal passages      b) pharynx      c) esophagus      d) trachea
- a \_\_\_ 21) True or false: saliva helps lubricate food:  
a) True      b) False
- b \_\_\_ 22) Gastric juice has a pH of about:  
a) 0      b) 2      c) 6      d) 10      e) 14
- d \_\_\_ 23) The stomach wall releases (careful!):  
a) amylase      b) nucleases      c) pepsin      d) pepsinogen      e) lipase
- b \_\_\_ 24) A muscle that prevents food from backing up into the esophagus:  
a) pyloric sphincter      b) cardiac sphincter      c) esophageal sphincter      d) diaphragm
- d \_\_\_ 25) Bile is stored by the:  
a) liver      b) pancreas      c) stomach      d) gall bladder      e) bile pouch
- a \_\_\_ 26) Helps break down carbohydrates:  
a) amylase      b) nucleases      c) pepsin      d) pepsinogen      e) lipase
- b \_\_\_ 27) True or false: fats are absorbed by the small intestine and transported to the liver via the hepatic portal vein:  
a) True      b) False
- e \_\_\_ 28) The large intestine absorbs:  
a) fats      b) nucleic acids      c) proteins      d) carbohydrates      e) water
- b \_\_\_ 29) True or false: humans have a large cecum:  
a) True      b) False
- c \_\_\_ 30) Gastrin causes the release of:  
a) pepsin      b) pepsinogen      c) gastric juice      d) alcohol
- c \_\_\_ 31) Elephants can deal with cellulose because they have a:  
a) large cecum      b) four part stomach      c) really large body/stomach

- a \_\_\_ 32) True or false: some small salamanders found around here do not have lungs:  
a) True      b) False
- a \_\_\_ 33) A counter current exchange system is more efficient because:  
a) it never reaches equilibrium      b) it reaches equilibrium quicker  
c) it can exchange oxygen through osmosis      d) it can exchange oxygen in a inverse pump
- d \_\_\_ 34) Most insects breathe by using:  
a) skin      b) lungs      c) gills      d) trachea      e) none of the above
- b \_\_\_ 35) True or false: all turtles breathe using their anus:  
a) True      b) False
- c \_\_\_ 36) Helps move foreign particles out of the lungs:  
a) pseudopodia      b) flagella      c) cilia      d) none of the above
- a \_\_\_ 37) Frogs have:  
a) positive pressure breathing      b) negative pressure breathing      c) neutral pressure breathing
- a \_\_\_ 38) In humans, in order to inhale the diaphragm and ribs need to:  
a) contract      b) relax
- a \_\_\_ 39) True or false: Birds can exchange all the air in their lungs with every breath:  
a) True      b) False
- b \_\_\_ 40) The impulse to breathe is caused by:  
a) insufficient oxygen      b) too much carbon dioxide      c) too much carbon monoxide
- d \_\_\_ 41) If you smoke, on average you will die about how many years earlier as a person who does not smoke?  
a) 2      b) 5      c) 10      d) 14
- e \_\_\_ 42) Smoking can cause all of the following except:  
a) lung cancer      b) premature wrinkling      c) emphysema  
d) increased blood pressure & bad cholesterol      e) there are no exceptions on this list
- d \_\_\_ 43) Each year, about how many people die as a result of smoking in the U.S.  
a) 1,000      b) 10,000      c) 100,000      d) 440,000
- a \_\_\_ 44) The single biggest cause of preventable deaths in the United States is:  
a) smoking
- a \_\_\_ 45) In adults, blood coming back from the body enters the:  
a) right atrium      b) left atrium      c) right ventricle      d) left ventricle      e) lungs
- e \_\_\_ 46) In the fetus, blood coming back from the lungs enters the (careful - read all options!):  
a) right atrium      b) left atrium      c) right ventricle      d) left ventricle  
e) little or no blood comes back from the lungs
- d \_\_\_ 47) Heart sounds are caused by:  
a) ventricles contracting      b) atria contracting      c) a & b      d) heart valves closing

b \_\_\_ 48) An average resting heart rate for humans is about:  
a) 35            b) 70            c) 140            d) 210            e) 500

b \_\_\_ 49) The atria enter diastole during:  
a) ventricular diastole            b) ventricular systole

b \_\_\_ 50) The first peak in an EKG/ECG represents:  
a) the atria relaxing    b) the atria contracting    c) the ventricles relaxing    d) the ventricles contracting

***Reminders:***

- 1) Please put your G-number on the scantron before you hand it in.
- 2) You may keep the exam.
- 3) Use blackboard to look up your score (hopefully within 24 hours).