Biology: biological philosophy Name

Text Chapters 15-17

**Vocabulary List**: below are terms that you need to study in order to complete the matching on the test; they will be divided into 4 groups (see symbols) and you will recognize them by these definitions!

**Pantheism:** Belief embracing that all forces and manifestations of the universe are god.

**Deism:** Belief which suggests that God started the universe but is not personally or intimately involved in its affairs.

**Atheism:** Belief defined as a denial of a Supreme God in or over the universe.

**Materialistic Naturalism:** Scientifically-based belief which posits the natural world (i.e. the universe) is all that exists and, therefore, nothing supernatural exists; observable events in nature are explainable only by natural causes; the inevitable starting point for traditional Neo-Darwinism.

**Venn diagram**: drawings that show all the hypothetically possible logical relations between a collection of things or ideas; they are typically drawn as labeled circles.

**Galileo Galilei**: 16th century Italian physicist who revived the Copernican heliocentric view and challenged the scientific assumptions of the day; also the inventor of the telescope.

**Charles Darwin**: 19th century English biologist; proposed theory of evolution in his landmark work, *Origin of the Species* which he hesitated to publish because of its potentially far-reaching consequences.

**Karl Marx**: 19th century German economist who justified shrewd economic theories based on Darwin’s theory; asked Darwin if he would be willing to accept a dedication in his book, *Das Kapital* which Darwin refused.

**Josef Stalin**: 20th century Russian political figure; justified political movements by combining Marx’s and Darwin’s ideas.

**Friedrich Nietzsche**: 19th century German philosopher; his ideas combined with Evolutionary biology fueled Hitler’s political movements; accurately predicted that the 20th century would be man’s bloodiest.

**Adolf Hitler**: 20th century Austrian political figure; led Germany to war with the world in an effort to cleanse the earth of its ‘defects.’

**4 Categories of questions every human ought to face**:

 *Origin*: asks, “Where did I come from?”

 *Meaning*: asks, “What is my purpose?”

 *Morality*: asks, “What is the difference between right and wrong?”

 *Destiny*: asks, “Where am I headed?”

**Singularity:** the super-dense point from which all matter emerged as proposed by the Big Bang theory.

**Abiogenesis**: summarizes the belief that “life arises from non-life”; embraced by supporters of the theory of *spontaneous generation*, disproven by Pasteur in the late 1800’s.

**Biogenesis:** summarizes the belief that “life arises from life; scientifically considered to be the basis of modern cell theory.

**Micro-evolution:** any evolutionary change below the level of species; form of evolution consistent with Scripture and scientifically observable at the classroom level; simply put, ‘change over time.’

**Macro-evolution**: any evolutionary change at or above the level of species; captures the traditional Neo-Darwinian view.

**“irreducible-complexity”:** theory proposed by biochemist Michael Behe in his work*, Darwin’s Black Box*; main idea states that all components of certain biological systems must be in place at once in order for said organism(s) to survive.

**Chance:** associated with statements of mathematical probability; not an entity and, technically, nonexistent; primary mechanism by which Natural selection works according to traditional Evolutionists.

**Aerobic:** adjective that means “requiring air” where oxygen is typically in mind.

**Anaerobic:** adjective that means “without air” where oxygen is typically in mind.

** “Warm-blooded”:** body temperature regulation characterized by maintaining homeostasis internally (metabolism); term has fallen out of favor because of its vagueness.

** “Cold-blooded”:** body temperature regulation characterized by interaction with external environment; term has fallen out of favor because of its vagueness.

**Upright stance:** characteristic common to dinosaurs and birds where the feet are directly below the bulk of the organism; allows for greater efficiency and speed when running.

**Splayed stance:** characteristic common to reptiles and amphibians where the legs are bent at right angles to the body and the feet are lateral to the bulk of the organism; consequences include reduced efficiency and speed when running.

**Neoteny:** a process of development resulting in organisms capable of reproducing while juveniles.

**Intelligent Design (ID):** belief that patterns in the universe point to intelligent causality; A minimal commitment to the plausibility that nature has an intelligent designer (not nec. God).

**Neo-Darwinism:** belief that undirected natural selection over time is responsible for living diversity originating from a single celled organism; traditionally, it demanded material naturalism, however newer versions are suggesting an eternal, pre-existent (to life) universe.

**Creationism:** Belief that God created the universe out of nothing according to Genesis 1 & 2; opinions differ whether God created in six 24-hour days or over epochs.

 **Literal-Day theory**: Position of Creationism; posits the days of Genesis are 24 hour days; traditionally believes in a young earth.

 **Day-Age theory:** Position of Creationism; posits the days of Genesis are poetic eras; traditionally allows for an older earth.

** “ex nihilo”:** literally ‘out of nothing’; applied to God’s manner of creating the universe.

**Psalm 139**: David addresses all Four Fundamental Questions intimately and poetically.

**Theistic Evolution:** Belief that God either created the universe and brought life about by (Neo-Darwinian) evolutionary means or that He guided evolution to bring about life.

** “Imago Dei”:** Literally, “Image of God”; term that embodies the principle that humans were made in the Image of God and so possess an inherent dignity from their Creator; this concept, more than any other, has a profound effect on issues of human morality.

