QUIZ: CLASSIFICATION, NOMENCLATURE, AND EVOLUTION

- **1.** Greek thinker Aristotle classified animals according to whether they lived on land, in water or in the air. It is misleading because
 - (a) All the animals living in water are highly evolved
 - (b) All the animals living on land are amphibious
 - (c) All the animals living in the air are omnivores
 - (d) Their habitat is the only point they share in common
- **2.** The following is a basic characteristic of classification used is making broad groups
 - (a) Presence or absence of a clearly demarcated nucleus and other organelles in a cell.
 - (b) Presence or absence of a plastid
 - (c) Body design
 - (d) Both (a) and (b)
- **3.** The binomial nomenclature introduced by C. Linnaeus in 18th century limit ourselves to writing the name of the Genus and Species of an organism, and the name is written in the following language.
 - (a) English
 - (b) Latin
 - (c) German
 - (d) Persian
- **4.** Among the below mentioned habitats, in which one do you expect to observe more biodiversity?
 - (a) Desert
 - (b) High altitudes (above 20,000 ft)
 - (c) Tropical regions
 - (d) Water pond
- **5.** Humans have played their own part in recent times in changing the delicate balance maintained by nature in the stable biotic communities. An example for such human activity is
 - (a) Changing pattern of land use

- (b) Apiculture
- (c) Rain water harvesting
- (d) Both (a) and (b)
- **6.** Which of the following statement is NOT true?
 - (a) Modern systems of classification of life forms are closely related to their evolution.
 - (b) Primitive or lower organisms have ancient body designs that have not changed very much.
 - (c) Advanced or higher organisms have acquired their particular body designs relatively recently.
 - (d) India is not a mega biodiversity nation.

Answers:

1. (d)

Options:

- (a) Incorrect as we can see primitive as well as highly evolved organisms in water bodies.
- (b)Incorrect only a few animals living on land are amphibious.
- (c)Incorrect

Explanation: Yes it is only habitat the organism share is common. For example, animals that live in the sea include corals, zooplankton, whales, shark, octopuses and sharks are very different from each other in many ways.

Habitat is not an appropriate character useful in making groups of organisms to study and think about.

2. (d)

Explanation: Both (a), (b) and (c). Incorrect characteristics of body design are used to make sub-groups.

3. (b)

Explanation: The world over, it has been agreed that the scientific names of **Genus** and **Species** will be used in Latin forms.

English, (b) German and (c) Persian are not used in binominal nomenclature.

4. (c)

Explanation: The warm and humid tropical regions of the earth, between the tropic of Cancer and the tropic of Capricorn are rich in plant and animal life.

The biodiversity is relatively less in desert/High altitudes due to extreme climate condition success

5. (a)

Explanation: (a) Vast tracts of forests and agriculture fields are cleared for industries, construction of houses and other works. Also excessive use of fertilizers changed the physical & chemical properties of soil, and reduced the fertility of soil.

- (b) Apiculture means bee keeping for honey
- (c) Rain water harvesting helps in recharging ground water

6. (d)

Explanation: Of the total biodiversity of the planet earth, more than half is concentrated in a few countries including India.

Statements given in (a), (b), and (c) are correct statements