

1. Where is Mughal garden located?

Located inside the Rashtrapati Bhawan compound, India. It is open for the public during February and March only.

2. Where is Eden garden?

Eden Gardens is a cricket ground in Kolkata, India. Established in 1864.

3. Where is Shalimar garden?

Shalimar Bagh is a Mughal garden in Srinagar.

4. Brass is an alloy of

- a. Copper and Zinc    b. Copper and tin    c. Zinc and tin    d. None

5. Which of these countries is entirely surrounded by the Republic of South Africa?

- a. Swaziland    b. Lesotho    c. Mozambique    d. Namibia

6. Which newspaper used to have the nickname of The Thunder?

- a. The Washington Post    b. The Daily Telegraph    c. The Times    d. None

7. With what process would you associate the word 'zymurgy'?

- a. The drying of paint    b. The turn of the tides  
c. Fermentation in brewing    d. Pasturization of milk

8. In a normal healthy body the number of red cells or erythrocytes in each cubic millimetre of blood is

- a. 40 lakh    b. 50 lakh    c. 60 lakh    d. 70 lakh

Normal red blood cells values at various ages are:

- Newborns: 4.8 - 7.2 million
- Adults: (males): 4.6 - 6.0 million
- (Females): 4.2 - 5.0 million
- Pregnancy: slightly lower than normal adult values
- Children: 3.8 - 5.5 million

<https://www.rnceus.com/cbc/cbcrbc.html>

9. How do bannas grow?

- a. On a tree    b. On a bush    c. under the ground    d. None

10. How long is the Suez Canal?

- a. 17 miles    b. 120 miles    c. 210 miles    d. None

The canal extends 120 miles (193 km) between Port Said in the north and Suez in the south, with dredged approach channels north of Port Said, into the Mediterranean, and south of Suez. The canal does not take the shortest route across the isthmus, which is only 121 km.

11. A star may be described as having a certain magnitude .To what does this refer?  
a. **Its brightness**      b. Its size      c. Its surface temperature      d. None

**Magnitude**, in astronomy, measure of the brightness of a star or other celestial body. The brighter the object, the lower the number assigned as a magnitude. In ancient times, stars were ranked in six magnitude classes, the first magnitude class containing the brightest stars.

12. Where would you expect to find an overture?  
a. At a cricket match      **b. At the beginning of an opera**      c. In a walled Garden      d. none

**Overture**, musical composition, usually the orchestral introduction to a musical work (often dramatic), but also an independent instrumental work.

13. Everest is the world's highest mountain. What is the name of the second highest?  
**a. K2**      b. Annapurna      c. Dhaulagiri      d. None

Mountain peak	Range	Location	Height	
			ft.	m
<a href="#">Everest<sup>1</sup></a>	<a href="#">Himalayas</a>	Nepal/Tibet	29,035	8,850
<a href="#">K2 (Godwin Austen)</a>	<a href="#">Karakoram</a>	Pakistan/China	28,250	8,611
<a href="#">Kanchenjunga</a>	Himalayas	India/Nepal	28,169	8,586
Lhotse I	Himalayas	Nepal/Tibet	27,940	8,516
Makalu I	Himalayas	Nepal/Tibet	27,766	8,463
Cho Oyu	Himalayas	Nepal/Tibet	26,906	8,201
Dhaulagiri	Himalayas	Nepal	26,795	8,167
Manaslu I	Himalayas	Nepal	26,781	8,163
<a href="#">Nanga Parbat</a>	Himalayas	Pakistan	26,660	8,125
<a href="#">Annapurna</a>	Himalayas	Nepal	26,545	8,091

<https://www.infoplease.com/world/geography/highest-mountain-peaks-world>

14. If someone said that they were taking their baedeker with them what would they be referring to?

a. A fountain pen      b. A tourist guide book      c. A type of anorak

15. Rocks formed from cooling molten magma are called

a. Metamorphic      b. Sedimentary      c. Igneous

Igneous rocks form when magma (molten rock) cools and crystallizes, either at volcanoes on the surface of the Earth or while the melted rock is still inside the crust. All magma develops underground, in the lower crust or upper mantle, because of the intense heat there.

16. What is the Pulitzer Prize awarded for?

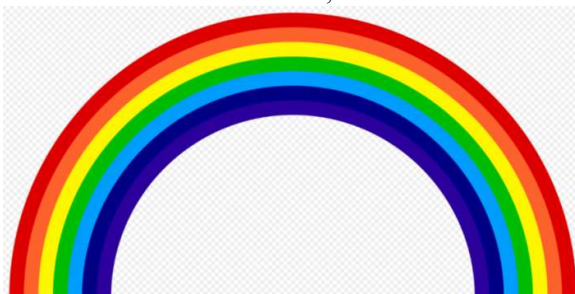
a. Scientific achievement      b. Contribution to world peace      c. Journalism and literature

17. Which colour occurs in the middle of the rainbow?

a. Green      b. Blue      c. Orange

Note: Rain bow colours from top are given by – (bottom)VIBGYOR (top) or (top)ROYGBIV (bottom)

**ROYGBIV** is an acronym for the sequence of hues commonly described as making up a rainbow: red, orange, yellow, green, blue, indigo and violet. The initialism is sometimes referred to in reverse order, as VIBGYOR.



<https://en.wikipedia.org/wiki/ROYGBIV#/media/File:Rainbow-diagram-ROYGBIV.svg>

### The colours of a rainbow

The basic sequence for primary rainbows is always the same running from;

**Red** (the longest wavelength at around 780 nm) through to **Violet** (the shortest wavelength in the sequence at 380 nm).

<https://www.metoffice.gov.uk/weather/learn-about/weather/optical-effects/rainbows/colours-of-the-rainbow#:~:text=The%20colours%20of%20the%2C%20Blue%2C%20Indigo%20and%20Violet%20rainbow%20are%20Red%2C%20Orange%2C%20Yellow%2C,%>

18. With what religion would you associate Kangha, Kirpan, Kara, Kaccha and Kes?

a. Sikh      b. Hindu      c. Buddhist      d. Jain

The names of all the Ks – kes, kangha, kirpan, kara and kachh – have Sanskrit roots.

19. If you referred to a thesaurus, it would be?

- a. A measuring instrument  
b. A book about words  
c. A prehistoric reptile  
d. Dictionary

20. If anyone gone to Staten Island what would he/she see?

- a. Notre Dame Cathedral  
b. The Statue of Liberty  
c. Alcatraz Prison  
d. Buddha statue

21. What was built in the year 1889?

- a. The Empire State Building  
b. Nelson's Column  
c. The Eiffel Tower

22. Which metal is associated with the adjective ferric?

- a. Iron  
b. Lead  
c. Platinum  
d. Copper

23. What would you be practising if you came across asanas?

- a. Singing  
b. Yoga  
c. Law  
d. aerobics

24. Which mountain range separates France from Spain?

- a. Dolomites  
b. Alps  
c. Pyrenees  
d. Andes

The Pyrenees - It stretches from the shores of the Mediterranean Sea on the east to the Bay of Biscay on the Atlantic Ocean on the west. The Pyrenees form a high wall between France and Spain

25. The circumference of the earth around the poles is

- a. The same as the Equator  
b. Greater than the Equator  
c. Less than the Equator  
d. None

Using those measurements, the equatorial circumference of Earth is about 24,901 miles (40,075 km). However, from pole-to-pole — the meridional circumference — Earth is only 24,860 miles (40,008 km) around. This shape, caused by the flattening at the poles, is called an oblate spheroid

26. The speed at which the Earth revolves round the sun at the equator is

- a. 800 km/minute  
b. 900km/minute  
c. 1,500 km/minute  
d. 1,670 km/minute

Ans: d. 1,670 km/minute

Speed of the Earth's Rotation at the Equator

Circumference of the Earth at the Equator = **40,000 km**

Time to complete one rotation = **24 hours**

Speed of Rotation = Distance/Time = 40,000 km / 24 hr = **1670 km/hr**

The speed of revolution around the Sun is even larger.

27. What is the centre of the Solar System?

- a. **Sun**                      b. A black hole                      c. Earth                      d. Galaxy

28. If one flew into the airport at Luanda, the country would be?

- a. Peru                      b. **Angola**                      c. Indonesia                      d. Algeria

29. Who wrote "As a woman I have not country. As a woman I want no country. As a woman my country is the whole world"?

- a. Germane Greer                      b. Mother Teresa                      c. **Virginia woolf**                      d. Mother Terasa

Virginia Woolf. **Three Guineas**. London: Hogarth Press, 1938.

30. Which of the following is holy river of the Hindus?

- a. Narmda                      b. Brahmapura                      c. **Ganges**                      d. Sarayu

31. How many millimetres are there in a meter?

- a. **1,000**                      b. 100                      c. 10                      d. 10000

32. What is the Taj Mahal?

- a. **A tomb**                      b. A place of worship                      c. A parliamentary building                      d. Lovers paradise

The Taj Mahal is an ivory-white marble mausoleum on the southern bank of the river Yamuna in the city of Agra. It was built by Mughal Emperor Shah Jahan in memory of his wife Mumtaz Mahal with construction starting in 1632 AD and completed in 1648 AD. with the mosque, the guest house and the main gateway on the south, the outer courtyard and its cloisters were added subsequently and completed in 1653. It is a World heritage site.

<https://whc.unesco.org/en/list/252/>

33. Which of these imaginary lines of earth is mainly vertical?

- a. Equator                      b. Tropic of Cancer                      c. Tropic of Capricorn                      d. **International Date Line**

34. Vitamin B2 is also known as

- a. Thiamine                      b. **Riboflavin**                      c. Calcium                      d. Retinol

**Riboflavin** (also known as **vitamin B2**) is one of the **B vitamins**, which are all water soluble. **Riboflavin** is naturally present in some foods, added to some food products, and available as a dietary supplement

35. From Which language do we hear the word dungaree?

- a. Japnaese      b. Arabic      c. Hindi      d. Arabic

A coarse cotton fabric used chiefly for work clothes. It is still used in Indian Railways.

36. Colorado in U.S.A is famous for this landform

1. Grand canyon      2. Grand Craters      3. Great Valleys      4. Great Basins

Ans:1

Note: Grand Canyon National Park

Located in Arizona, Grand Canyon National Park encompasses 446 km of the Colorado River and adjacent uplands. The park is home to much of the immense Grand Canyon 1.6 km deep, and up to 29 km wide. Layered bands of colorful rock reveal millions of years of geologic history. Grand Canyon is unmatched in the incomparable vistas it offers visitors from the rim.

37. Daily weather changes in the atmosphere are associated with

1. Troposphere      2. Mesosphere      3. Ionosphere      4. Straosphere

Ans:1

Note:

**Troposphere**

The troposphere is the lowest atmospheric layer. On average, the troposphere extends from the ground to about 10 km (6 miles) high, ranging from about 6 km (4 miles) at the poles to more than 16 km (10 miles) at the Equator. Almost all weather develops in the troposphere because it contains almost all of the atmosphere's water vapor. Clouds, from low-lying fog to thunderheads to high-altitude cirrus, form in the troposphere. Air masses, areas of high-pressure and low-pressure systems, are moved by winds in the troposphere. These weather systems lead to daily weather changes as well as seasonal weather patterns and climate systems, such as El Nino.

**Stratosphere**

The stratosphere extends from the tropopause, the upper boundary of the troposphere, to about 50 km (32 miles) above the Earth's surface. Strong horizontal winds blow in the stratosphere, but there is little turbulence. This is ideal for planes that can fly in this part of the atmosphere.

The stratosphere is very dry and clouds are rare. Those that do form are thin and wispy. They are called nacreous clouds. Sometimes they are called mother-of-pearl clouds because their colors look like those inside a mollusk shell.

The stratosphere is crucial to life on Earth because it contains small amounts of ozone, a form of oxygen that prevents harmful UV rays from reaching Earth. The region within the stratosphere where this thin shell of ozone is found is called the ozone layer. The stratosphere's ozone layer is uneven, and thinner near the poles. The amount of ozone in the Earth's atmosphere is declining steadily. Scientists have linked use of chemicals such as chlorofluorocarbons (CFCs) to ozone depletion.

### **Mesosphere**

The mesosphere extends from the stratopause (the upper boundary of the stratosphere) to about 85 km (53 miles) above the surface of the Earth. Here, temperatures again begin to fall.

The mesosphere has the coldest temperatures in the atmosphere, dipping as low as  $-120^{\circ}\text{C}$  ( $-184^{\circ}\text{F}$  or  $153\text{ K}$ ). The mesosphere also has the atmosphere's highest clouds. In clear weather, you can sometimes see them as silvery wisps immediately after sunset. They are called noctilucent clouds, or night-shining clouds. The mesosphere is so cold that noctilucent clouds are actually frozen water vapor—ice clouds.

Shooting stars—the fiery burnout of meteors, dust, and rocks from outer space—are visible in the mesosphere.

### **Ionosphere**

The ionosphere extends from the top half of the mesosphere all the way to the exosphere. This atmospheric layer conducts electricity.

The ionosphere is named for ions created by energetic particles from sunlight and outer space. Ions are atoms in which the number of electrons does not equal the number of protons, giving the atom a positive (fewer electrons than protons) or negative (more electrons than protons) charge. Ions are created as powerful X-rays and UV rays knock electrons off atoms.

The ionosphere—a layer of free electrons and ions—reflects radio waves. Guglielmo Marconi, the “Father of Wireless,” helped prove this in 1901 when he sent a radio signal from Cornwall, England, to St. John's, Newfoundland, Canada. Marconi's experiment demonstrated that radio signals did not travel in a straight line, but bounced off an atmospheric layer—the ionosphere.

The ionosphere is broken into distinct layers, called the D, E, F1, and F2 layers. Like all other parts of the atmosphere, these layers vary with season and latitude. Changes in the ionosphere actually happen on a daily basis. The low D layer, which absorbs high-frequency radio waves, and the E layer actually disappear at night, which means radio waves can reach higher

into the ionosphere. That's why AM radio stations can extend their range by hundreds of kilometers every night.

The ionosphere also reflects particles from solar wind, the stream of highly charged particles ejected by the sun. These electrical displays create auroras (light displays) called the Northern and Southern Lights.

### **Thermosphere**

The thermosphere is the thickest layer in the atmosphere. Only the lightest gases—mostly oxygen, helium, and hydrogen are found here.

The thermosphere extends from the mesopause (the upper boundary of the mesosphere) to 690km(429 miles) above the surface of the Earth. Here, thinly scattered molecules of gas absorb x-rays and ultraviolet radiation. This absorption process propels the molecules in the thermosphere to great speeds and high temperatures. Temperatures in the thermosphere can rise to 1,500°C(2,732°F or 1,773K).

### **Exosphere**

The fluctuating area between the thermosphere and the exosphere is called the turbopause. The lowest level of the exosphere is called the exobase. At the upper boundary of the exosphere, the ionosphere merges with interplanetary space, or the space between planets.

The exosphere expands and contracts as it comes into contact with solar storms. In solar storms particles are flung through space from explosive events on the sun, such as solar flares and coronal mass ejections (CMEs).

Hydrogen, the lightest element in the universe, dominates the thin atmosphere of the exosphere. Only trace amounts of helium, carbon dioxide, oxygen, and other gases are present.

Many weather satellites orbit Earth in the exosphere. The lower part of the exosphere includes low-Earth orbit, while medium-Earth orbit is higher in the atmosphere.

The upper boundary of the exosphere is visible in satellite images of Earth. Called the geocorona, it is the fuzzy blue illumination that circles the Earth.

### **Extraterrestrial Atmospheres**

All the planets in our solar system have atmospheres. Most of these atmospheres are radically different from Earth's, although they contain many of the same elements.

The solar system has two major types of planets: terrestrial planets (Mercury, Venus, Earth, and Mars) and gas giants (Jupiter, Saturn, Uranus, and Neptune).

The atmospheres of the terrestrial planets are somewhat similar to Earth's. Mercury's atmosphere contains only a thin exosphere dominated by hydrogen, helium, and oxygen. Venus' atmosphere is much thicker than Earth's, preventing a clear view of the planet. Its atmosphere is dominated by carbon dioxide, and features swirling clouds of sulfuric acid. The atmosphere on Mars is also dominated by carbon dioxide, although unlike Venus, it is quite thin.

Gas giants are composed of gases. Their atmospheres are almost entirely hydrogen and helium. The presence of methane in the atmospheres of Uranus and Neptune give the planets their bright blue color.

<https://www.nationalgeographic.org/encyclopedia/atmosphere/#:~:text=Air%20masses%2C%20areas%20of%20high,troposphere%20thins%20as%20altitude%20increases.>

38. Epigraphy means

1. The study of coins
2. The study of inscriptions
3. The study of epics
4. The study of geography

Ans:2

39. The 19<sup>th</sup> Century reawakening in India was confined to the

1. Priestly class
2. Upper middle class
3. Rich peasantry
4. Urban Landlords

Ans:2

40. Who was the first Indian to be elected to the British Parliament?

1. Dadabhai Naoroji
2. Gopala Krishna Gokhale
3. Bipin Chandra Pal
4. Lala Lajpat Rai

Ans:1

Note: Naoroji moved to Britain once again and continued his political involvement. Elected for the Liberal Party in Finsbury Central at the 1892 general election, he was the first British Indian MP

41. Who introduced the permanent settlement in Bengal?

1. Lord Cornwallis
2. Lord Dalhousie
3. William Bentinck
4. Lord Curzon

Ans:1

Note: The Permanent Settlement of Bengal was brought into effect by the East India Company headed by the Governor-General Lord Cornwallis in 1793. This was basically an agreement between the company and the Zamindars to fix the land revenue. First enacted in

Bengal, Bihar and Odisha, this was later followed in northern Madras Presidency and the district of Varanasi.

42. Which one of the following metals is used to galvanise iron?

1. Copper                      2. Lead                      3. Zinc                      4. Nickel

Ans:3

**Note: Galvanizing-** Galvanization or galvanizing is the process of applying a protective zinc coating to steel or iron, to prevent rusting. The most common method is hot-dip galvanizing, in which the parts to be coated are submerged in a bath of molten hot zinc.

**Anodizing** is an electrochemical process that converts the metal surface into a decorative, durable, corrosion-resistant, anodic oxide finish. Aluminum is ideally suited to **anodizing**, although other nonferrous metals, such as magnesium and titanium, also can be **anodized**.

43. Instrument used to measure the force and velocity of the wind is

1. Ammeter                      2. Anemometer                      3. Altimeter                      4. Audiometer

Ans:2

**Note:** An **anemometer** is a device used for measuring wind speed and direction. It is also a common weather station instrument.

44. To whom can a case dispute in the election of the president of India be referred to ?

1. Election commission                      2. Parliament  
3. Supreme Court of India                      4. Cabinet

Ans:3

45. Which company invented the transistor radio ?

1. Sony                      2. Grundig                      3. Panasonic                      4. Telestra

Ans:1

**Note:** The transistor was successfully demonstrated on December 23, 1947 at **Bell Laboratories** in Murray Hill, New Jersey. The three individuals credited with the invention of the transistor were William Shockley, John Bardeen and Walter Brattain.

A **transistor radio** is a small portable radio receiver that uses transistor-based circuitry, which revolutionized the field of consumer electronics by introducing small but powerful, convenient hand-held devices. Following the invention of the transistor the first commercial transistor radio, the Regency TR-1, was released in 1954.

46. Where is Indian Institute of petroleum located?

1. Vishakapatnam                      2. Delhi                      3. Dehradun                      4. Chennai

Ans:3

47. Where is Indian Institute of Science located?

1. Vishakapatnam                      2. Delhi                      3. Bangalore                      4. Chennai

Ans:3

48. Hay fever is a sign of

1. Malnutrition

2. Allergy

3. Old age

4. Overwork

Ans:2

Note: Allergic **rhinitis**, also known as **hay fever**, is a type of inflammation in the nose which occurs when the immune system overreacts to allergens in the air. Signs and symptoms include a runny or stuffy nose, sneezing, red, itchy, and watery eyes, and swelling around the eyes

49. The branch of agriculture which deals with the feeding, shelter, health and breeding of the domestic animals is called

1. Dairy science

2. Veterinary Science

3. Poultry

4. Animal Husbandry

Ans:4

50. Which foreign country is closest to Andaman islands?

1. Sri Lanka

2. Myanmar

3. Indonesia

4. Pakistan

Ans:2