EXAM PREPARATION SERIES

Everyday Science
30 Solved MCQs

A tough, exam-focused set of everyday-science multiple choice questions with verified correct answers and short explanations — built for competitive test prep.

30	100%	A+
QUESTIONS	VERIFIED	DIFFICULTY

Solved · Answer-Key Highlighted · Explained

SCIMCQ

Everyday Science — Solved MCQs

Correct answer is highlighted in green with a tick. A brief explanation follows each question.

01 **The normal pH of human blood is maintained at approximately:**

- A 6.8
- B 7.0
- ✓ **7.4**
- D 8.2

Why? Blood pH is tightly regulated between 7.35–7.45; a shift either way causes acidosis or alkalosis.

02 **Vitamin D, essential for calcium absorption, is synthesized in the skin on exposure to:**

- A Infrared rays
- ✓ **Ultraviolet rays**
- C Visible light
- D X-rays

Why? UV-B rays convert 7-dehydrocholesterol in skin into previtamin D3.

03 **The SI unit used to measure electrical resistance is the:**

- A Volt
- B Ampere
- ✓ **Ohm**
- D Watt

Why? Resistance (R) is measured in Ohms, defined by V = IR.

04 **Balance, posture and muscle coordination are primarily controlled by the:**

- A Cerebrum
- ✓ **Cerebellum**
- C Medulla oblongata
- D Hypothalamus

Why? The cerebellum fine-tunes motor movements and maintains equilibrium.

05 **Which blood group is regarded as the universal donor for transfusion?**

- A AB positive
- B A negative
- ✓ **O negative**
- D B positive

Why? O negative lacks A, B and Rh antigens, so it rarely triggers immune rejection.

06 **Sound travels fastest through which of the following media?**

- A Air
- B Water
- ✓ **Steel**
- D Vacuum

Why? Sound speed rises with medium density and elasticity; steel transmits it far faster than air or water.

07 **Insulin, which regulates blood glucose, is secreted by the:**

- A Liver
- ✓ **Pancreas**
- C Thyroid
- D Adrenal gland

Why? Beta cells in the islets of Langerhans within the pancreas produce insulin.

08 **The most abundant gas in Earth's atmosphere by volume is:**

- A Oxygen
- B Carbon dioxide
- ✓ **Nitrogen**
- D Argon

Why? Nitrogen makes up about 78% of the atmosphere; oxygen is second at about 21%.

09 **A deficiency of which vitamin typically causes night blindness?**

- ✓ **Vitamin A**
- B Vitamin B12
- C Vitamin C
- D Vitamin E

Why? Vitamin A is needed to make rhodopsin, the pigment used for low-light vision.

10 **Which structure of the eye controls the amount of light entering it?**

- A Retina
- B Cornea
- ✓ **Iris**
- D Lens

Why? The iris adjusts pupil size, regulating how much light reaches the retina.

11 **The loss of water vapour from plant leaves is called:**

- A Respiration
- ✓ **Transpiration**
- C Osmosis
- D Guttation

Why? Transpiration occurs mainly through stomata and helps pull water up from the roots.

12 **The acid naturally present in the human stomach that aids digestion is:**

- A Sulphuric acid
- B Acetic acid
- ✓ **Hydrochloric acid**
- D Nitric acid

Why? Gastric glands secrete HCl, which activates pepsin and kills ingested pathogens.

13 **The SI unit of frequency, equal to one cycle per second, is the:**

- ✓ **Hertz**
- B Joule
- C Newton
- D Pascal

Why? Named after Heinrich Hertz; 1 Hz means one complete wave cycle per second.

14 **Which gas is commonly used to fill balloons because it is lighter than air and non-flammable?**

- A Hydrogen
- ✓ **Helium**
- C Methane
- D Nitrogen

Why? Helium is inert and about seven times lighter than air, unlike flammable hydrogen.

15 **The adult human skeleton normally contains how many bones?**

A 186

B 196

✓ **206**

D 216

Why? Infants have around 300 bones that fuse together, leaving 206 in adulthood.

16 **The theory of relativity, which reshaped ideas of space and time, was proposed by:**

A Isaac Newton

B Niels Bohr

✓ **Albert Einstein**

D Max Planck

Why? Einstein published Special Relativity in 1905 and General Relativity in 1915.

17 **The organelle regarded as the 'powerhouse of the cell' is the:**

- A Nucleus
- B Ribosome
- ✓ **Mitochondrion**
- D Golgi body

Why? Mitochondria generate ATP through cellular respiration, powering most cell activity.

18 **Which metal remains in liquid form at normal room temperature?**

- A Sodium
- ✓ **Mercury**
- C Gallium
- D Caesium

Why? Mercury has a very low melting point (-38.8°C), keeping it liquid at room temperature.

19 **The average normal human body temperature is approximately:**

- A 35°C
- B 36°C
- ✓ **37°C**
- D 39°C

Why? 37°C (98.6°F) is the commonly cited average, though it varies slightly between individuals.

20 **During photosynthesis, plants primarily absorb which gas from the air?**

- A Oxygen
- B Nitrogen
- ✓ **Carbon dioxide**
- D Hydrogen

Why? CO2 is combined with water using light energy to produce glucose and oxygen.

21 **The largest gland in the human body is the:**

- A Pancreas
- B Thyroid
- ✓ **Liver**
- D Pituitary

Why? The liver, weighing about 1.5 kg, is the body's largest internal organ and gland.

22 **Sound waves cannot travel through which of the following?**

- A Water
- B Steel
- C Air
- ✓ **Vacuum**

Why? Sound needs a material medium to propagate; a vacuum has no particles to carry vibrations.

23 **Which vitamin plays a key role in normal blood clotting?**

- ✓ **Vitamin K**
- B Vitamin B6
- C Vitamin C
- D Vitamin D

Why? Vitamin K activates clotting factors synthesized in the liver.

24 **The chemical formula of common table salt is:**

- A KCl
- ✓ **NaCl**
- C CaCl2
- D MgCl2

Why? Table salt is sodium chloride, formed from Na+ and Cl- ions.

25 **Balance and equilibrium of the body are sensed mainly by the ear's:**

- A Cochlea
- B Eardrum
- ✓ **Semicircular canals**
- D Auditory nerve

Why? The fluid-filled semicircular canals in the inner ear detect rotational movement.

26 **The Sun's mass is composed mainly of which two elements?**

- A Oxygen and Carbon
- ✓ **Hydrogen and Helium**
- C Nitrogen and Hydrogen
- D Helium and Neon

Why? Roughly 74% hydrogen and 24% helium by mass, fused via nuclear fusion for energy.

27 **Which part of the human brain regulates body temperature and hunger?**

- A Cerebellum
- ✓ **Hypothalamus**
- C Medulla oblongata
- D Thalamus

Why? The hypothalamus maintains homeostasis, controlling temperature, hunger and thirst.

28 **Rust forms on iron due to a chemical reaction with:**

- A Nitrogen only
- ✓ **Oxygen and moisture**
- C Carbon dioxide only
- D Hydrogen

Why? Iron oxidises in the presence of both oxygen and water to form hydrated iron oxide.

29 **The units used to measure the loudness of sound are:**

- A Hertz
- ✓ **Decibels**
- C Lumens
- D Watts

Why? Decibels (dB) measure sound intensity on a logarithmic scale.

30 **Which of these is NOT a greenhouse gas?**

- A Carbon dioxide
- B Methane
- ✓ **Nitrogen**
- D Water vapour

Why? Nitrogen is diatomic and does not absorb infrared radiation, unlike true greenhouse gases.