

**Introductory Biology II**  
**Final Exam**  
**Spring, 2013**

Name: \_\_\_\_\_

G-number \_\_\_\_\_

**Instructions:** There are **65** questions. You may consider *5 of them as extra credit*. 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 your scantron. You may keep the exam. **Good luck!**

***Material covered by exam I:***

- \_\_\_\_ 1) Intercalated disks are found in what kind of tissue?  
a) epithelial    b) connective    c) nervous    d) muscle
- \_\_\_\_ 2) Humans are:  
a) autotrophic    b) heterotrophic    c) homeotrophic    d) atrophic
- \_\_\_\_ 3) Controls the opening from the stomach into the small intestine:  
a) cardiac sphincter    b) pyloric sphincter    c) gastric sphincter
- \_\_\_\_ 4) The single biggest cause of preventable deaths in the United States is:  
a) smoking
- \_\_\_\_ 5) One of the things B-cells make when they are exposed to an antigen:  
a) T-cells    b) R-cells    c) interferon    d) pathogens    e) memory cells:

***Material covered by exam II:***

- \_\_\_\_ 6) A disease transmitted by tse-tse flies:  
a) malaria    b) sleeping sickness    c) encephalitis    d) West Nile    e) Chagas' disease
- \_\_\_\_ 7) Follicles start to grow as a result of increasing levels of:  
a) estrogen    b) progesterone    c) testosterone    d) FSH    e) oxytocin
- \_\_\_\_ 8) At rest, a neuron has more K<sup>+</sup> ions on the:  
a) inside    b) outside
- \_\_\_\_ 9) The "whites" of your eyes:  
a) sclera    b) choroid    c) retina    d) iris    e) cornea
- \_\_\_\_ 10) ATP is needed to reset:  
a) actin heads    b) myosin heads    c) tropomyosin

***New material:***

- \_\_\_\_ 11) The outer covering of the meninges is made up of the:  
a) pia mater    b) dura mater    c) arachnoid membrane    d) none of the above

- \_\_\_ 12) Your voluntary muscles are controlled which part of the nervous system?  
a) somatic    b) autonomic    c) autonomous    d) inverse
- \_\_\_ 13) Sensory information from “touch” receptors in your hand goes to which part of the brain (pick *best* answer)?  
a) motor cortex    b) sensory cortex    c) hypothalamus    d) pituitary    e) pons
- \_\_\_ 14) The “superior olive” helps you:  
a) with depth perception    b) figure out emotional content    c) locate the direction of sound
- \_\_\_ 15) Information from the right side of the brain is moved to the left side using the:  
a) pons    b) medulla    c) corpus callosum    d) limbic system    e) hypothalamus
- \_\_\_ 16) Coordinates motor movement:  
a) medulla    b) pons    c) hypothalamus    d) cerebellum    e) limbic system
- \_\_\_ 17) If you do well on this exam you will have successfully put lots of information into:  
a) short term memory    b) immediate memories    c) long term memories
- \_\_\_ 18) Moves water around plants (generally upwards):  
a) xylem    b) phloem    c) vascular assistance cells    d) reverse osmotic pumps
- \_\_\_ 19) True or false: spores are diploid and grow into a new individual:  
a) True    b) False
- \_\_\_ 20) In mosses, the dominant part of the life cycle is:  
a) haploid    b) diploid    c) triploid    d) tetraploid
- \_\_\_ 21) True or false: Ferns use seeds to reproduce:  
a) True    b) False
- \_\_\_ 22) *Not* a Gymnosperm:  
a) Pine tree    b) Ginkgo    c) Cycad    d) Oak tree
- \_\_\_ 23) Pepper plants are examples of:  
a) monocots    b) dicots    c) neither
- \_\_\_ 24) A female part of a flower:  
a) anther    b) filament    c) stamen    d) stigma
- \_\_\_ 25) True or false: some flowers reek after rotting meat and are pollinated by flies:  
a) True    b) False
- \_\_\_ 26) True or false: all naval oranges (a type of seedless orange) are descended from a single tree:  
a) True    b) False
- \_\_\_ 27) Photosynthesis usually takes place in what type of tissue:  
a) ground    b) vascular    c) dermal    d) connective

- \_\_\_ 28) A plant that lives only two years is a:  
a) annual      b) biennial      c) perennial
- \_\_\_ 29) Apical meristem is found in:  
a) the bark of trees      b) leaves      c) tips of branches and roots      d) heartwood
- \_\_\_ 30) Sapwood is:  
a) functional phloem      b) functional xylem      c) non-functional phloem      d) non-functional xylem
- \_\_\_ 31) Bark is replaced by the:  
a) vascular cambium      b) cork cambium      c) outer cambium
- \_\_\_ 32) True or false: births are the only way that population size can increase:  
a) True      b) False
- \_\_\_ 33) Wolves travel in packs. Their distribution (dispersal pattern) would be:  
a) clumped      b) uniform      c) random
- \_\_\_ 34) A population that grows without limit (assume this is possible) follows what kind of growth model?  
a) exponential      b) logarithmic      c) normal      d) logistic
- \_\_\_ 35) "K" refers to:  
a) growth rate      b) death rate      c) population size      d) carrying capacity
- \_\_\_ 36) Squirrels have a constant death rate (they die at the same rate at any age). They have what kind of survivorship curve?  
a) type I      b) type II      c) type III      d) type IV      e) type V
- \_\_\_ 37) Roaches would be an example of a:  
a) r - selected species      b) K - selected species
- \_\_\_ 38) The main reason for human population growth has been:  
a) an increased birth rate      b) decreased death rate due to better health care
- \_\_\_ 39) True or false: a person living in the United States consumes far more resources than someone living in India:  
a) True      b) False
- \_\_\_ 40) A population pyramid with parallel sides shows a population that is:  
a) increasing      b) decreasing      c) stable
- \_\_\_ 41) True or False: China's one child per family policy means that China's population is now decreasing:  
a) True      b) False
- \_\_\_ 42) If two animals are competing for the same resources:  
a) They will eventually learn to coexist      b) one of them will win.
- \_\_\_ 43) All the biotic and abiotic factors that an organism needs in order to survive is termed the organism's:  
a) lifestyle      b) life history      c) niche      d) community

- \_\_\_ 44) True or false: predation always lowers diversity in a community:  
a) True      b) False
- \_\_\_ 45) A tick feeding on a dog is an example of what kind of relationship?  
a) predation    b) competition    c) mutualism    d) parasitism
- \_\_\_ 46) An example of mutualism:  
a) sea otters - sea urchins    b) barnacle - barnacle    c) clown fish - sea anemone
- \_\_\_ 47) A community progresses from grass and weeds to shrubs, and eventually to trees. This is an example of:  
a) mutualism    b) predation    c) succession    d) reverse disturbance
- \_\_\_ 48) Herbivores are:  
a) primary producers    b) primary consumers    c) secondary consumers  
d) secondary producers    e) detritivores
- \_\_\_ 49) Autotrophs are:  
a) primary producers    b) primary consumers    c) secondary consumers  
d) secondary producers    e) detritivores
- \_\_\_ 50) You eat a steak. What percentage of the energy in the steak is eventually available for use by your cells?  
a) 1%    b) 10%    c) 25%    d) 50%    e) 75%
- \_\_\_ 51) We can feed more people if people eat:  
a) plants    b) meat
- \_\_\_ 52) True or false: photosynthesis can occur in deep ocean trenches:  
a) True    b) False
- \_\_\_ 53) True or false: all tropical forests are rain forests:  
a) True    b) False
- \_\_\_ 54) Which biome has better soil?  
a) Temperate forest    b) Tropical rainforest
- \_\_\_ 55) Characterized by long winters, acid soil, and large numbers of coniferous trees:  
a) Deciduous forest    b) Tundra    c) Chaparral    d) Taiga    e) Savannah
- \_\_\_ 56) Clothing and shelter would be what kind of reason to conserve?  
a) Economic    b) Spiritual    c) Ecological
- \_\_\_ 57) Preserving the area around Mt. Sinai would be what kind of reason to conserve?  
a) Economic    b) Spiritual    c) Ecological
- \_\_\_ 58) Habitat destruction in Northern Virginia is due mainly to:  
a) urbanization    b) deforestation    c) desertification    d) loss of wetlands
- \_\_\_ 59) Cod are difficult to find in the Atlantic due to:  
a) habitat destruction    b) introduced species    c) overexploitation

- \_\_\_ 60) Elephant poaching has increased in recent years due to high demand for ivory mostly from:  
a) the U.S.            b) Germany            c) China            d) Kenya            e) Canada
- \_\_\_ 61) A major pest species in Great Britain, South Africa, and the Pacific Northwest:  
a) Gypsy moth            b) Mongoose            c) Python            d) Eastern gray squirrel            e) Kudzu
- \_\_\_ 62) Baby turtles often go the wrong direction on beaches due to:  
a) air pollution            b) noise pollution            c) light pollution            d) carbon dioxide
- \_\_\_ 63) The single **most important** thing you can do to help conserve an animal is to (pick **best** answer):  
a) control predators            b) pass legislation            c) set up a reserve            d) study the animal!
- \_\_\_ 64) True or false: The black footed ferret has been successfully bred in captivity by the National Zoo:  
a) True            b) False
- \_\_\_ 65) The Athi plains border the Nairobi National Park on which side?  
a) east            b) north            c) west            d) south

***Reminders:***

Please put your *name* and *G-number* on the scantron before you hand it in.

You may keep your exam.

Your score on the final should be available on blackboard by Thursday (tomorrow) afternoon.

Final grades will be available **only** through the patriotweb system.

***I hope you didn't find today too horrible. Have a great summer!***