Biology

- 1. What is plasma?
- 2. What are blood groups?
- 3. What are zoonotic diseases, and can you name some recent ones?
- 4. Why is Rh-negative more prevalent in India compared to Rh-positive, and does it relate to our ancestry?
- 5. What are the reasons for low hemoglobin levels in women, and what are the health impacts? What is this condition called?
- 6. Besides medication, what measures are needed to address anemia?
- 7. Have you heard about filariasis cases in Uttar Pradesh recently?
- 8. What are zoonotic diseases, and can you name some recent ones?
- 9. Can you suggest a general diet plan for a healthy person?
- 10. Why is diabetes on the rise in India, according to WHO?

Physics

- 1. What is maglev technology? Which countries operate maglev trains, and how do they work?
- 2. What is LED, and why is it more energy-efficient?
- 3. What are semiconductors? Why is India pushing for it?
- 4. What are black holes? Are they present at the centers of all galaxies?
- 5. Explain quantum computing, entanglement, and superposition.
- 6. What is string theory? What happens if someone enters a black hole

Information Technology

- 1. What is blockchain, and how is it stored?
- 2. What is cryptocurrency, its pros, and cons?
- 3. Name three cryptocurrencies.
- 4. What is net neutrality? How will its absence hamper democratic use of the internet and information flow?
- 5. Why is India a global leader in software but not in AI? Are we lagging behind, and how many large language models does China have?
- 6. What is the difference between AI and technology?
- 7. Define artificial intelligence.
- 8. What distinguishes AI from ML?
- 9. What is machine learning, and what kind of machines can learn on their own?
- 10. What is an intrusion detection system, and can it be used for VIP security?
- 11. What is cybersecurity, and what are its key aspects?

- 12. What are the various aspects of cybersecurity, and how can we create a resilient infrastructure?
- 13. What is VoIP? Can communications via VoIP be tracked?
- 14. What is the metaverse? Could it reduce the relevance of the physical world?
- 15. How does Al access data, and what are its primary database sources?
- 16. Have you heard of singularity in AI?

Space Technology

- 1. What is LEO? Should India regulate satellites in LEO, and how can the country become a key player in this sector?
- What is Aditya L1, and what does the term "L1" signify?
- 3. Why not study the sun from Earth rather than sending missions like Aditya L1?
- 4. What are the advantages of studying the sun up close?
- 5. Which countries have launched moon missions after India?
- 6. What is the significance of "L1" in Aditya L1?
- 7. How is Chandrayaan-3 different from other lunar missions? Why target the moon's south pole?
- 8. After the Chandrayaan-3 mission, where exactly did India land on the moon? What was Vikram's role? Why was it put to sleep? What are the temperature and density differences between the moon and Earth?
- 9. How do space programs benefit us?
- 10. Should ISRO focus only on scientific missions?
- 11. How does ISRO contribute to industrial development?
- 12. What are the key takeaways from the Chandrayaan-3 mission?
- 13. What is the significance of the XPOSAT mission?
- 14. Why not establish a sun observatory on Earth?
- 15. Who will reach Mars first: digital avatars or physical humans?
- 16. If a digital avatar dies on Mars, will it affect its physical counterpart on Earth?

Defense Technology

- 1. What is INS Imphal, and why was it in the news?
- 2. What type of ship is INS Imphal, and what is its parent class? How many ships belong to this class, and are there others of the same type?
- 3. Why is India importing Rafale jets instead of using indigenous ones? How do Rafale and Tejas compare technically?
- 4. What is the INSAS rifle?
- 5. Why are we still using and importing AK-47 rifles despite having INSAS?
- 6. What is the role of communication and electronics in defense?
- 7. Tell me about missiles and their applications.

Renewable Energy and Sustainable Development

- 1. What are the challenges to the growth of nuclear energy?
- 2. What are the hurdles in the expansion of solar energy?
- 3. Why does India rely heavily on imports of solar modules from China instead of manufacturing them domestically?
- 4. What efforts are being made for solar rooftops?
- 5. How do you assess India's renewable energy sector, and what steps are needed for its expansion?

Disruptive and Emerging Technologies

- 1. What is disruptive technology? Can you give an example?
- 2. What are smart rings, and how can they benefit people?
- 3. What are the latest developments in mechanical engineering?
- 4. What advancements are being made in EV batteries?
- 5. How does a solid-state lithium battery function?
- 6. What is the future of lithium batteries and EVs in India?
- 7. What is IoT? What challenges does it face, and how can they be addressed?

Applied Sciences

- 1. What do you study in food technology?
- 2. What do you like about food technology?
- 3. What are semiconductor chips, and what are their uses?

Environment, Disaster Management, and Health

- 1. What are the extreme disasters faced by India, and what measures are currently in place to mitigate them?
- 2. What happened in the recent tunnel accident in Uttarakhand, and how were the workers rescued?
- 3. What was the name of the machine used in that incident? Is rat-hole mining legal or illegal?