1.Explain how a behavior OR physiological response of an organism is related to changes in the external environment.

2.a.) Describe the strategies organisms use to acquire and use energy. b.) Describe the strategies organisms use to acquire and use energy.

3.Describe factors that influence growth dynamics of populations.

4.Explain how the density of a population affects and is determined by restore availability in the environment.

5.a.) Explain how interactions within and among populations influence community structure. b.) Explain how community structure is related to energy availability in the environment.

6.a.) Describe the relationship between Ecosystem diversity and its resilience to changes in the environment. b.) Explain how the addition or removal of any component of an ecosystem will affect its overall short-term and long-term structure.

7. a.) Explain the interaction between the environment and random or preexisting variations in populations. b.) Explain how invasive species affect ecosystem dynamics. c.) Describe human activities that lead to changes in ecosystem structure and/or dynamics. d.) Explain how geological and meteorological activity leads to changes in ecosystem structure and/or dynamics.

## 8.Outline