Study Sheet for Biology unit Test

Grade 9 Science:

1. The 3 different spheres of the planet: atmosphere, lithosphere and hydrosphere
2. The biosphere
3. Description and sustainability of the ecosystem
4. Photosynthesis and respiration
5. Food webs, food chains and ecological pyramids
6. Cycling of matter in ecosystem: water, carbon and nitrogen cycles
7. Biotic and abiotic influences on ecosystems. Defining tolerance range and optimum range, carrying capacity
8. Major terrestrial and aquatic ecosystems
9. Ecological successions: primary and secondary successions
10. Biodiversity, species richness
11. Habitat loss and fragmentation
12. Non-native species, invasive species and control
13. Pollution: acid precipitations, waste in water (oil spills, plastic waste)

Grade 10 Science:

1. Plant and animal cells: structures, function of organelles, similarities, differences.
2. Cell division for reproduction, grow and repair
3. Cell cycle
4. Cancer, cell grow rate, causes, screening, diagnosis, treatment
5. Specialized cells
6. The animal body, levels of organization
7. Stem cells and cellular differentiation, stem cells, cord blood cell banking, tissue stem cell transplantation, regeneration
8. Digestive system, circulatory system, respiratory system, musculoskeletal system, nervous system
9. Interactions of systems