FINAL EXAM REVIEW
PART II

MULTIPLE CHOICE

44. Where can you find micro-organisms?
45. What types of microbes exist only as single cells? Multiple-cells?
46. Where might you find thermophiles, halophiles, or methanogens?
47. Describe some characteristics of the 5 types of bacteria that we spoke about in class: gram positive, cyanobacteria, proteobacteria, spirochetes, and chlamydias.
49. What are protists? What is the name of the “plant-like” ones? “animal-like?”
50. Can fungi photosynthesize? How do they get their food?
51. Which of the following “taxons” are used to assign scientific names? Choose from domain, kingdom, phylum, class, order, family, genus, species.
52. What do the terms cocci, bacillus, and spirilli mean?
53. Compare and contrast eukaryotic cells and prokaryotic cells.
54. Describe the structure of moulds. Include the terms hyphae, mycelia, sporangia, and zygospores.
55. Explain why viruses are not considered living.
56. What are some ways the body physically protects against pathogens?
57. Briefly explain how specific immunity works.

DIAGRAMS
The following is a list of diagrams you may encounter on the exam.

1. Animal & Plant Cell
3. Cell membrane
4. Enzyme activity
5. Heart
6. Digestive System
7. Respiratory System
8. Classifying Microbes
9. Mitosis & Meiosis
10. Binary Fission
11. Conjugation
WRITTEN ANSWER

You will be asked to explain the similarities between two terms (how they are related/connected) as well as compare them.

Cellular Biology – You will be given 4 of the following, and will choose 2.
1. Hydrophobic & Hydrophillic Substances
2. Carbohydrates & Proteins
3. Fats & Proteins
4. Carbohydrates & Fats
5. Photosynthesis & Cellular Respiration
6. Passive & Active Transport
7. Plant Cell & Animal Cell
8. Aerobic & Anaerobic Respiration

Genetics – You will be given 2 of the following, and will choose 1.
1. Mitosis & Meiosis
2. Healthy cells & Cancer Cells
3. Codominance & Incomplete Dominance
4. Autosomal Inheritance & Sex-linkage
5. Inherited traits & Acquired traits
6. Dominant & Recessive Alleles
7. Phenotype & Genotype
8. Pedigrees & Karyotypes

Anatomy – You will be given 4 of the following and will chose 2.
1. Physical & Chemical Digestion
2. Arteries & Veins
3. Alveoli & Capillaries
4. Bronchi & Bronchioles
5. Digestive System & Circulatory System
6. Circulatory System & Respiratory System
7. Immune System & Integumentary System
8. Aorta & Superior Vena Cava

Microbiology – You will be given
1. Vaccines & Antibiotics
2. Bacteria & Eukarya
3. Algae & Protozoa
4. Archaea & Bacteria
5. Bacteria & Viruses
6. Thermophiles & Methanogens
7. Cyanobacteria & Chlamydiases
8. Ciliates & Rhizopods

PROBLEM SOLVING

There will be one genetics problem for you to solve.
It will deal with one of the following types of inheritance:
• Dominant & Recessive
• Codominant
• Incomplete Dominance
• X-linked