MCQ on Ecosystem:

Q1: Which of the following is not an abiotic component of Ecosystem?

1. Energy
2. Temperature
3. Bacteria and fungi
4. Rainfall

Answer: C

**The Abiotic components of Ecosystem** includes **energy** (Essential for life), **Rainfall** (All the Biochemical reaction take place in aqueous medium), **Temperature** (It influences the survival of living organism as they tolerate a certain range of temperature), **Atmosphere** (It creates conditions suitable for existence), **Substratum, Latitude & Altitude** (It influence and areas temperature resulting in climates such as polar tropical), **Materials** (Organic material like proteins, carbohydrates etc. that are formed from inorganic substance on decomposition and **inorganic compound** like CO2, H2O, Sulphur, Nitrate etc).

Q2: The forest is a type of which ecosystem?

1. Natural Ecosystem
2. Man-made Ecosystem
3. Aquatic Ecosystem
4. Terrestrial Ecosystem

Answer: D

**Natural Ecosystem include-**

**1.  Terrestrial Ecosystem -** Forest, Grassland, Deserts.   
**2.  Aquatic Ecosystem -** Fresh water, Saline water and marine water.

Q3: Which of the following is an Biotic component of Ecosystem?

1. Autotrophs
2. Carnivorous
3. Inorganic compounds
4. Atmosphere

Answer: A

**The Biotic components of an ecosystem are primary Producers or Autotrophs** (Green Plants and certain bacteria and algae) and **Consumers or Heterotrophs** (Macro like herbivore, carnivore, omnivore & Micro like Saprotrophs or osmotrophs like bacteria & fungi).

Q4: Which of the following component of Ecosystem influences the survival of Living organism upto certain range?

1. Latitude
2. Temperature
3. Bacteria and fungi
4. Rainfall

Answer: B

**The Abiotic components of Ecosystem** includes **energy** (Essential for life), **Rainfall** (All the Biochemical reaction take place in aqueous medium), **Temperature** (It influences the survival of living organism as they tolerate a certain range of temperature), **Atmosphere** (It creates conditions suitable for existence), **Substratum, Latitude & Altitude** (It influence and areas temperature resulting in climates such as polar tropical), **Materials** (Organic material like proteins, carbohydrates etc. that are formed from inorganic substance on decomposition and **inorganic compound** like CO2, H2O, Sulphur, Nitrate etc).

Q5: Which term define the ability of an ecosystem to sustain equilibrium through self-regullation of its functional processes?

1. Ecosystem
2. Homeostasis
3. Ecotone
4. Biome

Answer: B

**Homeostasis is** the ability of an ecosystem to sustain equilibrium through self-regulation of its functional processes.

Q6: Which of the following is known as Zone of Tension?

1. Ecosystem
2. Pyramid of energy
3. Ecotone
4. Biosphere

Answer: C

**Characteristics of Ecotone:**

* It is either quite wide or quite thin.
* Zone of Tension or transition are other names for it. Conditions between two nearby ecosystems are present in it(zone of tension).
* When a plant's kind or color changes, for example, an ecotone can be recognised.

Q7: Which term define “It is a species' particular functional role or position within an ecosystem”?

1. Ecotone
2. Ecology
3. Ecological Niche
4. Edge effect

Answer: C

***Ecological Niche:***

It is a species' particular functional role or position within an ecosystem. No two species have precisely the same number of inches in this.

**Types of niches-**

* Habitat niche where it lives on food
* Food niche
* Reproductive niche
* Physical and chemical niche

Q8: Which of the following species is susceptible to the edge effect in Terrestrial Ecosystem?

1. Birds
2. Snake
3. Bacteria and fungi
4. Planktons

Answer: A

In some communities, there are more animals and people per square mile than in other ones. This is known as the **Edge Effect.** Example: Birds are particularly susceptible to the edge effect in terrestrial ecosystems.

Q9: Which of the following is not an Ecosystem include in Biome?

1. Aquatic Ecosystem
2. Fresh water Ecosystem
3. Marine Ecosystem
4. Estuaries

Answer: A

Biomes do not include **aquatic zones or Ecosystem.** It comprises **fresh water ecosystem**, such as lakes, creeks, ponds, swamps, and rivers; M**arine Ecosystem** It has salinity upto 35 ppt (90 percent sodium chloride); Estuaries, coral reefs, and mangroves are more productive than nearby rivers or seas (ecotone).

Q10: Which of the following is not a Fresh water Ecosystem?

1. Lotic Ecosystem
2. Lentic Ecosystem
3. Wetland Ecosystem
4. Aquatic Ecosystem

Answer: D

**Fresh water ecosystem:**

* **lotic (moving like river) ecosystem** includes freshwater streams, springs etc.
* **lentic (stagnant like pond) ecosystem** include pools etc. In this ecosystem, salinity is less than 5 ppt.
* **Wetlands ecosystem are intermediate ecosystem** between terrestrial & water habitat (floodplains, littoral, etc). It is a land area that is saturated with water, either permanently or seasonally.
* They vary considerably in physical, chemical and biological characteristics.

Q11: Fresh water streams is a type of which Ecosystem?

1. Aquatic
2. Lotic
3. Lentic
4. Desert

Answer: B

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* They vary considerably in physical, chemical and biological characteristics.

Q12: Oceans refers to which Ecosystem?

1. Marine Ecosystem
2. Terrestrial Ecosystem
3. Natural Ecosystem
4. Grassland Ecosystem

Answer: A

**Marine Ecosystem:**

* Oceans cover almost 3/4 of the surface of the Earth. Both the ocean and the coastal ecosystems are included in this ecosystem. Salinity in this habitat is more than 35 ppt (90 percent Sodium chloride).
* Estuaries are part of it (Coastal bays, river mouths, and tidal marshes forms estuaries).

Q13: Which of the following not form an Estuary?

1. Coastal Bays
2. River mouths
3. Tidal marshes
4. Ponds

Answer: D

**Marine Ecosystem:**

* Oceans cover almost 3/4 of the surface of the Earth. Both the ocean and the coastal ecosystems are included in this ecosystem. Salinity in this habitat is more than 35 ppt (90 percent Sodium chloride).
* Estuaries are part of it (Coastal bays, river mouths, and tidal marshes forms estuaries).
* In estuaries, saltwater from the ocean and freshwater from rivers mix together due to the action of the tides. When compared to the nearby river or sea, estuaries are much more productive. Mangroves and coral reefs are also part of it.

Q14: Lichens, Willows and Birches are flora of which type of vegetation?

1. Tundra
2. Taiga
3. Bacteria and fungi
4. Tropical evergreen forest

Answer: A

Tundra include-

* Flora- Willows, birches and lichens
* Fauna- Reindeer, Musk, Ox, Lemmings, Squirrel
* Two type of Tundra are there- Arctic and Alpine
* Arctic tundra- Polar ice cap and above tree line in northern hemisphere and on south pole, cover small area because most of it covered by ocean.
* Alpine tundra- It occur at high mountain and are found at all latitudes.

Q15: Rosewood, Mahagani, Ebony are which type of vegetation?

1. Tropical Evergreen forest
2. Tundra forest
3. Taiga forest
4. Thorn forest

Answer: A

Tropical evergreen forest includes- Flora- Rosewood, Mahagani, Aini. Ebony. It include western slope of western ghat hill of North east, Andaman and Nicobar islands.

Q16: The Grassland Ecosystem of of Europe and Asia are known by which of the following?

1. Steppes
2. Veld
3. Pampas
4. Downs

Answer: A

* About 10 to 25 percent of the Earth's surface is made up of the grassland ecosystem. It can be found in areas with annual precipitation of 15 to 75 cm, which is more than a pure desert but not enough to support a forest. Typical grasslands are vegetation types that are typically found in climates with high temperatures.
* In various parts of the world, these are known by many names, including steppes in Europe and Asia, pampas in South America, Veldt in South Africa, and Downs in Australia.

Q17: Which of the following is not an abiotic component of Ecosystem?

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4. Rainfall

Answer: C

Q18: Which of the following is not an abiotic component of Ecosystem?

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2. Temperature
3. Bacteria and fungi
4. Rainfall

Answer: C

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2. Temperature
3. Bacteria and fungi
4. Rainfall

Answer: C

Q20: Which of the following is not an abiotic component of Ecosystem?

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2. Temperature
3. Bacteria and fungi
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Answer: C