

## Science & Technology – UPSC MCQs

Here are 20 multiple-choice questions (MCQs) on science and technology that could be relevant for the UPSC examination:

1. Which of the following is not a programming language?

- a) Python
- b) Java
- c) HTML
- d) Ruby

Answer: c) HTML

2. The Hubble Space Telescope is managed by which space agency?

- a) NASA
- b) ESA
- c) ISRO
- d) Roscosmos

Answer: a) NASA

3. The term "CRISPR" in genetic engineering stands for:

- a) Clustered Regularly Interspaced Short Palindromic Repeats
- b) Coded Rapidly Interspaced Short Palindromic Repeats
- c) Clustered Repeated Short Protein Repeats
- d) Coded Rapid Short Protein Repeats

Answer: a) Clustered Regularly Interspaced Short Palindromic Repeats

4. Which of the following is a renewable energy source?

- a) Coal
- b) Natural Gas
- c) Solar Energy
- d) Nuclear Energy

Answer: c) Solar Energy

5. What is the primary purpose of a "LiDAR" system?

- a) Measuring temperature
- b) Measuring distance
- c) Measuring pressure
- d) Measuring velocity

Answer: b) Measuring distance

6. Which of the following materials is commonly used in the manufacture of solar cells?

- a) Silicon
- b) Aluminium
- c) Copper
- d) Iron

Answer: a) Silicon

7. The "Artemis" mission is associated with which space agency?

- a) NASA
- b) ISRO
- c) JAXA
- d) ESA

Answer: a) NASA

8. The phenomenon of superconductivity is observed at:

- a) High temperatures
- b) Room temperatures
- c) Low temperatures
- d) Any temperature

Answer: c) Low temperatures

9. The term "Moore's Law" refers to:

- a) The doubling of the number of transistors on a microchip every two years
- b) The reduction in the cost of electronic devices over time
- c) The increase in battery life of mobile devices over time
- d) The increase in internet speed over time

Answer: a) The doubling of the number of transistors on a microchip every two years

10. Which of the following is a non-biodegradable material?

- a) Paper
- b) Glass
- c) Cotton
- d) Vegetable peels

Answer: b) Glass

11. In the context of satellite communication, what does "GEO" stand for?

- a) Global Earth Orbit
- b) Geosynchronous Earth Orbit
- c) General Earth Orbit
- d) Geostationary Earth Orbit

Answer: d) Geostationary Earth Orbit

12. "Blockchain" technology is primarily used in:

- a) Artificial Intelligence
- b) Cryptocurrencies
- c) Biotechnology
- d) Renewable Energy

Answer: b) Cryptocurrencies

13. The "Square Kilometer Array" (SKA) is a project related to:

- a) Particle physics
- b) Gravitational waves
- c) Radio astronomy
- d) Quantum computing

Answer: c) Radio astronomy

14. The chemical element "Technetium" is unique because:

- a) It is the first element to be artificially produced
- b) It is the most abundant in the Earth's crust
- c) It is the heaviest naturally occurring element
- d) It is used exclusively in nuclear reactors

Answer: a) It is the first element to be artificially produced

15. The process of "photosynthesis" primarily takes place in which part of the plant?

- a) Roots
- b) Stem
- c) Leaves
- d) Flowers

Answer: c) Leaves

16. The "Large Hadron Collider" is located in:

- a) United States
- b) Switzerland
- c) Japan
- d) China

Answer: b) Switzerland

17. The first artificial satellite, Sputnik 1, was launched by which country?

- a) United States
- b) Soviet Union
- c) China
- d) United Kingdom

Answer: b) Soviet Union

18. "5G" technology primarily relates to:

- a) Space exploration
- b) Wireless communication
- c) Quantum computing
- d) Nanotechnology

Answer: b) Wireless communication

19. Which of the following elements is essential for the production of nuclear energy in most power plants?

- a) Hydrogen
- b) Uranium
- c) Carbon
- d) Nitrogen

Answer: b) Uranium

20. The concept of "Internet of Things" (IoT) refers to:

- a) Interconnected computing devices embedded in everyday objects
- b) A global network of supercomputers
- c) A new type of internet browser
- d) The next generation of social media platforms

Answer: a) Interconnected computing devices embedded in everyday objects