Basic Everyday Science (One Liner Questions)

Physics, Chemistry, Biology, Astronomy

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2025 Edition

Introduction

These short notes contain important one-line questions and key facts for CSS MPT and One Paper MCQs preparation. The content includes most repeated questions from past papers, authentic sources, and standard references. Each point is written in a concise format for quick revision and last-minute preparation.

How to Use These Notes?

- Revise **daily** in small portions.
- Mark the **most difficult questions** for repeated revision.
- Practice with **timed quizzes** to simulate exam conditions.
- Keep updating with **current affairs & new information**.

Basic Everyday Science (One Liner Questions)

Physics

Mechanics

1. When the resultant of all the forces acting on a body is zero, the body is in a state of equilibrium.
2. If we know the mass of an object and the force applied on it, it is possible to calculate the acceleration of the object (using Newton's second law, F = ma).
3. Newton is the unit of force.
4. The capacity to do work is called energy.
5. The energy possessed by a body due to its position is called potential energy.
6. When a bullet is fired upwards vertically, it gains potential energy.
7. When a bullet penetrates a target, its kinetic energy is converted primarily into thermal energy, deformation energy, and sound energy.
8. The swing of a spinning cricket ball in the air is explained by Bernoulli's theorem.
9. A body can escape the gravitational pull of Earth if thrown with a velocity of approximately 11.2 km/s (escape velocity).
10. The minimum velocity required to escape Earth's gravitational pull is 11.2 km/s.
11. Meter per second is a unit of velocity.
12. The velocity of wind is related to the pressure gradient.
13. Isobars are lines connecting places with the same atmospheric pressure.
14. Atmospheric pressure exerted on Earth is due to gravitational pull.
15. An iceberg floating in the sea has approximately one-tenth of its mass above the water surface.
16. If a body weighs 600 kg on Earth's surface, its weight on the Moon will be approximately 100 kg (1/6th due to lower gravity).
17. When an object is transferred from Earth to the Moon, its mass remains unchanged.
18. Lead balls fall through water more slowly than through air due to the viscous force in water.

Thermodynamics

19. In a heat engine, heat energy is converted into mechanical energy.
20. The pressure cooker works on the principle that the boiling point of a liquid increases with increasing pressure.
21. Water has maximum density at 4°C.
22. The temperature of water below a solid ice layer is approximately 4°C.
23. As the temperature of ice rises, it melts, and its density increases.
24. Scalding with steam is more severe than scalding with boiling water because steam contains more energy (latent heat of vaporization).
25. All forms of energy we use are ultimately transformed into heat energy.
26. The function of the thermostat in a refrigerator is to maintain temperature.
27. The snow on mountains does not melt all at once when heated by the sun because it reflects most of the heat (high albedo).

28. Nights are cooler in deserts than in plains because sand absorbs and releases heat more quickly than soil.

Optics

29. The separation of ordinary light into its constituent colors is known as dispersion.
30. A mirage is caused by the refraction of light due to temperature gradients in the atmosphere.
31. Rainbows are produced by the refraction, dispersion, and reflection of light in raindrops.
32. The Sun remains visible after it sets below the horizon due to atmospheric refraction.
33. A fraction of sunlight is refracted as it enters Earth's atmosphere.
34. The sky appears blue due to Rayleigh scattering of sunlight by atmospheric particles.
35. When a ray of sunlight enters a dark room, its path becomes visible due to the scattering of light by dust particles (Tyndall effect).
36. Optical fibers work on the principle of total internal reflection.
37. Ordinary light spreads in all directions.
38. Convex lenses are used to correct long-sightedness (hyperopia).
39. The magnifying power of a simple microscope can be increased by decreasing the focal length of the lens.
40. In a color television, the primary colors are green, red, and blue.
41. A three-dimensional image formed by a laser is called a hologram.
42. The first laser developed was a ruby laser.
43. Optical fibers are fine strands of glass.
44. The rear view mirror of a motor vehicle is convex.
45. A concave mirror can be used to focus sunlight.
46. Dry sand appears bright, while wet sand appears dark, due to differences in reflection.
47. When a CD is seen in sunlight, rainbow-like colors appear due to reflection and diffraction.

Electromagnetism

48. The neutron, electron, and proton have neutral, negative, and positive charges, respectively.
49. Coulomb is the unit of electric charge.
50. The speed of light is approximately 300,000 km/s.
51. Light travels fastest in a vacuum.
52. Heat radiation travels at the speed of light.
53. An electric heater is most likely to produce infrared radiation.
54. If an object emits its own light, it is said to be luminous.
55. Transistors do not need a warm-up period because they lack filaments.
56. Generators convert mechanical energy into electrical energy.
57. A dynamo converts mechanical energy into electrical energy.
58. A transformer is used to increase or decrease AC voltage.
59. The atmospheric ionosphere layer facilitates radio communication.

60. Radio waves are used to send sound waves over long distances.
61. Microwaves are used to send signals to satellites from ground stations.
62. A mobile phone sends and receives messages through radio waves.
63. The carrier waves used for radio transmission have frequencies up to 30 kHz.
64. A video camera converts pictures into electrical signals.
65. A fax machine receives signals and outputs them through a printer.
66. In a telephone receiver, a magnet is placed under the diaphragm.
67. The first telegraph signal was transmitted in 1901.
68. Modern incandescent bulbs do not contain copper filaments (typically tungsten).
69. After long periods of use, a gray spot develops inside a bulb because the tungsten filament evaporates and collects there.
70. Wheatstone Bridge is an electrical circuit used to measure resistance.
71. A voltmeter can be made by modifying a galvanometer.
72. An AVO meter measures current, voltage, and resistance.
73. In the name of the multimeter "AVO," V stands for voltage.
74. Silicon is a semiconductor.
75. Paper is an insulator.
76. It is economical to transmit electric power at high voltage.
77. Fluorescent tubes are fitted with a choke coil to reduce current in the circuit.
78. Fuse wire is made of 63% tin and 37% lead.

Waves and Sound

79. The frequency of audible sound ranges from 20 to 20,000 Hz.
80. The smallest unit of wavelength measurement is the angstrom (10^{-10} meters).
81. Sound is a form of energy.
82. The unit of sound intensity is the decibel.
83. Sound travels faster in iron than in air.
84. The echo (reflected sound) is distinctly heard at ordinary temperatures if the reflecting surface is at least 56 feet from the sound source.
85. It is possible to recognize a person in the dark by their unique voice due to its pitch.
86. Bats can fly in the dark by using ultrasonic waves.
87. The principle used in radar is the same as in sonar; radar uses radio waves, while sonar uses ultrasonic waves.
88. The dirt in dirty water can be separated using ultrasound.

Fluid Dynamics

89. The absorption of ink by blotting paper involves capillary action.
90. Materials for rainproof coats and tents owe their waterproof properties to surface tension.
91. Detergents dissolved in water help clean clothes by reducing surface tension.
92. A very important application of capillary action is hoeing or "godi" practiced by farmers.
93. Ice cubes float in alcohol but sink in water due to differences in density.
94. The twinkling of stars is caused by the refraction of light in Earth's atmosphere.

Nuclear Physics

95. The type of radiation unaffected by a magnetic field is gamma rays.
96. Gamma rays are high-energy rays emitted by radioactive elements.
97. A moderator in a nuclear reactor slows down neutrons.
98. A nuclear reactor harnesses nuclear energy through a controlled chain reaction.
99. If a U-238 nucleus splits into two identical parts, the resulting nuclei are radioactive (e.g., producing isotopes like Xe-140 and Sr-94).
100. Elements with an atomic number greater than 82 emit radiation.

Astrophysics and Atmospheric Physics

101. The theory of the expanding universe was first proposed by Edwin Hubble.
102. Of all man-made flying machines, only rockets are suitable for space flight.
103. Air is present in Earth's atmosphere up to a height of approximately 200 kilometers.
104. The satellites that move with Earth's rotation are called geostationary satellites.
105. A lake starts freezing from the top surface due to cooling from the cold atmosphere.
106. To circle the globe at the equator in sunlight, one must move at approximately 1670 km/h (to match Earth's rotation).
107. Spring tides occur on new moon and full moon days because the Sun, Moon, and Earth are aligned, maximizing gravitational effects.

Thermodynamics and Energy Units

108. The Kelvin scale is called the absolute temperature scale.
109. One thousand watts is called 1 kilowatt (unit of power).
110. Kilowatt-hour (kWh) is a unit of energy, used to measure electricity consumption.
111. A 2500-watt air conditioner consumes 2.5 kWh of electricity in one hour.
112. In the BTU system, one BTU is equal to 1055 joules.
113. The unit "TON" for air conditioners is equivalent to 12,000 BTU/hour.
114. One horsepower is equal to 746 watts.

Acoustics and Seismology

115. The instrument used for recording Earth's tremors is a seismograph.

Medical Physics

116. Night vision devices detect infrared radiation or amplify visible light.
117. Magnetic resonance imaging (MRI) uses radio waves.
118. X-rays can be used in lithotripsy to disintegrate bladder and kidney stones.

119. Using ultrasound, the internal structure of the body can be determined.
120. The penetration of X-rays through an object depends on the object's density.
121. The unit to measure supersonic speed is Mach.
122. A rail gun uses magnetic force to launch projectiles at high speeds.
123. Quartz crystals in watches work on the piezoelectric effect.
124. For reproduction of sound, a CD audio player uses a laser beam.
125. Polaroids are used in photo elasticity to study stress in materials.

Material Properties

126. The property by which metals can be beaten into thin sheets is called malleability.
127. Diamond has a tetrahedral crystal structure.
128. The heating element of an electric heater is typically made of nichrome.
129. Steel is more elastic than rubber.

Chemistry

Inorganic Chemistry

1. The second most abundant element in the Earth's crust is silicon.
2. The second most abundant metal found in the Earth's crust is iron.
3. Iron is the most abundant transition metal.
4. Oxygen is present in the largest amount in terms of percent by mass in the Earth's crust.
5. Noble gases (e.g., helium, neon, argon) are extremely unreactive.
6. The volume percentage of nitrogen in air is 78%.
7. Air contains approximately 0.03% carbon dioxide by volume.
8. Heavy water consists of oxygen and deuterium (heavy hydrogen).
9. Quartz is chemically silicon dioxide (SiO_2).
10. Ruby is an oxide of aluminum (Al_2O_3, with trace impurities).
11. Chromite ore contains chromium oxide (Cr_2O_3).
12. The main chemical substance in the bones and teeth of animals is calcium phosphate ($Ca_3(PO_4)_2$).
13. Gypsum is hydrated calcium sulfate ($CaSO_4 \cdot 2H_2O$).
14. The stones formed in human kidneys consist mostly of calcium oxalate (CaC_2O_4).
15. Haematite is an important source of iron (Fe_2O_3).
16. Bauxite is the mineral source of aluminum.
17. Gold is found in its native (elemental) form.
18. Mercury is extracted from cinnabar (HgS).
19. The gases used by divers as an artificial atmosphere are helium and oxygen.
20. Lead is used in storage batteries.
21. Chlorine is used for water purification.
22. Calcium plays a vital role in blood clotting.

23. In thyroid glands, iodine is required for the synthesis of thyroxine.
24. Tincture of iodine consists of a solution of iodine in alcohol.
25. A small pouch containing silica gel is often found in bottles of medicine to absorb moisture.

Organic Chemistry

26. Starch is a polymer of glucose.
27. Cellulose is a natural polymer of glucose.
28. Protein is a natural polymer composed of amino acids.
29. Rayon is made of cellulose.
30. The greatest number of compounds is formed by the element carbon.
31. The major component of honey is glucose.
32. Natural rubber is a polymer of isoprene.
33. The chemical name of aspirin is acetylsalicylic acid.
34. The chemical name of vinegar is dilute acetic acid.
35. Phenol is used as a raw material in the manufacture of foam for mattresses and cushions.
36. Cooking oil can be converted into vegetable ghee by the process of hydrogenation.
37. The most important stimulant in tea leaves is caffeine.
38. The acid in sour milk is lactic acid.
39. Sodium benzoate is used for the preservation of food grains.
40. Vinegar is produced in two steps: fermentation of sugar by yeast to ethanol, followed by fermentation of ethanol to acetic acid by bacteria.

Biochemistry

41. Water is a universal solvent for biochemical reactions.
42. In blood, the percentage of water is approximately 90%.
43. The composition of oxygen in air is maintained by photosynthesis.
44. Nitrogen occurs in plants and animals in the form of proteins.
45. Enzymes are biological catalysts made up of proteins.
46. The inherited traits of a person can be investigated by studying deoxyribonucleic acid (DNA).
47. In chlorophyll, magnesium is present.
48. The pigment involved in photosynthesis is chlorophyll.
49. Haemoglobin, which contains iron, transports oxygen and makes blood appear red.
50. The cow's milk contains about 80% water by percentage.
51. The fat content in buffalo milk is about 10%.
52. Green vegetables have high iron content.
53. Ascorbic acid is vitamin C and is water-soluble.
54. Vitamins A and D are fat-soluble.
55. Wheat, rice, corn, and maize are the best sources of carbohydrates.
56. The muscles, tissues, and blood are primarily made up of proteins.
57. Animal fat has the highest calories per gram.

58. The amount of calories provided by an egg is approximately 150 kcal/100g.
59. Lipase enzyme catalyzes the hydrolysis of fats.
60. Biofertilizers are nitrogen-fixing microorganisms that enrich soil.

Environmental Chemistry

61. Chlorofluorocarbons (CFCs) cause decomposition of the ozone layer.
62. Rainwater dissolves sulfur dioxide to form sulfuric acid, contributing to acid rain.
63. Acid rain contains high levels of sulfuric acid.
64. The greenhouse effect is caused by an excess of carbon dioxide.
65. The major component of natural gas, petroleum, and coal is methane.
66. Most explosions in mines occur due to the mixing of methane with air.
67. Carbon dioxide is used in fire extinguishers.
68. Carbon dioxide is used in the preparation of soft drinks.

Industrial and Applied Chemistry

69. Copper is a highly effective conductor of electricity.
70. Mica is a non-conductor of electricity.
71. Silica (silicon dioxide) is used in glass-making.
72. Gypsum is used in the production of cement.
73. Chromium is obtained from chromite.
74. In order to prevent corrosion, iron pipes are often coated with zinc in a process called galvanization.
75. Potassium carbonate is used to remove air bubbles from glass during its manufacture.
76. Potassium is used in the preparation of glass and soap in the form of carbonates.
77. Potassium phosphate is used in the preparation of detergents.
78. Sodium carbonate (washing soda) behaves as a base in water.
79. The chemical name for baking soda is sodium bicarbonate.
80. The material used for bleaching paper pulp is sodium hypochlorite.
81. Hypo is a solution of sodium thiosulfate.
82. Potassium nitrate is used in fertilizers.
83. The commonly present elements in artificial fertilizers are potassium, nitrogen, and phosphorus.
84. Fertilizer with high nitrogen content is urea.
85. Cattle-bone powder, rich in phosphorus, is used as a fertilizer.
86. Silicon is extensively used in electronics.
87. In Brazil, ethanol is used as a fuel for vehicles.
88. Soft drinks such as colas contain significant quantities of caffeine.
89. Poplar is a woody raw material used for the manufacture of paper pulp.
90. Rectified spirit contains about 95% ethanol.
91. The solution of benzoic acid is used for seasoning food.

Nuclear Chemistry

92. Radioactivity was first discovered by Henry Becquerel.
93. Radioactive sources must be kept in lead containers.
94. Carbon-14 is used for dating very old objects of archaeological importance.
95. Plutonium is used as fuel for nuclear fission.
96. Uranium-235 is used in the fission process.
97. In a nuclear reactor, cadmium rods are used for absorbing neutrons.
98. A nuclear reactor harnesses nuclear energy through a controlled chain reaction.
99. Heavy water, used in nuclear reactors, consists of oxygen and deuterium.

Physical Chemistry

100. Standard pressure is 760 mmHg.
101. The process of elimination of water from a system is called dehydration.
102. The sparkling red color after the blast of a firecracker is due to the presence of strontium (not sulfur).
103. Oxidation involves the loss of electrons.
104. The acid used in a car battery is sulfuric acid.

Materials Chemistry

105. Diamond is an allotropic form of carbon.
106. Dry ice is solid carbon dioxide (CO_2).
107. Brass is an alloy of copper and zinc.
108. Bronze is an alloy of copper and tin.
109. Stainless steel is an alloy of iron, chromium, and nickel.
110. The alloy of copper, zinc, and nickel is called nickel silver (or paktong, alpaca, German silver).
111. Pure gold is 24 carat.
112. The composition of the mixture used for welding is copper oxide and aluminum.
113. Bakelite is a thermosetting plastic, not a thermoplastic.
114. Aqua regia is a mixture of nitric acid and hydrochloric acid that can dissolve platinum.
115. Helium gas is commonly used in balloons and airships.
116. Vanadium, a corrosion-resistant metal, occurs naturally in oxide form.
117. Permanent magnets can be made from cobalt.

Biology

1. The process of digestion begins in the mouth.

2. Blood cells are manufactured by bone marrow in the human body.
3. When iron is less in the body, the quantity of haemoglobin in cells decreases.
4. Arteries become hard due to the deposition of fats and cholesterol in them.
5. In a normal resting man, the rate of heart beat is 72 per minute.
6. A sheet of muscles called the diaphragm separates the chest from the abdomen.
7. In the human body, blood clotting factors are produced by platelets.
8. Human blood carries large amounts of oxygen because of haemoglobin.
9. The front of the eye is covered with a tough transparent material called the cornea.
10. In the eye, only the retina contains receptors for light energy.
11. The smallest branches of an artery lead into tiny blood vessels called capillaries.
12. The Eustachian tube belongs to the ear.
13. The auricle is present in the heart.
14. Anvil and stirrup are names of bones present in the ear.
15. Dendrites are part of a neuron.
16. The left lung has two lobes, while the right lung has three lobes.
17. The pulmonary veins return oxygenated blood to the left atrium.
18. The normal temperature of human blood is 37°C (98.6°F).
19. The liver is part of the gastrointestinal tract.
20. The heart of a normal adult human weighs about 300 grams, and that of a woman about 200 grams.
21. The heart pumps 5 liters of blood per minute in a normal human adult at rest.
22. The blood glucose level is commonly expressed as milligrams per deciliter.
23. A woman's voice is shriller than a man's due to smaller vocal cords.
24. In a normal healthy body, the number of red blood cells (erythrocytes) per cubic millimeter is approximately 5 million.
25. The average life of a red blood cell in the body is about 120 days.
26. The longest and strongest bone in the human body is the femur.
27. The liver secretes bile, which aids in fat digestion.

Cellular Biology

28. The nucleus usually lies in the center of animal cells.
29. The living part of a plant cell is composed of a nucleus and cytoplasm.
30. In an animal cell, protein is synthesized in the ribosome.
31. The pattern for building protein molecules is stored in messenger RNA.
32. Mitochondria are often called the powerhouse of the cell.
33. DNA is a class of nucleic acids.
34. DNA has a double helix structure, while RNA does not.
35. The cell nucleus was first discovered by Robert Brown.
36. Cytology is the branch of biology that deals with the study of cell structure and function.
37. The cell structure that controls the movement of materials into and out of the cell is the cell membrane.
38. Haploid cells result from the process of meiosis.
39. Mitosis is a type of cell division where the number of chromosomes in the daughter cells remains the same.

40. The rupture of red blood cells is called eryptosis.

Biochemistry and Nutrition

41. Proteins are formed by the combination of amino acids.
42. The monomer of proteins is amino acids.
43. Amino acids are a product of the digestion of proteins.
44. The fat in our food is digested by the enzyme lipase.
45. Enzymes are biological catalysts made up of proteins.
46. Ptyalin is a starch-digesting enzyme.
47. Pepsin, a digestive enzyme, is produced in the stomach.
48. The conversion of non-diffusible substances into diffusible ones by the action of enzymes is called digestion.
49. Carbohydrates are the cheapest and most ready source of energy.
50. Cellulose is a carbohydrate and the main chemical substance in the plant cell wall.
51. The most abundant element in the human body is oxygen.
52. About 60-70% of the human body consists of water.
53. The pigment involved in photosynthesis is chlorophyll.
54. All the oxygen we breathe is produced by the splitting of water during photosynthesis.
55. Reserve food material is usually stored as starch in plants and glycogen in animals.
56. The major component of honey is glucose.
57. Milk is nearly a complete food by itself.
58. The cow's milk contains about 80% water by percentage.
59. The fat content in buffalo milk is about 10%.
60. The amount of calories provided by an egg is approximately 150 kcal/100g.
61. Guava contains more vitamin C than orange.
62. Ascorbic acid is vitamin C.
63. Thiamine is vitamin B1.
64. Riboflavin (vitamin B2) is not affected by cooking.
65. Spinach is a good source of vitamin K.
66. Cod liver oil contains vitamin D.
67. The three elements needed for healthy plant growth are nitrogen (N), phosphorus (P), and potassium (K).
68. Biofertilizers are nitrogen-fixing microorganisms that can enrich soil.
69. The color of the skin is due to the presence of melanin.

Genetics and Evolution

70. The science that deals with heredity is known as genetics.
71. The total genetic material within an individual is known as the genome.
72. Hereditary disorders result from defective DNA.
73. Mutation is the only source of new alleles.
74. Polygenic characteristics are controlled by multiple genes.
75. Evolution can be described as a continuing process.

76. The number of chromosomes in a human spermatozoon is 23.
77. Fossils found in the lowest geological strata are generally the most primitive.
78. The inherited traits of a person can be investigated by studying deoxyribonucleic acid (DNA).

Microbiology and Infectious Diseases

79. Sometimes when white blood cells greatly increase in number, they cause a disease called leukemia.
80. AIDS is caused by the Human Immunodeficiency Virus (HIV).
81. Malaria is caused by Plasmodium.
82. Typhoid is caused by Salmonella Typhi.
83. Influenza is caused by a virus.
84. Polio is caused by a virus.
85. Measles is a viral disease.
86. Anthrax is a bacterial disease.
87. Trachoma is a disease of the eye.
88. Hepatitis is the inflammation of the liver.
89. Hepatitis A is transmitted to different individuals by feces.
90. Meningitis is the inflammation of the membrane surrounding the brain.
91. Streptococcus is a gram-positive bacterium.
92. Anabaena azolla is a cyanobacterium.
93. Bacteria help in the process of fermentation of biomass.
94. Bacteria are often parasitic.
95. Fungicides are used against molds and fungi.

Plant Biology

96. Plant cells manufacture their food due to the presence of chlorophyll.
97. Water transport in plants occurs within xylem.
98. Xylem and phloem are conducting tissues in plants.
99. Underground horizontal stems are called rhizomes.
100. The young plant inside a grain of wheat is called the embryo.
101. A seed is technically a ripened ovule.
102. Plant hormones control plant responses to environmental stimuli.
103. Epiphytes are plants that grow upon other plants.
104. Insectivorous plants grow where soil is deficient in nitrogen.
105. Clayey soil is best suited for cotton.

Human Diseases and Deficiencies

106. The science of studying old age is called gerontology.
107. Haemophilia is a hereditary disease caused by genetic mutations affecting blood clotting factors.

108. Leprosy is a disorder of the nervous system.
109. Muscle stiffness is a symptom caused by the disease tetanus.
110. Severe deficiency of vitamin C results in scurvy.
111. Deficiency of vitamin B1 (thiamine) causes beriberi.
112. Rickets is caused by the deficiency of vitamin D and affects bone tissue.
113. Goitre is caused due to a deficiency of iodine in the diet.
114. Insulin is used for the treatment of diabetes.
115. Cancer can be treated by chemotherapy and radiotherapy.
116. Cataract is a disease of the eye involving cloudy areas in the lens.
117. Alzheimer's is a disease of the brain.
118. The part of the body directly affected by pneumonia is the respiratory system.
119. Menopause usually occurs between 40 to 45 years.

Endocrinology

120. Insulin is a hormone secreted by the pancreas.
121. ADH (antidiuretic hormone) is secreted by the posterior pituitary gland.
122. The hormone secreted by the adrenal cortex includes corticosteroids (cortisol and aldosterone).

Animal Biology

123. Amoeba is a unicellular animal.
124. A chicken egg is composed of one cell.
125. The kangaroo rat is a desert mammal that does not drink water.
126. Platypus and echidnas are the only monotremes, mammals that lay eggs.
127. An animal that captures and readily kills living animals for food is called a predator.
128. Hermaphroditism is a form of sexual reproduction.
129. Aviculture is the rearing and breeding of birds.

Other Biological Processes

130. Inborn behavior that involves only one part of the body is called a reflex action.
131. Digestion involves ingestion, digestion, absorption, and elimination.
132. In humans, most nutrient molecules are absorbed by the small intestine.
133. Inhaled air passes through bronchioles last in the respiratory tract.
134. The organ responsible for the digestion of proteins only is the stomach.
135. The study of chemical processes in living organisms is called biochemistry.
136. Biometry is the application of statistics in the study of biology.
137. Morphology is the biological study of the external form and structure of living organisms or their parts.
138. The ultraviolet rays cause sunburn.
139. In eye donation, the cornea of the donor's eye is utilized.

140. A post-mortem study usually involves an analysis of the liver.
141. Chemically, fingernails are made up of protein.
142. Cartilage is a connective tissue.
143. Tendons are connective tissues that attach muscles to bones.
144. Ligaments connect bones to other bones.
145. The eggshell is composed of calcium carbonate.
146. Calcium and phosphorus are essential elements of bones.
147. The "O" blood group in humans is a universal donor.
148. The human blood is divided into four groups.
149. The hypothalamus regulates body temperature.
150. Interferon is a protein that renders cells less susceptible to attack by viruses.

Astronomy Facts

Planets and Their Properties:

- The planet nearest to the Sun is Mercury.
- The brightest planet is Venus.
- Mars is the planet nearest to Earth.
- Uranus is the coldest planet.
- Neptune is the coldest planet of the solar system.
- Jupiter is the largest planet of the solar system.
- Mercury is the smallest planet of the solar system.
- The fastest revolving planet is Mercury.
- Planet Mars has two moons.
- Orbital period of the planet Mercury around the Sun is 88 days.

Solar System and Celestial Mechanics:

- The distance between Earth and the Sun is called an Astronomical unit.
- The position of Earth in its orbit when it is at its greatest distance from the Sun, causing northern summer, is called Aphelion.
- Equinox is the time when the Sun appears vertically overhead at noon at the equator.
- Twenty-first of June is the longest day of the year in the northern hemisphere.
- In the Australian continent, nights are longer than days in June.
- Solar eclipse occurs during a full moon.
- The solar energy falling on the atmosphere of Earth is almost 1.4 kilowatt per square meter.
- Most asteroids lie in the asteroid belt between the orbits of Mars and Jupiter.
- The satellites that revolve in such an orbit, so they move with Earth's rotation, are called geostationary satellites.

Cosmic Phenomena and Structures:

- The universe is expanding.
- The theory of the expanding universe was first propounded by Hubble.
- “Black holes” refer to collapsing objects of high density.
- The phenomenon of Aurora Borealis, the display of red and green lights in the northern hemisphere, is due to radiations from the ionosphere.
- The most splendid and magnificent constellation in the sky is Orion.
- Our galaxy, the Milky Way, is shaped like a large, thick concave lens with a large central bulge.
- The term “Blue Shift” indicates the Doppler Effect, where an object appears bluer when moving toward the observer or when the observer moves toward the object.

Atmospheric and Cosmic Interactions:

- The ionosphere layer makes radio transmission possible.
- The ozone layer prevents ultraviolet radiation from entering the atmosphere.
- Most of the ozone is concentrated in the stratosphere.
- The deepest place on Earth is the Mariana Trench (not directly astronomy but relevant to planetary geography).
- The Sun remains visible for some time after it actually sets below the horizon due to atmospheric refraction.
- The sky appears blue because Earth’s atmosphere reflects blue light.
- The speed of light is 300,000 km/sec.
- Air is present in the atmosphere of Earth up to a height of 200 kilometers.
- The moon has no atmosphere.

Stellar and Elemental Composition:

- The most abundant element in the Sun is hydrogen.
- The nuclear reaction taking place on the surface of the Sun is nuclear fusion.
- All stars are not of the same color.
- The Sun is not the biggest star in the universe.
- The only planet in the solar system with water vapors is Neptune.

Astronomical Measurements and Observations:

- A light year is a unit of distance.
- Parsec is a unit of distance.
- The diameter of Earth is 12,742 km.

Historical and Exploration Milestones:

- Yuri Gagarin was the first person to orbit Earth.

- Neil Armstrong was the first astronaut to land on the surface of the Moon.