



**MCQs:**

**1. Which of the following statement/s is/are true?**

1. Hydrofluorocarbons (HFCs) are man-made organic compounds that contain fluorine and hydrogen atoms.
  2. HFCs are used as replacements for CFCs and HCFCs.
- (a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2

Ans: c

**Explanation:**

- Hydrofluorocarbons are organic compounds that contain fluorine and hydrogen atoms. They are the most common kind of organofluorine compounds. They are specifically manufactured, unlike other greenhouse gases which are mostly waste/byproducts. HFCs are used as replacements for CFCs and HCFCs.

**2. Consider the following fauna:**

1. Lion-tailed Macaque
2. Malabar Civet
3. Sambar Deer

**How many of the above are generally nocturnal or most active after sunset?**

- (a) Only one  
(b) Only two  
(c) All three  
(d) None

Ans: b



**Explanation:**

- Lion Tailed Macaque is active only during daylight hours.
- Other 2 are nocturnal.

**3. Which organisms perform waggle dance for others of their kin to indicate the direction and the distance to a source of their food?**

- (a) Butterflies
- (b) Dragonflies
- (c) Honeybees
- (d) Wasps

Ans: c

**Explanation:**

- Honey bees use a complex form of spatial referential communication. Their “waggle dance” communicates the direction, distance, and quality of a resource to nestmates by encoding celestial cues, retinal optic flow, and relative food value into motion and sound within the nest.

**4. Which of the following statement/s are true?**

1. Some mushrooms have medicinal properties.
2. Some mushrooms have bioluminescent properties.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: c

**Explanation:**



- Many traditionally used mushrooms from genera, Auricularia, Flammulina, Ganoderma, Grifola, Lentinus, Trametes (Coriolus) and Tremella have been demonstrated to possess significant medicinal properties.
- The glowing mushroom make light by using a chemical reaction, which involves luciferin, a luciferase enzyme, and molecular oxygen.

#### 5. PM Mitra Scheme is associated with?

- (a) Some microorganisms can grow in environments with temperature above the boiling point of water
- (b) Some microorganisms can grow in environments with temperature below the freezing point of water.
- (c) Some microorganisms can grow in highly acidic environment with a pH below 3.
- (d) All of the above

Ans: d

#### Explanation:

- All the three statements are true.