



## Daily Current Affairs Prelims Quiz 05-06-2025 (Online Prelims Test)

1) Which of the following statements about Actinobacteria is/are correct?

1. They are a group of Gram-positive bacteria.
2. They are known for producing antibiotics like streptomycin and tetracycline.
3. Some Actinobacteria are thermophilic, capable of surviving in hot environments.

Select the correct answer using the code given below:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : d

**Answer: (d) 1, 2 and 3**



**1. They are a group of Gram-positive bacteria.**

- **Explanation:** This statement is correct. Actinobacteria are characterized by their Gram-positive cell wall structure, meaning they retain the crystal violet stain in the Gram staining procedure. This is due to a thick peptidoglycan layer in their cell wall.

**2. They are known for producing antibiotics like streptomycin and tetracycline.**

- **Explanation:** This statement is also correct and highlights a significant contribution of Actinobacteria to medicine. Many genera within Actinobacteria, particularly *Streptomyces*, are prolific producers of a wide array of secondary metabolites, including numerous antibiotics like streptomycin, tetracycline, erythromycin, and many others. A significant percentage of naturally derived antibiotics originate from Actinobacteria.

**3. Some Actinobacteria are thermophilic, capable of surviving in hot environments.**

- **Explanation:** This statement is correct. While many Actinobacteria are mesophilic (preferring moderate temperatures), there are indeed thermophilic species that thrive in hot environments such as hot springs, compost piles, and other high-temperature niches. Examples include some species within genera like *Thermobifida* and *Thermoactinomyces*. Their enzymes and cellular machinery are adapted to function optimally at elevated temperatures.

**2) Which of the following describes a "Strombolian" eruption ?**

- a. Hot gas, ash, and rock exploding high enough to reach the stratosphere.
- b. Continuous, effusive lava flows without significant ash or rock fragments.
- c. Discreet, moderately explosive bursts ejecting chunks of rock and cinders hundreds of metres

into the air.

d. A quiet release of steam and minor ash from fumaroles.

Answer : c

**Answer: (c) Explanation:** A Strombolian eruption as "discreet moderately explosive bursts which can eject chunks of rock and cinders that can travel hundreds of metres into the air."

**3. Which of the following rivers are mentioned as originating in the Aravalli hills?**

1. Chambal
2. Luni
3. Narmada
4. Sabarmati

Select the correct answer using the code given below:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1, 2 and 4 only
- d. 1, 2, 3 and 4

Answer : a

**Answer: (a) Explanation:** "Several rivers, including the Chambal and Luni, originate in these hills". Narmada and Sabarmati are not as originating in the Aravallis.

**4) One of the primary roles of "Indian Opinion" started by Mahatma Gandhi was:**

- a. To criticize the British government in India.
- b. To mobilize the Indian community in South Africa.
- c. To promote individual freedom
- d. To advocate for armed struggle.

Answer : b

**Answer: (b) Explanation:** The "Indian Opinion" was vital for mobilization". Indian community in South Africa.

**5) Which of the following is/are among the stated aims of IATA?**

1. Promoting the growth of international air transportation.
2. Fostering collaboration among airlines.
3. Strengthening safety across all facets of air travel.
4. Establishing international air traffic rules and regulations.

Select the correct answer using the code given below:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1, 3 and 4 only
- d. 1, 2, 3 and 4

Answer : d

**Answer: (d) Explanation:** "To promoting the growth of international air transportation and fostering collaboration among airlines & strengthen safety across all facets of air travel and to establish international air traffic rules and regulations."

