

**HOWARD UNIVERSITY**  
**COLLEGE of ARTS and SCIENCES**  
**COMPREHENSIVE SCIENCES**

**LIFE SCIENCES - UNIT VIII: EVOLUTION: STUDY QUESTIONS**

1. What are the basic points of A.I. Oparin's Idea concerning the origin of the Universe/Solar System?
2. Compare/contrast the particulars of the early earth and the current earth with respect to the types of molecules that were prevalent. Why is early earth sometimes described as a "nitrogenous soup"?
3. What spheres constituted the early earth?
4. What form of life evolved first from the perbionts?
5. What is essence of the Theory of Natural Selection as an explanation for the origin of the diverse species of life that was proposed by Charles Darwin?
6. (a) List three means by which the evolution of a new species of life can occur. (b) List three means by which the extinction of a species of life can occur.
7. (a) List a primitive plant characteristic/trait. (b) List an advanced plant characteristic/trait.
8. (a) List a primitive animal characteristic/trait. (b) List an advanced animal characteristic/trait.
9. Arrange the following from the most primitive to the most advanced: no true organs; presence of cones; presence of spores; presence of blossoms; monocotyledons; dicotyledons.
10. Arrange the following from the most primitive to the most advanced: reptile; mammal; bird; sponge; arthropod; worm.
11. List two experiments to show that life could have originated from inorganic components.
12. Are viruses living or non-living? Explain.
13. Explain Lamarck's Theory of Evolution.
14. In the human evolutionary line, who is our immediate ancestor?
15. Why were the ideas of Redi and Spallanzani about the origin of life disproven?