gradeup

RRB NTPC GK & Science Q/A

250+ Important Questions

Prep Smart. Score Better. Go gradeup

www.gradeup.co

1. Dodo is a bird categorized under _____.
A. Extinct
B. Endangered
C. Critically endangered
D. Rare
Ans. A
Sol. Dodo is a bird categorized under extinct species.

2. Which among the following is not a word processor?
A. Microsoft Word B. Word Perfect
C. Microsoft Excel D. Word Star
Ans. C
Sol. A word processor provides for input, editing, formatting and output of text. Word processors can be used to create multiple types of files, including Text files (.txt), Rich Text files (.rtf), HTML files (.htm & .html), and Word files (.doc & .docx). Some word processors can also be used to create XML files (.xml).
Microsoft Excel is a spreadsheet application where you can input data in tables in the pattern you choose. Excel forms a part of Microsoft office.

3. Stomatal opening is based on
A. Exosmosis
B. Endosmosis
C. Plasmolysis in guard cells
D. Decrease in concertration of cell app
Ans. B
Sol. According to the K+ ion theory the guard cells absorb k+ ions from the cells around them as they produce ATP (due to photosynthesis) and become hyper-tonic. This leads to absorption of water from nearby cells by **endosmosis** due to which the guard cell become turgid and the stomata opens. Decreasing light intensity and photosynthesis causes stomata closing.

4.Where does Amoeba digests its food?
A. Pseudopodia
B. Nucleus
C. Food Vacuole
D. Cell membrane
Ans. C
Sol. Amoeba digests its food in Food vacuole. Amoeba is a microscopic unicellular organism. It mostly resides in places like pond water. It's structure consists of the following basic components:
• a cell membrane
• a nucleus
• cytoplasm – endoplasm and ectoplasm
• small food vacuoles (these look like small bubbles)
• finger-like projections called pseudopodia (also known as " false feet")

5. Match the following.

Column – A	Column – B
1. Input device	a. Printer
2. Output device	b. Chrome
3. Browser	c. Keyboard

A. 1-c, 2-a, 3-b
B. 1-b, 2-a, 3-c
C. 1-a, 2-b, 3-c
D. 1-c, 2-b, 3-a

Ans. A
Sol.

Column – A	Column – B
1. Input device	c. Keyboard
2. Output device	a. Printer
3. Browser	b. Chrome

Basically there are two types of devices in computer which are input devices and output devices.
Input devices are used to provide data and control signals of a computer or we can say that input devices are used to provide raw data or information to the computer. e.g. keyboard, mouse, scanner, joystick, cameras etc.
Output device is a part of the computer that receives from the computer and present or displays it. e.g. monitor, LED, Printer , projectors, speakers etc.
Browsers are used for net surfing. Chrome, Mozilla, internet explorer, Safari are the examples of browser.

6.What is the nature of antacid?
A. Acidic
B. Basic
C. Neutral
D. Highly Acidic
Ans. B

Sol. The nature of antacid is basic. Antacid tablets are used to neutralize stomach acidity.

7.Which among the following is not a Biotic component of environment?
A. Parasites
B. Decomposers
C. Non-Green plants
D. Soil
Ans. D
Sol. Soil is not a biotic component of environment. Environment is made up of both living and non living things. The living things which are part of environment are called biotic while non living things which are part of environment are called abiotic.
Hence, option D is the correct answer.

8.Match the following.

Quantity	SI Unit
1. Resistance	a. Watt
2. Energy	b. Ohm
3. Power	c. Joule

A. 1 – b, 2 – c, 3 – a
B. 1 – a, 2 – c, 3 – b
C. 1 – b, 2 – a, 3 – c
D. 1 – c, 2 – a, 3 – b
Ans. A
Sol.

Quantity	SI Unit	Dimensions
Resistance	Ohm	$ML^2T^{-3}A^{-1}$
Energy	Joule	ML^2T^{-2}
Power	Watt	ML^2T^{-3}

9. What is the main function of white blood cells (WBCs)?
A. To transport oxygen
B. To fight against infection
C. Blood clotting
D. To provide red colour to blood
Ans. B
Sol. The main function of White Blood Cells is to fight against infection. White Blood Cells are also called leukocytes. These are the cells of immune system protecting the body from both infectious diseases and foreign invaders.

10.What are the components of nucleus of an atom?
A. Only Protons
B. Protons and Neutrons
C. Neutrons and Electrons
D. Only Neutrons
Ans. B
Sol.

- Protons and Neutrons are the components of nucleus of an atom.
- Protons are the particles which have positive charge and found within atomic nuclei.
- Neutrons are the particles which have no charge and found within atomic nuclei (except for hydrogen-1). Protons are slightly smaller in mass as compared to neutrons.

11. Energy in the foods can be measured in which units?
A. Kelvin B. Joule
C. Calorie D. Celsius
Ans. C
Sol. The energy in foods is measured in Calorie. 1 calorie (in gm) is equal to 4.186 joule.

12.Which of the following is an artificial ecosystem?
A. Aquarium B. Zoo
C. Sanctuary D. Both a & b
Ans. D
Sol. The ecosystem which is created or altered by human, and are not necessarily found in nature. Both option A & B are the correct option.

13.Who amongst the following invented 'chronometer'?
A. John Harrison B. William Harvey
C. Friese Greene D. Robert Koch
Ans. A
Sol. John Harrison invented marine chronometerin 1761. It is a long-sought-after device for solving the problem of calculating longitude while at sea. A marine chronometer is a timepiece that is precise and accurate enough to be used as a portable time standard. It was a major technical achievement as accurate knowledge of the time.

14.Which of the following is considered as physical basis of life?
A. Cell wall B. Cell membrane
C. Mitochondria D. Protoplasm
Ans. D
Sol. Protoplasm is the living content of a cell that is surrounded by a plasma membrane. Thomas Huxley referred to it as the "physical basis of life" and considered that the property of life resulted from the distribution of molecules within this substance.

15. Which among the following has largest storing space?
A. Giga byte
B. Mega byte
C. Tera byte
D. Kilo byte
Ans. C
Sol. A) Giga byte – 1024 Mega byte
B) Mega byte – 1024 Kilo byte
C) Tera byte – 1024 Giga byte
D) Kilo byte – 1024 bytes
1 byte is made up of 8 bits.
Thus among the given options, the largest storing space is Tera byte.

16.Wings of birds are:
A. Modified hind limbs
B. New structure
C. Integumentary outgrowth
D. Modified fore limbs
Ans. D
Sol. The wings are modified forelimbs of birds which are the key to bird fight. Each wing composed of three limb bones, the humerus , ulna and radius.
Hence option D is the right answer.

17.Which of the following cell organells are present only in plant cell?
A. Lusosomes B. Plastids
C. cell membrane D. Mitochondria
Ans. B
Sol.

- There are organelles that plant cells have that animal cells do not; such as plastids (leucoplasts, chromoplasts, and chloroplasts), a central vacuole, and a cell wall.
- The plastid is a double-membrane organelle found in the cells of plants, algae, and some other eukaryotic organisms.
- Plastids were discovered and named by Ernst Haeckel, but A F W Schimper was the first to provide a clear definition.

18. Laser was invented by _____.
A. A H Taylor B. T H Maiman
C. Lee De Forest D. Thomas Edison
Ans. B
Sol.

- A laser is a device that emits light through a process of optical amplification based on the stimulated emission of electromagnetic radiation.
- The term "laser" originated as an acronym for "light amplification by stimulated emission of radiation".
- The first laser was built in 1960 by Theodore H. Maiman at Hughes Research Laboratories, based on theoretical work by Charles Hard Townes and Arthur Leonard Schawlow.

19.Where is pituitary gland situated?
A. Near stomach B. Near lungs
C. Near kidney D. Near brain
Ans. D
Sol. Pituitary gland is situated near brain. There are two types of glands which endocrine glands and exocrine glands.
Endocrine glands: pituitary, thyroid, parathyroid, adrenal, kidney, pineal etc.
Exocrine glands: salivary glands, sweat glands etc.

20.Which of the following are the main components of stainless steel?
A. Iron and zinc
B. Silver
C. Iron, chromium and Nickel
D. Iron and nickel
Ans. C
Sol.

- Stainless steel is an alloy which is made of various elements varying their percentage of a quantity. It is an iron alloy with added elements such as chromium, nickel, silicon, manganese, nitrogen and carbon.

21. Which among the following is used in fire extinguisher?
I. Carbon dioxide
II. Oxygen
III. Sulphur dioxide
A. Only I
B. Only II
C. Only III
D. All options are correct
Ans. A
Sol.

- Carbon dioxide is used in fire extinguisher.
- Fire extinguishers contain different chemicals, depending on the application. Hand held extinguishers, which are commonly sold at hardware stores for use in the kitchen or garage, are pressurized with nitrogen or carbon dioxide (CO2) to propel a stream of fire-squelching agent to the fire

22.Which of the following glands secrete growth hormone?
A. Adrenal
B. Pituitary Gland
C. Gonads
D. Pancreas
Ans. B
Sol.

- Pituitary Gland produces growth hormones. It also produces other hormones that have different functions from the growth hormone.

- It promotes growth in children. In adults, it does not cause growth but it helps to maintain normal body structure and metabolism, including helping to keep blood glucose levels within set levels.

23. When a bus starts suddenly, then passengers in the bus tend to fall backwards. This event is an example of _____.
A. Inertia of rest
B. Inertia of motion
C. Inertia of direction
D. None of these
Ans. A
Sol.

- When bus suddenly starts the passengers fall back. This is because our body is initially at rest but when the bus starts moving our feet which are in contact with the bus also tend to move forward but our body shows inability to move due to inertia and as a result it falls back.
- Inertia at rest is the tendency of an object to stay at rest when you start pushing at it.
- This is due to Newton's first law of motion which states that every object will remain at rest or in uniform motion in a straight line unless compelled to change its state by the action of an external force.

24.Sodium bicarbonate is chemical name of which of the following?
A. Baking Soda
B. Washing Powder
C. Plaster
D. Fly-Ash
Ans. A
Sol. Sodium bicarbonate is commonly known as baking soda. It's formula is $NaHCO_3$. Sodium bicarbonate is a white solid that is crystalline but often appears as a fine powder.

25.Who amongst the following gave the 'Periodic Law'?
A. Carlton McGee
B. Emil Fischer
C. Charles Darwin
D. Dmitri Mendeleev
Ans. D
Sol. 'Periodic table' was given by Dmitri Mendeleev. Modern periodic table is developed after the periodic law and a periodic table was given by Mendeleev. The modern periodic law can be stated as "the physical and chemical properties of the elements are periodic functions of their atomic numbers".

26.The first law of thermodynamics is simply the case of _____.

A. Charle's law
B. Newton's law of cooling
C. The law of heat exchange
D. The law of conservation of energy

Ans. D
Sol. The first law of thermodynamics is a version of the law of conservation of energy adapted for thermodynamic systems. The law of conservation of energy states that the total energy of an isolated system is constant; energy can be transformed from one form to another, but can be neither created nor destroyed. Hence option D is the right answer.

27.Which contact force is responsible for changing the state of motion of an object?
A. Magnetic force
B. Frictional force
C. Muscular force
D. Electrostatic force
Ans. B
Sol.

- Frictional force is responsible for changing the state of motion of an object. Friction is the force resisting the relative motion of solid surfaces, fluid layers, and material elements sliding against each other.

28.In a periodic table, while moving from left to right in a period, number of ……. Remains same.
A. electrons
B. protons
C. shells
D. nurtrons
Ans. C
Sol.

- In a periodic table, while moving from left to right in a period, the **number of shells remains same**.
- There are **7 rows or periods (horizontal)** in the periodic table.
- This table contains the 118 elements of chemistry.
- On moving from left to right in a period, the chemical reactivity of elements first decreases and then increases. On moving from left to right in a period, the number of valence electrons increases from 1 to 8. On moving from left to right in a period, the atomic size decreases; the size of the atoms decreases.

29. Which of the following is not a connective tissue?
A. Adipose Tissue
B. Compact Bone
C. Cardiac Muscle
D. Areolar Tissue
Ans. C
Sol. Cardiac Muscle is not a connective tissue.
Tissue is a cellular organizational level between cells and a complete organ.

30.Which of the following quantities does not have any unit?
A. Speed
B. Density
C. Relative Density
D. Acceleration

Ans. C
Sol. Relative Density is defined as the ratio of the density of a substance to the density of a standard, usually water for a liquid or solid, and air for a gas. Hence, it does not have any unit.

Quantity	Unit
Speed	m/s
Density	kg/m^3
Acceleration	m/s^2

31.The traditional art of 'Jamdani' weaving originated in _____.
A. Nepal
B. Myanmar (Burma)
C. Bangladesh
D. China
Ans. C
Sol.
• **The traditional art of 'Jamdani' weaving originated in Bangladesh.**
• In 2013, the traditional art of weaving jamdani was declared a UNESCO Intangible Cultural Heritage of Humanity.

• In 2016, Bangladesh received geographical indication (GI) status for Jamdani Sari.

32.Who among the following became the fastest Asian to cycle around the globe in 2018?
A. Swati Sani
B. Vedangi Kulkarni
C. Deena Prince
D. Disha Srivastava
Ans. B
Sol.
• **Vedangi Kulkarni became the fastest Asian to cycle around the globe in 2018**.
• She belongs to Pune, Maharashtra.
• Vedangi Kulkarni reached Kolkata in December 2018 completing 29000 kms distance required to qualify as bicycling across the world.
• She Started the journey from Perth.

33.Who among the following was give the title 'Quaid-i-Azam'?
A. Jawaharlal Nehru
B. Muhammad Ali Jinnah
C. Sardar Vallabhbhai Patel
D. Mahatma Gandhi
Ans. B
Sol.
• **Muhammad Ali Jinnah was given the title 'Quaid-i-Azam' and Baba-i-Qaum.**
• He was the first Governor-General of Pakistan.
• Jinnah died at age 71 in September 1948.

34.Which soil is found in the maximum area in Uttar Pradesh?
A. Red clay
B. Alluvial clay
C. Sandy clay
D. Red and Black mixed
Ans. B
Sol.
• Much of the area of Uttar Pradesh is covered by a deep **layer of alluvium** spread by the slow-moving rivers of the Ganges system.
• On the basis of the analysis made by **Wadia, Krishnan and Mukherjee**, the soils of Uttar Pradesh can be divided into two parts:
• Alluvial soil of Gangetic plain and Soils of Southern Uttar Pradesh formed of ancient Crystalline and Vindhyan rocks.

35.Central Industrial Security Force (CISF) is all set to have a permanent deployment of more than 300 highly-trained personnel at the Baglihar Hydro Electric Power plant in Jammu and Kashmir. It is built on which river?
A. Sutlej
B. Beas
C. Ravi
D. Chenab
E. Jhelum
Ans. D
Sol. * According to sources, the Central Industrial Security Force (CISF) is all set to have a permanent deployment of more than 300 highly-trained personnel at Baglihar Hydro Electric Power plant in Jammu and Kashmir.
* This Hydroelectric Power Project is one of the most sensitive hydroelectric plants. Recently, the security forces gunned down two militants along with a top Hizbul Mujahideen commander.
* Another senior government official also said that there have been consistent threats on Baglihar Dam as Pakistan has opposed its construction claiming it as a violation of the Indus Water Treaty of 1960.
* Baglihar Dam also known as Baglihar Hydroelectric Power Project, is a run-of-the-river power project on the Chenab River in the Ramban district of the Indian state of Jammu and Kashmir.
* Baglihar Hydroelectric Power Project was conceived in 1992, approved in 1996 and construction began in 1999.

36.Union Health Minister Dr. Harsh Vardhan has launched the "Trans-Fat Free" logo during the 8th International Chefs Conference in _____.
A. Mumbai B. Nagpur
C. New Delhi D. Noida
E. Lucknow
Ans. C
Sol.

* Union Health Minister Dr. Harsh Vardhan has launched the "Trans-Fat Free" logo during the 8th International Chefs Conference in New Delhi.
* The logo can be used by the Food establishments which use trans-fat free fats/oil and do not have industrial trans-fat more than 0.2g/100g of food, in compliance with the Food Safety and Standards (Advertising and Claims) Regulations, 2018.
* The logo can be voluntarily used by food business operators in their outlets and also on food products.
* India is committed to eliminating it from the food supply and is progressing towards its objective of trans fat elimination by 2022 in a phased manner.
* "The FSSAI is committed to reducing trans-fatty acids produced in industries by 2 per cent in a phased manner by 2022.

37.In which of the following cities India's first e-waste clinic will be set up?
A. Indore B. Jabalpur
C. Bhopal D. Raipur
E. New Delhi
Ans. C
Sol. * The Bhopal Municipal Corporation (BMC) and the Central Pollution Control Board (CPCB) have joined hands to set up the country's first e-waste clinic in Bhopal.
* It would enable segregation, processing and disposal of waste from both household and commercial units.
* The clinic is a three-month pilot project, if successful, would be replicated elsewhere in the country.
* Electronic waste will be collected door-to-door or could be deposited directly at the clinic in exchange for a fee.

38.Which of the following Hollywood actress has been named as UNESCO Goodwill Ambassador for Indigenous Peoples?
A. Angelina Jolie
B. Yalitza Aparicio
C. Salma Hayek
D. Emma Stone
E. Priyanka Chopra
Ans. B
Sol. * The United Nations Educational, Scientific and Cultural Organization (UNESCO) has named Mexican actress Yalitza Aparicio as a UNESCO Goodwill Ambassador for Indigenous Peoples.
* Ms. Aparicio is committed to the fight against racism and for the rights of women and indigenous peoples. She was chosen to play in Alfonso Cuarón's film Roma while studying to be a teacher.
* Her performance in the film, for which she had to learn the Mixtec language of her father's family, won her an Oscar nomination for best actress, the first indigenous Mexican woman to be so recognized by the US Academy Awards.
* TIME magazine (USA) listed her as one of the 100 most influential people in the world in 2019.

39.Former judge of Madras High Court Justice Vinod Kumar Sharma has been appointed as the Lokpal of which state?
A. Uttar Pradesh B. Haryana
C. Punjab D. Kerala
E. Telangana
Ans. C
Sol. * Punjab government has appointed Justice Vinod Kumar Sharma as Punjab Lokpal.
* This is done without amending Punjab Lokpal Act, 1996 in which CM of Punjab and cabinet ministers are out of its ambit.
* Justice Satish Kumar Mittal resigned from the post of Lokpal in April 2018 and became the chairman of Haryana Human Rights Commission, since then this post was lying vacant.
* Justice Sharma had worked as an advocate in Punjab and Haryana High Court from 1974 till his elevation as Judge of Punjab and Haryana High Court in March 2006.
* He retired as a judge of Madras High Court in May 2013. At least 3,000 of his judgments have been quoted in various law books and journals.
* The Lokpal holds the office for a term of six years.

40.Joint military training, Exercise Nomadic Elephant–XIV started on 5th October 2019. It is between which two countries?

A. India and Thailand
B. India and Singapore
C. India and Malaysia
D. India and China
E. India and Mongolia
Ans. E
Sol. * 14th edition of Indo – Mongolian joint military training, Exercise Nomadic Elephant–XIV started on 5th October.
* The exercise will be conducted from 05 to 18 Oct 19 at Bakloh. In this exercise, the Indian Army is being represented by a battalion of the RAJPUTANA RIFLES Regiment.
* Nomadic Elephant – XIV is the fourteenth edition between the two nations aimed at training troops in counter-insurgency & counter-terrorism operations under the United Nations mandate.
* The joint exercise will enhance defence co-operation and military relations between the two nations.

41.In economic terms what do we mean by 'Intermediate Goods'?
A. Fixed assets used by manufacturers
B. Price of goods without GST
C. Goods sold between industries for the resale or production of other goods
D. Goods in transit before reaching the consumers
Ans. C
Sol.
• In economic terms**, intermediate goods** are sold between industries for the resale or production of other goods.
• An intermediate good is a product used to produce a final good or finished product.
• These goods can be used in production but they can also be consumer goods.
• **For example** : If a consumer buys a packet of sugar to use at home, it is a consumer good but if a manufacturer purchase sugar to use during the production of another product, it becomes an intermediate good. Same as Sugar, Steel , Glass, Wood etc.

42.How many provinces is the country of Nepal divided into?
A. 5
B. 6
C. 7
D. 4
Ans. C
Sol.
• The country of Nepal is divided into **7 provinces.**
• The provinces of Nepal were formed on 20th September 2015.
• The seven provinces are Biratnagar, Janakpur, Hetauda, Pokhara, Butwal, Birendranagar and Godawari.

43.The Khilafat Movement of 1920 was organized as a protest against the injustice done to _____.
A. Iraq
B. Turkey
C. Egypt
D. Afghanistan

Ans. B
Sol.
• **The Khilafat Movement of 1920 was organised as a protest against the injustice done to Turkey.**
• This movement led by the brothers Shaukat and Muḥammad ʿAlī and by Abul Kalam Azad.
• It was a significant Islamic movement in India during the British rule.
• The main objective behind this movement was to enlist the support of the Muslim community into this movement, which addressed the issue of 'Swaraj' (Self-Government).

44.Which gas is used as an anaesthetic in dental surgeries?
A. Isobutene gas
B. Isochlorine gas
C. Isomethyl gas
D. isoflurane gas
Ans. D
Sol.
* **Isoflurane gas** is used as an anaesthetic in dental surgeries.
* It is formed by combining nitrous oxides and oxygen and sevoflurane gas.
* Desflurane, isoflurane and sevoflurane are some of the widely used anaesthetics.

45.A Traditional 'battery' contains which of the following chemichals?
A. Ethanol

B. Sodium bicarbonate
C. Ethylene glycol
D. Sulphuric acid
Ans. D
Sol.
• A traditional 'battery' contains **Sulphuric Acid.**
• Its formula is H_2SO_4.
• It is also known as king of acids.

46.In contact process, the main product is _____.
A. SO2
B. SO3
C. NH3
D. Fe
Ans. B
Sol.
• The contact process is the method of **producing sulfuric acid** in the high concentrations.
• This process was patented in 1831 by British vinegar merchant Peregrine Phillips.
• Sulfur dioxide and dioxygen react as follows: 2 SO2(g) + O2(g) --2 SO3(g)

47.What is the chemical name of the deadly poison 'cyanide'?
A. Hydrochloric acid
B. Sulfuric acid
C. Nitric acid
D. Prussic acid
Ans. D
Sol.
• **The scientific name of cyanide is Prussic Acid.**
• A cyanide is a chemical compound that contains the cyno group C≡N.
• The cyanide ion is isoelectronic with carbon monoxide and with molecular nitrogen.

48.Identify the unit of measuring intensity of sound.
A. Knots
B. Ampere
C. Decible
D. Candela
Ans. C
Sol.
• **Decible is a unit of measurement for intensity of sound.**
• The *human ear* as a dyamic *range* from 0dB (threshold) to 120-130 *dB*.
• Normal conservation occurs at 60 db, a car horn at 110db, etc.

49.The phrase 'Survival of the fittest' as a way of describing the mechanism of natural selection was coined by _____.
A. Marie Curie
B. Louis Pasteur
C. Charles Babbage
D. Herbert Spencer
Ans. D
Sol.
• The phrase 'Survival of the fittest' as a way of describing the mechanism of natural selection **was coined by Herbert Spencer.**
• Spencer developed an all-embracing conception of evolution as the progressive development of human culture and societies.
• The phrase 'Survival of the fittest' refers that only those species survives which is strong and fittest of all.

50.DNA is stored majorly in _____ of the cell.
A. nucleus
B. golgi body
C. cytoplasm
D. plasma membrane
Ans. A
Sol.
• Mainly **DNA is stored in cell nucleus** but a small amount of DNAs are also present in mitochondria.
• DNA is the hereditary material in humans and almost all other organisms.
• The important property of DNA is that it can replicate, or make copies of itself. Each strand of DNA in the double helix can serve as a pattern for duplicating the sequence of bases.

51.Night Blindness is caused by the deficiency of Vitamin _____.
A. K
B. C
C. B12
D. A
Ans. D
Sol.

• **Night Blindness is caused by the deficiency of vitamin A.**
• Night blindness is the inability to see well at night or in poor light. Its causes include glaucoma medications and cataracts.
• Vitamin A is the name of a group of fat-soluble retinoids.

52.Wind turbines convert _____ energy into mechanical power.
A. Nuclear
B. Gravitational
C. Chemical
D. Kinetic
Ans. D
Sol.
• Wind turbines convert **kinetic energy into mechanical power**.
• This mechanical power can be used for specific tasks (such as grinding grain or pumping water).
• A generator can convert this mechanical power into electricity to power homes, businesses, schools, and the like.

53.Which of the following is the natural host of Nipah virus?
A. Rats
B. Pigs
C. Fruit bats
D. Aedes mosquitoes
Ans. C
Sol.
• The pteropus bats or **the fruit bats** act as a natural host for Nipah virus.
• Pigs can also act as intermediate hosts. Nipah virus disease is a zoonotic disease which means animal to human transmission.
• It was first identified in 1998 at Kampung Sungai Nipah village, Malaysia. The virus is named after this village.
• The first outbreak of this disease in India was reported in Siliguri, West Bengal in 2001. Most recently, the Indian state of Kerala faced an outbreak of Nipah virus in 2018-19.

54.The summer solstice 2019 in the Northern Hemisphere will occur on _____.
A. 21st June
B. 26th June
C. 20th June
D. 24th June
Ans. A
Sol.
• **The Summer solstice occurred on Friday, 21 June, 2019.**
• Summer solstice, the two moments during the year when the path of the Sun in the sky is farthest north in the Northern Hemisphere (June 20 or 21) or farthest south in the Southern Hemisphere (December 21 or 22).

55.What is the term used to describe the angular distance of a place north or south of Earth's equator?
A. Hemisphere
B. Longitude
C. Latitude
D. Pole
Ans. C
Sol.
• **Latitude** is used to describe the angular distance of a place north or south of Earth's equator.
• **Longitude** is a geographic coordinate that specifies the east–west position of a point on the Earth's surface, or the surface of a celestial body.

56.What does the slope of a velocity time graph reperesent ?
A. Acceleration
B. Distance
C. Speed
D. momentum
Ans. A
Sol.
- Slope of a velocity time graph represents Acceleration.
- if the acceleration is zero, then the velocity-time graph is a horizontal line (i.e., the slope is zero). If the acceleration is positive, then the line is an upward sloping line (i.e., the slope is positive). If the acceleration is negative, then the velocity-time graph is a downward sloping line (i.e., the slope is negative)

57.Optical fibre works on which of the following principle of light?
A. Reflection

B. Refraction
C. Diffraction
D. Total internal reflection

Ans. D
Sol. Optical fibre works on **Total internal reflection.** It is the phenomenon which occurs when a propagated wave strikes a medium boundary at an angle larger than a particular critical angle with respect to the normal to the surface.

58.Which instrument is used to measure very high temperatures?
A. Machmeter
B. Photometer
C. Pyknometer
D. Pyrometer

Ans. D
Sol. A **pyrometer** is a device for measuring **very high temperatures** and uses the principle that all substances emit radiant energy when hot, the rate of emission depending on their temperature. There are two main types of pyrometer, namely the **total radiation pyrometer** and the **optical pyrometer**.

59.The discoverer of penicillin was
A. Lord Lister
B. Alexander F1eming
C. Karl Landsteiner
D. Walter Reed

Ans. B
Sol. Penicillin, the first true antibiotic, was discovered by **Alexander Fleming**, Professor of Bacteriology at St. Mary's Hospital in London.
Penicillins are a certain collection of antibiotics that eliminate infection causing bacteria. Also known in short as pen or PCN, they originate from a type of fungi called Penicillium fungi. They are used in the treatment or prevention of many different bacterial infections, usually caused by Gram-positive organisms.

60.Crescograph was invented by
A. S.N. Bose
B. P.C. Roy
C. J.C. Bose
D. P.C. Mahalanobis

Ans. C
Sol. Indian Scientist Sir Dr. Jagadish Chandra Bose invented the Crescograph an electrical instrument that could measure the growth of a plant

61.Digestion of carbohydrates begins in _____?
A. Small intestine
B. Mouth
C. Buccal cavity
D. Stomach

Ans. B
Sol. Digestion of carbohydrates, and in particular starches, begins in the mouth with the action of salivary amylase. This enzyme catalyzes, or speeds along, the hydrolysis of the starch molecule.

62.Energy is stored in liver and muscles in the form of
A. Carbohydrate
B. Fat
C. Protein
D. Glycogen

Ans. D
Sol. When the body needs glucose for energy, stored fat in the Glycogen is used.

63.Making of Curd from Milk is because of:
A. Bacteria
B. Virus
C. Protozoa
D. Other

Ans. A
Sol. Bacteria was required in the process of biotechnology from ancient times to curdling. To make curd, after boiling the milk to 30-40 ° C, it is cooled and added a sweet curd. Now due to the presence of lactic acid bacteria in the curd, the bacteria present in it grow rapidly in a few hours, accumulating whole milk.

64.The pH value of the blood in human body is
A. 6.4

B. 4.8
C. 7.4
D. 8.4
E. 6.2

Ans. C
Sol. PH value of human body's blood is 7.4. An adult man has an average of 5-6 liters of blood.

65.In Nuclear reactors graphite is used as_____.
A. Lubricant
B. Fuel
C. Linear of the reactor
D. Moderator

Ans. D
Sol. **Nuclear reactors** are used at nuclear power plants for **electricity** generation .These are generally **graphite moderated** and CO_2cooled.

66.Teflon is the common name of
A. Polytetrafluoro ethylene
B. Polyvinyl chloride
C. Polyvinyl fluoride
D. Dichlorodifluoro methane

Ans. A
Sol. The common name of Polytetrafluoroethylene is Teflon. Polytetrafluoroethylene (PTFE) is a synthetic fluoropolymer of tetrafluoroethylene that has numerous applications. The well-known brand name of PTFE-based formulas is Teflon by Chemours.

67.Rutherford's alpha-particle scattering experiment was responsible for the discovery of –
A. Atomic Nucleus
B. Electron
C. Boson
D. Neutron
E. None of the above/More than one of the above

Ans. A
Sol. Atomic nucleus
• On the basis of his experiment, Rutherford put forward the nuclear model of an atom, which had the following features:
i. There is a positively charged centre in an atom called the nucleus. Nearly all the mass of an atom resides in the nucleus.
ii. The electrons revolve around the nucleus in well-defined orbits.
iii. The size of the nucleus is very small as compared to the size of the atom
Source: Science NCERT Class 9 Chapter 4

68.Galvanization is a method of protecting iron from rusting by coating with a thin layer of –
A. Gallium
B. Aluminum
C. Zinc
D. Silver
E. None of the above/More than one of the above

Ans. C
Sol. Zinc
• Galvanization (or galvanizing as it is most commonly called in that industry) 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 parts are submerged in a bath of molten zinc.
Source : Science NCERT Class 9 Chapter 4

69.Decibel unit is used to measure
A. Light intensity
B. Sound intensity
C. Magnitude of Earthquake
D. None of the above

Ans. B
Sol. The ' Decibel ' unit is used to measure the intensity of the sound. By Kandla, the intensity of light
is measured. on the reactor scale, the seismic intensity is measured.

70.In SONAR, we use
A. ultrasonic waves
B. Infrasonic waves
C. radio waves
D. audible sound waves

Ans. A

Sol. Sonar (originally an acronym for Sound Navigation And Ranging) is a technique that uses sound propagation (usually underwater, as in submarine navigation) to navigate, communicate with or detect objects on or under the surface of the water, such as other vessels.

71.According to new definition adopted by 'International Astronomial Union' in 2006, which of the following is no a 'planet'?
A. Uranus
B. Neptune
C. Pluto
D. Jupiter

Ans. C
Sol. According to the new definition of the planets given in the conference organized in Prague in August 2006 by the International Astronomical Union (IAU), it has been classified as a dwarf planet in the category of planet because it does not meet the criteria of calling Pluto as Planet. Pluto was invented in 1930 by Claude Tamvo.

72.Which one of the following does not contain silver?
A. Horn silver
B. German silver
C. Ruby silver
D. Lunar caustic

Ans. B
Sol. Except German silver, all alloys given in question contain silver. There are some important alloys and their components are given below:
(i) Horn silver It is also called silver chloride (Ag Cl). Its components are Ag and Cl.
(ii) German silver Cu-50%,Zn-35%,Ni-15%.
(iii) Ruby silver It is also called red silver.
(iv) Lunar caustic It is also called silver nitrate (AgN03).

73.Which of the following in measured by 'Anemometer?
A. Velocity of water-flow
B. Depth of water
C. Speed of the wind
D. Intensity of light

Ans. C
Sol. The power of wind and speed is measured by the anemometer. Anemometer was invented in 1846 by John Thomas Romney Robinson.

74.The image formed by an astronomical telescope is:
A. Virtual and diminished
B. Virtual and magnified
C. Real and diminished
D. Real and magnified

Ans. B
Sol. An astronomical telescope is an optical instrument which is used to see the magnified image of distant heavenly bodies like stars, planets, satellites and galaxies etc. The final image formed by an astronomical telescope is always virtual, inverted and magnified.

75.Idol of dancing girl (Bronze) is found in which of the following civilization?
A. Mesopotamian Civilization
B. Indus Valley Civilization
C. Persian Civilization
D. Egyptian Civilization

Ans. B
Sol. Idol of dancing girl made up of bronze was found in Indus Valley Civilization city of Mohenjo-Daro. It was discovered by British archaeologist Earnest Mackay in 1926.

76.Taxila University is located currently in which country?
A. Bangladesh
B. India
C. Pakistan
D. Nepal

Ans. C
Sol.

- Takshashila University is the most famous and the world's first university. Takshashila University was established 2700 years ago in Taxila.

- Takshasila is also known as Taxila or Takshila. Between 600BC and 500AD, Taxila was in the kingdom of Gandhar, in Ancient India before partition, but now Takshashila is in Rawalpindi district of the Punjab Pakistan after partition.

77.Who among the following is known as 'Bismarck of India'?
A. Sardar Vallabhbhai Patel
B. Bhagat Singh
C. Swami Vivekanand
D. Lala Lajpat Rai

Ans. A
Sol.

- Sardar Vallabhbhai Patel is known as 'Bismarck of India'.
- He was the first Deputy Prime Minister of India.
- He is also known as 'Iron Man of India'.

78.In Indus valley civilization, Great Bath is found in which of the following place?
A. Lothal
B. Mohenjo-daro
C. Mitathal
D. Kalibangan

Ans. B
Sol. In Indus valley civilization, Great Bath is found in Mohenjo-daro.

City	River	Archaeolog
Harappa	Ravi	Granaries
Mohenjodaro	Indus	Bronze Ido
Lothal	Bhogava	Dockyard
Dholavira	Indus	City plannir

79.In which century, Qutub Minar of Delhi was built?
A. 12th Century
B. 13th Century
C. 14th Century
D. 11th Century

Ans. B
Sol.

- Qutub Minar of Delhi was started in 13th Century by Qutub-ud-Din Aibak. In 1220, Aibak's successor and son-in-law Shamsuddin Iltutmish completed a further three storeys.

80.Which was the oldest Budhist University in Ancient India?
A. Taxila
B. Nalanda
C. Odanthapuri
D. Kanchi

Ans. A
Sol.

- **Taxila University** was a centre of knowledge continued under the Maurya Empire and Greek rule in the 3rd and 2nd centuries BCE.
- It became the greatest learning centre in the region and allowed for exchanges between people from various cultures.

81.In which year Quit India movement started?
A. 1939
B. 1940
C. 1942
D. 1945

Ans. C
Sol.

- The Quit India movement started in 1942.
- This movement was launched at Bombay session by Mahatma Gandhi during World War II demanding an end to British Rule in India.

82.'Safari' is a type of _____.
A. Operating system
B. Browser

C. Printer
D. Input device

Ans. B
Sol.

- 'Safari' is a type of browser.
- Basically there are two types of devices in computer which are input devices and output devices.Input devices are used to provide data and control signals of a computer or we can say that input devices are used to provide raw data or information to the computer. e.g. keyboard, mouse, scanner, joystick, cameras etc.
- Output device is a part of the computer that receives from the computer and present or displays it. e.g. monitor, LED, Printer , projectors, speakers etc.
- Browsers are used for net surfing. Chrome, Mozilla, internet explorer, Safari are the examples of browser.

83._____ are used for communication in artificial satellites
A. Infrared waves
B. Radio waves
C. Ultraviolet (UV) rays
D. Amplitude Modulation (A.M.) waves

Ans. B
Sol.

- Radio waves and microwaves both are used for communication in artificial satellites. Radio waves are used for transmit television programmes while microwaves are used for mobile and wi-fi.
- Note: In question, only radio waves is given in the option. So, option B is the correct answer.

84.Jet engine works on the principal of conservation of _____.
A. Heat
B. Mass
C. Linear momentum
D. Angular momentum

Ans. C
Sol.

- Jet engine works on the principal of conservation of Linear momentum.
- The principal of conservation of linear momentum is a system has constant magnitude and direction if the system is subjected to no external force.
- A body or system of bodies in motion retains its total momentum, the product of mass and vector velocity, unless an external force is applied to it.

85.Sulphur dioxide bleaches colouring matter by :
A. Reduction
B. Dehydration
C. Decomposition
D. Oxidation

Ans. A
Sol.

- Sulphur dioxide gas exhibits bleaching properties in presence of moisture. It dissolve in water liberating nascent hydrogen. Nascent hydrogen removes oxygen atoms from the coloring matter (reduces coloring matter) and it loses its color.
- The bleaching action sulphur dioxide is due to its **reducing action**. The colour of pigment on exposure to SO2 gets **reduced** to a colourless compound.

86.Red rot of sugarcane is caused by:
A. Bacteria
B. Virus
C. Fungus
D. None of these

Ans. C
Sol.

- Red rot disease is caused by the **fungus Glomerella tucumanensis** (older name, Colletotrichum falcatum).

- Red rot occurs in various parts of the cane plant but it is usually considered a stalk and a seed-piece disease.

- Its symptoms are highly variable depending upon the susceptibility of the sugarcane variety and the environment.

87.The fleshy thalamus is edible in
A. Apple
B. Tomato
C. Orange
D. Mango

Ans. A
Sol. Apple is a pome, a simple, fleshy but false fruit as it is surrounded by a fleshy thalamus which is edible while actual fruit lies within. Other examples are pear, loquat, etc.

88.In our body, antibodies are formed against pathogens in
A. liver by RBC
B. blood by platelets
C. brain by macrophages
D. thymus by lymphocytes

Ans. D
Sol.

- In our body, antibodies are formed against pathogens in thymus by lymphocytes.

- An antibody, also known as an immunoglobulin, is a large, Y-shaped protein **produced** mainly by plasma cells that is used by the immune system **to** neutralize **pathogens** such as pathogenic bacteria and viruses.

89.Where does Amoeba digests its food?
A. Pseudopodia
B. Nucleus
C. Food Vacuole
D. Cell membrane

Ans. C
Sol. Amoeba digests its food in Food vacuole. Amoeba is a microscopic unicellular organism. It mostly resides in places like pond water. It's structure consists of the following basic components:
• a cell membrane
• a nucleus
• cytoplasm – endoplasm and ectoplasm
• small food vacuoles (these look like small bubbles)
• finger-like projections called pseudopodia (also known as " false feet")

90.Disease-causing micro-organisms are called_____.
A. antibiotics
B. carriers
C. pathogens
D. antigens

Ans. C
Sol.

Antibiotics	a medicine that inhibits the growth of o destroys microorganisms.
Carriers	is a person who harbors the pathogeni microorganism without suffering from disease from it.
Pathogens	is a micro-organism that causes disease
Antigens	is a molecule capable of inducing an immune response in the host organism

91.Who invented electric motor?
A. Michael Faraday
B. Guglielmo Marconi
C. James Watt
D. Isaac Newton

Ans. A
Sol.

- The electric motor was invented by Michael Faraday.

- Electric motor is an electrical machine that converts electrical energy into mechanical energy

92.Who was the chairman of **Third Buddhist Council ?**
A. Sabakami
B. Mogaliputta Tissa
C. Vasumitra , Ashvaghosa
D. None of these

Ans. B
Sol. * **Third Buddhist Council** was held at **Patliputra** in **250 BC** under the chairmanship of **Mogaliputta Tissa .**
* **Ashoka** was the **patron** of this **council.**
* **Sabakami** , & Vasumitra , Ashvaghosa was the also chairmans of the **second and fourth** Buddhist's Council respectively.

93.Who was the founder of **the Satavahans or Andhras ?**
A. Dasrath
B. Simuka
C. Rajendar
D. Mahendra

Ans. B
Sol. •**Simuka** (60 – 37 BC) was the founder of **Satvahana Dynasty.**
•**Gautamiputra Satakarni** was a famous king of this dynasty.
•**Satvahanas** were finally succeeded by the **Ikshvakus** in AD 3rd Century.

94.The Virashaiva Movement in Karnataka founded by whom ?
A. Sundarar
B. Andal
C. Basavanna
D. Tipu Sultan

Ans. C
Sol. • **The Virashaivas** were Shaitive saints who were completely against the **caste system, idol worship and meaningless rituals .** One of the most important figure was **Basavanna.**
• The Virashaivas included people from all social backgrounds and women as well. **Akkamahadevi** was a famous Virashaiva saint. This movement is also known as the **Lingayat movement.** It originated in **Karnataka** in the **12th Century CE** (Common Era)**.**

95.Who was the first Chancellor of Jamia Millia Islamia University?
A. Abdul Ghaffar Khan
B. Rajkumari Amrit Kaur
C. Hakim Ajmal Khan
D. Sir Sayyad Ahmad Khan

Ans. C
Sol.
- **Hakim Ajmal Khan** was one of the founders of the Jamia Millia Islamia University, becoming its first chancellor in 1920 and remaining in office until his death in 1927. T
- he University was established by Muslim leaders in 1920, prior to partition. Among the founding leaders, the main were the Ali Brothers, Moulana Mohammad Ali Jouhar and Moulana Shaukat Ali.

96.The school of Indian art which is also known as the Greco Roman Buddhist is the _____ school.
A. Mauryan
B. Shunga
C. Gandhara
D. Gupta

Ans. C
Sol. The interaction of Greek and Buddhist culture flourished in the area of Gandhara. Gandhāra was an ancient Indic kingdom situated in the northwestern region of Pakistan, around Peshawar. Gandhara existed since the time of the Rigveda and formed part of the Achaemenid Empire in the 6th century BC.

97.Wall Street collapse led to_____
A. World War II
B. Recession
C. U.S attack on Iraq
D. Great depression

Ans. D

Sol. Wall Street collapse led to Great depression Wall Street is an eight-block-long street running roughly northwest to southeast from Broadway to South Street, at the East River, in the Financial District of Lower Manhattan in New York City.

98.First national park of India that was established in 1936 was named as
A. Kanha National Park
B. Bharatpur National Park
C. Hailey National Park
D. Rajaji National Park

Ans. C
Sol.

- Hailey National Park, the first national park of India was established in 1936 to protect the endangered Bengal Tiger.
- It is **also known as Jim Corbett National Park**.
- It is located in Nainital district of Uttarakhand and was named after Jim Corbett.

99.Which is the biggest building at Mohenjodaro?
A. Great Bath
B. Great Granary
C. Assembly Hall
D. Rectangular Building

Ans. B
Sol.

- Mohenjodaro was built in the 26th century BC.
- It was one of the largest cities of the ancient Indus Valley Civilization, also known as the Harappan Civilization, which developed around 3,000 BCE from the prehistoric Indus culture.
- The **Great Granary** is the biggest building in comparison with the Great Bath and other buildings found there

100.Who is generally considered to be the father of the Indian Renaissance?
A. Rabindranath Tagore
B. Raja Rammohan Roy
C. Mahatma Phule
D. M.G. Ranade

Ans. B
Sol.

- Raja Ram Mohan Roy is considered to be the father of Indian Renaissance.
- It is so because he introduced key changes in Indian society based on the twin plank of reasons and humanism.
- He founded Atmiya Sabha, and Brahmo Samaj, and took active participation in purging Indian society from social evils like Sati, superstition, idolatry etc.

101.Who was the revolutionary leader who ended his days as a Swami of Ramakrishna Mission?
A. Ajit Singh
B. Aurobindo Ghosh
C. Jatindranath Bandopadhyay
D. Hemachandra Kanungo

Ans. C
Sol. Jatindranath Bandopadhyay, also known as Niralamba Swami was a key figure along with Aurobindo Ghosh in the first phase of Revolutionary struggle. However later on he took a break from the freedom struggle and took a sanyasi life for spiritual upliftment.

102.The only Viceroy to be assassinated in India was
A. Lord Harding
B. Lord Northbrook
C. Lord Ellenborough
D. Lord Mayo

Ans. D
Sol. Lord Mayo became the 4th Viceroy of India in 1869. During his tenure the first census took place in 1872. He was assassinated in Andaman during his visit.

103.Who was the first lady Governor of an Indian State?

A. Mrs. Sucheta Kripalani
B. Miss Padmaja Naidu
C. Mrs Tarkeswari Sinha
D. Mrs. Sarojini Naidu

Ans. D
Sol. First lady Governor of an Indian State was Sarojini Naidu. She headed the state of Uttar Pradesh. She was also known as the nightingale of India.

104.The Taj Mahal is called 'a dream in marble'. Which monument is called as 'a dream in stone'?
A. The Rang Mahal
B. The Panch Mahal
C. The Red Fort
D. The Bahai temple

Ans. B
Sol. Panch Mahal is a five storey palace in fatehpur sikri. This was commissioned by Sikarwar Rajputs. The Mahal contains five stories, arranged one upon each other in decreasing order. The ground floor contains 84 pillars. The Mahal was generally used for entertainment and relaxation.

105.Which one of the following papers was edited by Gandhiji in South Africa?
A. Indian Opinion
B. Harijan
C. Young India
D. Both A and B

Ans. A
Sol.

- Indian opinion was edited by Mahatma Gandhi **in South Africa**. The publication was an important tool for the political movement led by Gandhi and the Indian national Congress to fight and win for the Indian immigrant community in South Africa. It existed between 1903 and 1915.
- Young India was a weekly paper or journal in English published by Mohandas Karamchand Gandhi from 1919 to 1931.

106.In which year did the Kakori conspiracy case take place?
A. 1925
B. 1924
C. 1926
D. 1927

Ans. A
Sol. Kakori conspiracy took place in 1925. This was done by Hindustan Republican Association (HRA) - a revolutionary outfit. This conspiracy was about robbing a train near Lucknow, in order to seize money, for carrying forward the group revolutionary activities.

107.Which among the following is not correctly paired?
A. Shivaji - Afzal Khan
B. Nurjahan - Mahabat Khan
C. Akbar - Rana Pratap
D. Babar - Bairam Khan

Ans. D
Sol. Babar and Bairam khan were not enemy of each other. Rather bairam khan served in in the army of subsequent Mughal kings- Babar, Humayun and Akbar. However, during his last day of service to Mughal empire, he developed conflict with Akbar, which was later amicably resolved.

108.The Sergeant Plan was introduced by_____?
A. Lord William Bentinck
B. Sir John Sergeant
C. Lord Curzon
D. Lord Dalhousie

Ans. B
Sol. Sir John Sergeant was the Educational Advisor to the Government of India . He introduced the Sergeant Plan which worked out by the Central Advisory Board of Education in 1944. This Plan stipulates universal , free and compulsory education for children in the 6 to 11 age group and a six year school course for the 11 to 17 age group.

109.Who introduced the term "Biodiversity Hotspot" ?
A. M Swaminarayan
B. Dr. James Smith
C. Norman Myers

D. None of these

Ans. C
Sol. The concept of "**biodiversity hotspots**" was originated by **Norman Myers**.
• A biodiversity hotspot is a **Bio Geographic region** with a significant reservoir of biodiversity that is under **threat from humans**.

110.Where is the Indian Railway's wheel axle plant located ?
A. Ludhiana, Punjab
B. Bangalore, Karnataka
C. Jaipur, Rajasthan
D. Kapurthala, Punjab

Ans. B
Sol. Indian Railway's **wheel axle plant** is located in Bangalore, Karnataka.
• It was commissioned in **1984** to manufacture wheels and axles for the Indian Railways.

111.Which of the following site is not in the list of Wonders of the World?
A. Great Wall of China
B. Taj Mahal
C. Ha Long
D. Machu Picchu

Ans. C
Sol. Ha long comes under the list of Seven Wonders of Nature.
Wonders of the World are:
• Great Wall of China
• Petra
• Christ the Redeemer
• Machu Picchu
• Chichen Itza
• Colosseum
• Taj Mahal
• Great Pyramid of Giza
Wonders of Nature are:
• Iguazu Falls
• Hạ Long
• Jeju Island
• Puerto Princesa Underground River
• Table Mountain
• Komodo
• Amazon rainforest

112.The only state in India that produces saffron is
A. Assam
B. Himachal Pradesh
C. Jammu and Kashmir
D. Meghalaya

Ans. C
Sol. The only state in India that produces saffron is Jammu and Kashmir.

113.First Metro train was introduced in_____?
A. Mumbai
B. Calcutta
C. Chennai
D. New Delhi

Ans. B
Sol.
- The first metro train was introduced in Calcutta on 24th October ,1984. The two stations connected were Dumdum and Belgachha.
- Delhi Metro rail was approved in 1996 but it was started in 2002 0n 25th December between Shahdra and Tees Hazari .

114.Which of the following statement is true?
A. Animals worry about raising their family
B. Animals make several feeding trips in a day
C. Animals often behave sensibly
D. Animals do not know meaning of brotherhood

Ans. B
Sol. Animals make several feeding trips in a day is true statement.
Hence, option is B correct.

115.Which hormone is not related to Pituitary Gland?
A. Thyroid stimulating hormone
B. Antidiuretic hormone
C. Luteinizing hormone
D. Calcitonin hormone

Ans. D
Sol.

- Except D, all the hormones are related to Pituitary Gland.
- **Calcitonin** is produced by the parafollicular cells of the thyroid gland, that helps to regulate levels of calcium and phosphate in the blood.
- **Luteinizing hormone** is a hormone produced by gonadotropic cells in the anterior pituitary gland.
- **Antidiuretic hormone** is made by the hypothalamus in the brain and stored in the posterior pituitary gland.
- **TSH** is produced by the pituitary gland and aids in release of thyroid hormones into your blood.

116.Which of the following is a fungal disease?
A. Dermattis
B. Cholera
C. Jaundice
D. Indigofera

Ans. A
Sol. Dermattis is a fungal disease, a group of disease that results in inflammation of the skin. It is also known as eczema. Itchiness, red skin and rashes are the character of these diseases.
Dermatitis is a group of skin conditions that includes atopic dermatitis, allergic contact dermatitis, irritant contact dermatitis, and stasis dermatitis.

117.The chemical component that is invariably found in all viruses is
A. proteins
B. lipids
C. DNA
D. RNA

Ans. A
Sol.

- A virus is a small infectious agent that replicates only inside the living cells of other organisms.
- Viruses can infect all types of life forms, from animals and plants to microorganisms, including bacteria and archaea.
- A complete virus particle, known as a virion, consists of nucleic acid surrounded by a protective coat of **protein** called a **capsid**.

118.Lacrymal glands are situated in the _____.
A. Palms
B. Buccal cavity
C. Eye orbit
D. Stomach

Ans. C
Sol.

- Lacrymal glands are situated in **eye orbit.**
- These glands secrete the aqueous layer of the tear film called lacrimal fluid, which moistens the surface of the skin, lubricate eyelids and wash away foreign bodies.

119.Which State Government of India has instituted the Iqbal samman award?
A. UP
B. MP
C. AP
D. HP
E. None o these

Ans. B
Sol. Iqbal Samman is a prestigious annual award given in the field of creative **Urdu writing** by the Government of Madhya Pradesh.
Note: It carries a cash of ₹ 2 lakh and a plaque of honour.

120.Which of the following statements is incorrect?
A. Wheat is grown in Punjab
B. Tea is produced in Assam
C. Coffee is grown in Karnataka
D. Saffron is produced in Himachal Pradesh

Ans. D
Sol. Almost all saffron grows in a belt bounded by the Mediterranean in the west and mountainous Kashmir in the east. The cultivation of saffron is a traditional art. In India, 5,707 hectares of land come under its cultivation. Its annual

production is around sixteen thousand kilograms. The state of Jammu and Kashmir tops the list of saffron growing states in India. It can be gauged from the fact out of the total 5,707 hectares of land under its cultivation.

121.In which of the following industries is the maximum number of women employed in India?
A. Textile
B. Jute
C. Tea
D. Coal

Ans. C
Sol. The Tea Industry is one of the largest employers of women amongst organised industries in India. Women constitute nearly 51% of the total workforce.

122.Chandigarh was designed by
A. Le corbousier
B. Edward Lutyons
C. Christopher Wren
D. Michelongo

Ans. A
Sol. The city of Chandigarh was one of the early planned cities in the post-independence India and is known internationally for its architecture and urban design. The master plan of the city was prepared by Swiss-French architect Le Corbusier, transformed from earlier plans created by the Polish architect Maciej Nowicki and the American planner Albert Mayer. Most of the government buildings and housing in the city, however, were designed by the Chandigarh Capital Project Team headed byPierre Jeanneret, Jane Drew and Maxwell Fry. In 2015, an article published by BBC named Chandigarh as one of the perfect cities of the world in terms of architecture, cultural growth and modernisation.

123.The Indus Valley Civilization flourished during _____.
A. 5000-3500 BC
B. 3000-1500 BC
C. 2500-1750 BC
D. 1500-500 BC

Ans. C
Sol.

- The Indus Valley Civilization flourished **during 2500-1750 BC.**
- It was a Bronze Age civilisation in the northwestern regions of South Asia. It is is also known as the **Harappan Civilisation.**
- This civilization is named after the Indus river system in whose alluvial plains the early sites of the civilisation were identified and excavated.

124.Which of the following was not one of the features of Government of India Act, 1935?
A. Provincial autonomy
B. Introduction of elections
C. Bicameral Legislature
D. All India federation

Ans. C
Sol. The most significant aspects of the Indian Act 1935 were:
•the grant of a large measure of autonomy to the provinces of British India (ending the system of diarchy introduced by the Government of India Act 1919)
•provision for the establishment of a "Federation of India", to be made up of both British India and some or all of the "princely states"
•the introduction of direct elections, thus increasing the franchise from seven million to thirty-five million people
•a partial reorganisation of the provinces
•membership of the provincial assemblies was altered so as to include more elected Indian representatives, who were now able to form majorities and be appointed to form governments
•the establishment of a Federal Court.

125.Why does a piece of cloth, which appears green in sunlight, appear black when it is viewed under red light?
A. The cloth completely absorbs red color wavelength.
B. It is due to refraction.
C. It is the effect of scattering of light.
D. It is due to parallax error.

Ans. A
Sol. A piece of cloth, which appears green in sunlight, appear black when it is viewed under red light. This is because the green pigment on the cloth completely absorbs the wavelength of red color. Thus, appearing black under red light.

126.The cloud float in the atmosphere because of their low
A. temperature
B. velocity
C. pressure
D. density

Ans. D
Sol. The clouds float in the atmosphere because they have low density.
Hence Option D is correct

127.India first took part in the Olympic Games in the year
A. 1920
B. 1928
C. 1972
D. 1974

Ans. A
Sol. **India** competed at the **1920 Summer Olympics** in Antwerp, Belgium. It was the first time that the nation had sent a team to the Olympic Games since a single athlete (Norman Pritchard) competed for India twenty years earlier (see India at the 1900 Summer Olympics).

128.Which of the following rights was described by Dr. B. R. Ambedkar as "The Heart and Soul of the Constitution"?
A. Right to freedom of the Religion
B. Right to property
C. Right to Equality
D. Right to constitutional Remedies

Ans. D
Sol. Right to constitutional Remedies was described by Dr. B. R. Ambedkar as "The Heart and Soul of the Constitution"

129.India War of Independence 1857' is written by_____.
A. S. N. Sen
B. R C Majumdar
C. V D Savarkar
D. S B Chaudhari

Ans. C
Sol.

- ***The Indian War of Independence*** is an Indian nationalist history of the 1857 revolt by Vinayak Damodar Savarkar that was first published in 1909.
- The book, initially written in Marathi, was penned by Savarkar in response to celebrations in Britain of the 50th anniversary of the 1857 Indian uprising with records from India Office archives and the whole project received support from Indian nationalists in Britain including the likes of Madame Cama, V.V.S. Iyer and M.P.T. Acharya, as well as Indian students who had dared not show their support or sympathy for India House openly.

130.There are approximately _____ muscles in human body.
A. 200
B. 350
C. 500
D. 640

Ans. D
Sol.

- There are approximately 640 muscles in human body and together they make up about 40% of total body mass.
- Hence, option D is correct.

131.Former judge of Madras High Court Justice Vinod Kumar Sharma has been appointed as the Lokpal of which state?
A. Uttar Pradesh
B. Haryana
C. Punjab
D. Kerala
E. Telangana

Ans. C

Sol. * Punjab government has appointed Justice Vinod Kumar Sharma as Punjab Lokpal.

* This is done without amending Punjab Lokpal Act, 1996 in which CM of Punjab and cabinet ministers are out of its ambit.

* Justice Satish Kumar Mittal resigned from the post of Lokpal in April 2018 and became the chairman of Haryana Human Rights Commission, since then this post was lying vacant.

* Justice Sharma had worked as an advocate in Punjab and Haryana High Court from 1974 till his elevation as Judge of Punjab and Haryana High Court in March 2006.

* He retired as a judge of Madras High Court in May 2013. At least 3,000 of his judgments have been quoted in various law books and journals.

* The Lokpal holds the office for a term of six years.

132.Joint military training, Exercise Nomadic Elephant–XIV started on 5th October 2019. It is between which two countries?
A. India and Thailand
B. India and Singapore
C. India and Malaysia
D. India and China
E. India and Mongolia

Ans. E
Sol. * 14th edition of Indo – Mongolian joint military training, Exercise Nomadic Elephant–XIV started on 5th October.
* The exercise will be conducted from 05 to 18 Oct 19 at Bakloh. In this exercise, the Indian Army is being represented by a battalion of the RAJPUTANA RIFLES Regiment.
* Nomadic Elephant – XIV is the fourteenth edition between the two nations aimed at training troops in counter-insurgency & counter-terrorism operations under the United Nations mandate.
* The joint exercise will enhance defence co-operation and military relations between the two nations.

133.Who among the following has won the 2019 Japan Open single title in Tokyo, Japan?
A. Roger Federer
B. Rafael Nadal
C. Novak Djokovic
D. John Millman
E. Daniil Medvedev

Ans. C
Sol. * World number one Novak Djokovic won his first Japan Open title and the 76th of his career by defeating Australian John Millman in the final in Tokyo.

* It was a triumphant return to the tour for Djokovic, who had withdrawn from the U.S. Open in the fourth round due to a shoulder injury

* It was the 10th time Novak Djokovic had won a title on his tournament debut.

* Djokovic has already qualified for next month's season-ending ATP Finals in London.

134.Which of the following banks has launched UCash, a digital product that will enable customers to withdraw money from ATMs through mobile banking without using a debit card?
A. Canara Bank
B. Bank of India
C. Uco Bank
D. Bank of Baroda
E. Punjab National Bank

Ans. C
Sol.
• Public sector lender, the Uco Bank has launched three new digital products namely UCash, Digilocker and an app.
• These new products were launched by the bank's managing director and CEO, A K Goel.
• UCash enables customers to withdraw money from ATMs through mobile banking without using a debit card.

• Digilocker aims to eliminate the use of physical documents and enables the sharing of verified electronic documents.
• The third product, the new mobile app, integrates four existing apps of the bank - UCO Mbanking, UCO UPI, UCO Mpassbook and UCO Secure- in a single interface.

135.Every year on which of the following dates the World Teachers' Day is celebrated?
A. 5th September
B. 15th September
C. 25th September
D. 2nd October
E. 5th October

Ans. E
Sol.
• World Teachers' Day or International Teachers' Days is being celebrated all across the world on October 5.
• It is being held annually since 1994 to commemorates the anniversary of the adoption of the 1966 ILO/UNESCO Recommendation concerning the Status of Teachers.
• The Recommendation concerning the Status of Higher-Education Teaching Personnel was adopted in 1997 to complement the 1966 Recommendation by covering teaching and research personnel in higher education.
• World Teachers' Day is co-convened in partnership with UNICEF, UNDP, the International Labour Organization, and Education International.
• This year's International Teachers' Day Theme is "Young Teachers: The future of the Profession."

136.Sushil Chandra Mishra is appointed as the MD & CEO of which PSUs?
A. Oil and Natural Gas Corporation
B. Oil India Limited
C. Bharat Petroleum Corporation Limited
D. Steel Authority of India Limited
E. Bharat Heavy Electricals Limited

Ans. B
Sol.
• Oil India Limited has appointed Sushil Chandra Mishra as the new Managing Director and Chief Executive Officer (CEO) of the company.
• Mr. Mishra replaces Utpal Bora, who ceased to be Chairman & Managing Director of the company on 30th September.
• Mishra started his professional journey as an executive trainee with OIL in 1984.
• He played a key role in framing and implementing procurement policies and procedures for inventory management, vendor development, framework agreement and its related strategies.
• He acquired significant Board level exposure at corporate office at the time of launch of OIL's IPO in 2009 and developing the Strategic Plan 2020.

137.What is the dominant chemical present in vinegar?
A. Ethanoic acid
B. Sulphuric acid
C. Formic acid
D. Malic acid

Ans. A
Sol.
* In vinegar, **ethanoic acid (acetic acid)is present in dominant**.
* The formula of ethanoic acid is CH_3COOH.

138._____ gases trap heat in the atmosphere which makes the Earth warmer, causing global warming.
A. Compound
B. Elemental
C. Nobel
D. Greenhouse

Ans. D
Sol.
• Greenhouse gas that contribute to the greenhouse effect that is warming the Earth by absorbing the infrared radiations.
• Carbon Dioxide and chloroflurocarbons are examples of greenhouse gases.

139.A bat emits ultrasonic sound of frequency 100kHz in air. If the sound meets a water surface, what will be the wavelength of the reflected sound?
(Speed of sound in air = $340ms^{-1}$)

A. 5.1×10^5
B. 6.4×10^{-3}
C. 3.4×10^{-5}
D. 3.4×10^{-3}

Ans. D
Sol. Frequency of ultrasonic sound = **100kHz = 10^5Hz**
Speed of sound in air is **340ms^{-1}**
The wavelength of the reflected sound is given by the relation:

$$\text{Wavelength} = \frac{\text{speed of sound in}}{\text{frequency}}$$

= $340/10^5$ = 0.0034 = **3.4×10^{-3}m.**

140.The least preferred technique in the disposal of Municipal Solid Waste is:
A. Incineration
B. Composting
C. Land filling
D. Briquetting

Ans. D
Sol. Briquetting is one of the densification technologies for converting biomass wastes into solid and convenient fuel. Briquetting technologies can be classified in the following categories based on the mechanical features and equipment involved: piston press densification, screw press densification, roll press densification and manual presses.

141.Which among the following is called "Mushroom rocks"?
A. Pedestal rocks
B. Desert pavements
C. Yardangs
D. Ventifacts

Ans. A
Sol.
• A mushroom rock, also called as pedestal rock, or a pedestal rock, is a naturally occurring rock whose shape, as its name implies, resembles a mushroom. A mushroom rock, rock pedestal, or gour is a typical mushroom-shaped landform that is formed by the action of wind erosion.
• At an average height of two to three feet (0.6 to 0.9 m) from the base, the material-carrying capacity of the wind is at its maximum, so abrasion (erosion by wind in which transported materials hit an exposed rock surface and polish it or scratch it) is also maximized.
• In some cases, harder rocks are arranged horizontally over a softer rock, resulting in such erosion.

142.The 'Diphu Pass' which is the tri-junction between India, Myanmar and China is on this Border Line?
A. Durand Line
B. Palk Strait
C. McMohan Line
D. Radcliffe Line

Ans. C
Sol.
• **Diphu pass is located at the trijunction of India, Myanmar and china and it is located on the Mcmohan border line.**
• The McMahon Line is the demarcation line between the Tibetan region of China and the North-east region of India proposed by British colonial administrator Henry McMahon at the 1914 Simla Convention.

143.The term 'Blood Moon' is used to refer to _____.
A. Full Moon
B. Lunar Eclipse
C. Solar Eclipse
D. Crescent Moon

Ans. B
Sol.
• **Blood Moon happens when Earth's moon is in a total lunar eclipse.**
• The last blood moon on Jan. 20-21, 2019 coincided with a supermoon and the Full Wolf Moon, earning it the title "Super Blood Wolf Moon."

144.Charcoal can be made at home by burning
A. wood in absence of air
B. coal in absence of air
C. coal in an insufficient supply of air
D. wood in an insufficient supply of air

Ans. A

Sol. Charcoal is a biomass which is made by burning wood in the absence of air.

145.Which gas is present in both the natural gas and the biogas?
A. Methane
B. Hydrogen
C. Carbon monoxide
D. Butane

Ans. A
Sol. • Methane is the main component found in both natural gas and biogas.
• Natural gas is composed of methane, ethane, propane, butane, and pentane while biogas is composed of methane, carbon dioxide and hydrogen sulphide.

146.What is the source of sulfuric acid?
A. Fragrance oil
B. Fruit juices
C. Citric fruits
D. Harakasis

Ans. D
Sol. Harakasis
•Harakasis comes in use formaking explosive materials, color making, medicines etc
•Its chemical name is Feric sulphate and formula is [Fe2(SO4)]
•The most common use of sulfuric acid is for fertilizer manufacture.

147.Fabric made from_____ does not get wrinkled easily.
A. Cotton
B. Flax
C. Silk
D. Polyester

Ans. D
Sol.

- Fabric made from **polyester** does not get wrinkled easily.
- Polyester is synthetic chemical compound i.e polymers which contain ester functional group.
- Polyesters most commonly are prepared from a condensation reaction. Depending on the chemical structure, polyester can be a thermoplastic or thermoset.

148.Which one of the following is commonly used for pulp bleaching in the paper industry?
A. Mild Sulphuric acid
B. Glucose isomerase
C. Hydrogen peroxide
D. Iodine and water

Ans. C
Sol.

- **Hydrogen peroxide** is used in pulp bleaching in the paper industry.
- It's a colourless liquid and is slightly more viscous than water.
- It is used as an oxidizer, bleaching agent and disinfectant.

149.Fermentation is a type of _____ process.
A. Aerobic Respiration
B. Anaerobic Respiration
C. Exothermic Reaction
D. Transpiration

Ans. B
Sol.

- Fermentation is a metabolic process that produces chemical changes in organic substrates through the action of enzymes.
- Fermentation normally occurs in an anaerobic environment. In the presence of O2, NADH and pyruvate are used to generate ATP in respiration.

150.Physical property is not same but chemical property is same, it is called-
A. Allotropic
B. Compound
C. Alloy
D. None of the above

Ans. A
Sol. •Carbon has two allotropes, Diamond and graphite, pure forms of the same element that differ in crystalline structure.

•Allotropy property of some chemical elements to exist in two or more different forms, in the same physical state.
•Allotropes are different structural modifications of an element.
•For example, the allotropes of carbon include diamond (the carbon atoms are bonded together in a tetrahedral lattice arrangement

151.The property of metals by which they can be beaten into thin sheets is called _____.
A. Ductility
B. Malleability
C. Viscosity
D. Tensile strength

Ans. B
Sol.
- The property of metals by which they can be beaten into thin sheets is called malleability.
- Ductility is the property of metals by which they can be drawn into wires.
- Viscosity is a state of being thick, sticky, and semi-fluid in consistency, due to internal friction.

152.The salt concentration (measured as salinity in parts per thousand), is _____ % in sea.
A. 10-20
B. 30-35
C. 40-50
D. 60-70

Ans. B
Sol. The salt concentration (measured as salinity in parts per thousand), is 30-35 % in sea. Salinity is the measurement of salt present in the water. Salt with some amount of water is produced when acid and base react. Seawater pH is typically limited to a range between 7.5 and 8.4. The most saline sea in the world is dead sea.

153.Which of the following is a characteristic of an exothermic reaction?
A. Release of heat
B. Absorption of heat
C. Doesn't involve any change in temperature
D. None of the option is correct

Ans. A
Sol.
- An exothermic reaction is a chemical reaction that releases energy by light or heat causing the temperature of surroundings to rise.
- It takes place when the energy used to break the bonds in the reactants is less than the energy given out when bonds are formed in the products. Example: combustion.

154.Which chemical compound is used to prevent wooden furniture from termites?
A. Zinc chloride
B. Silver iodide
C. Potassium carbonate
D. Chromium trioxide

Ans. A
Sol.
- **Wooden furniture** is coated with **zinc chloride ($ZnCl_2$)** to prevent **termites**.
- Zinc chloride has numerous applications in different industries, including **health care**, **pharmaceuticals**, and **paper manufacturing** industry. It is used in **dry cell** batteries as an **electrolyte**. It is a powerful **emulsion breaker**. It separates oil from water.

155.Which of the following bonds are weakest in nature?
A. Single bond
B. Double bond
C. Triple bond
D. Hydrogen bond

Ans. D
Sol.
- Hydrogen bonds are **weakest** in nature as they are intermolecular electrostatic bond that occurs when a Hydrogen is bonded to a very electronegative atom like

oxygen, Nitrogen where there is no electron exchange leading to a weak bonding between molecules.
- **Hydrogen bonds** are classified as weak **bonds** because they are easily and rapidly formed and broken under normal biological conditions.

156.Process of gaining electrons is known as _____.
A. oxidation
B. reduction
C. radiation
D. both oxidation and reduction

Ans. B
Sol. Redox is a chemical reaction in which the oxidation states of atoms changes. It involves the transfer of electrons between elements.
• Oxidation is the chemical reaction in which there is a loss of electrons or an increase in oxidation state by a molecule, atom, or ion.
• Reduction is a chemical reaction where there is the gain of electrons or a decrease in oxidation state by a molecule, atom, or ion.

157.Which of the following metals (shown by its symbol) is generally used for making filaments of bulbs?
A. Fe
B. An
C. Aq
D. W

Ans. D
Sol. Tungsten is a chemical element with symbol W and atomic number 74.
Tungsten is a rare metal found naturally on Earth. Its important ores include wolframite and scheelite. Tungsten is used in incandescent light bulb filaments, X-ray tubes, electrodes in TIG welding, super alloys, and radiation shielding. Tungsten compounds are also often used as industrial catalysts.

158.Which amongst the following is not a Cation?
A. Aluminium ion
B. Copper ion
C. Sulphate ion
D. Zinc ion

Ans. C
Sol. Sulphate ion is not a cation. Cation is a positively charged ion but sulphate ion is a negatively charged ion as it gains electrons and forms a covalent bond with oxygen. Hence sulphate ion is an anion.

159.Which of the following is not a component of Smog?
A. Volatile organic compounds
B. Nitrogen Oxide
C. Sulphur dioxide
D. Chlorine oxide

Ans. D
Sol. Chlorine oxide is not a component of Smog. Smog an air pollutant is composed mainly of tropospheric ozone and primary particulate matter such as pollen and dust along with other particulate matter such as sulphur oxides, volatile organic compounds, nitrogen oxides and ammonia gas.

160.Which is known as carbolic acid?
A. Phenol
B. Ethanol
C. Acetic acid
D. Oxalic acid

Ans. A
Sol. Phenol also known as carbolic acid, is an aromatic organic compound. It is mildly acidic and requires careful handling due to its propensity to cause chemical burns. It is generally produced from petroleum.

161.Removal of carbon particles from air involves the principle of
A. Precipitation
B. Filteration
C. Electrophoresis
D. Sedimentation

Ans. C
Sol. Electrophoresis is a technique used in laboratories in order to separate macromolecules based on size. There is a movement of charged particles under the influence of an electric field.

162.$Na_2B_2O_4(OH)_4$ is the chemical formula of which of the following?
A. Benzoyl salicylic acid
B. Sodium Perborate
C. Anthranilic acid
D. Chloro benzoic acid

Ans. B
Sol. **Sodium perborate** (**PBS**) is a white, odorless, water-soluble chemical compound with the chemical formula **$Na_2B_2O_4(OH)_4$**.
It is usually encountered as the **tetrahydrate**, but **monohydrate**, **$NaBO_3 \cdot H_2O$** and **trihydrates** are well known **$NaBO_3 \cdot 3H_2O$**.

163.The absolute zero is a temperature at which _____
A. molecular motion in a gas would cease
B. water freezes
C. all gases become liquid
D. all gases become solid

Ans. A
Sol.

- Absolute Zero is a temperature where the molecular motion in gas would cease.
- Absolute zero is the point at which the fundamental particles of nature have minimal vibrational motion, retaining only quantum mechanical, zero-point energy-induced particle motion.

164.Iodex, a pain relief balm, has the smell of _____ .
A. Methyl salicylate
B. Ethyl salicylate
C. Propyl salicylate
D. Butyl salicylate

Ans. A
Sol. Methyl salicylate (oil of wintergreen or wintergreen oil) is an organic ester naturally produced by many species of plants, particularly wintergreens. It is also synthetically produced, used as a fragrance.

165.What is the common name of $CaOCl_2$?
A. Baking Powder
B. Baking Soda
C. Bleaching Powder
D. Washing Soda

Ans. C
Sol.

- **Calcium Hydrochlorite $Ca(OCl)_2$** which is commonly known as 'Bleaching Powder' is used as a bleaching agent for water treatment.
- This compound is relatively stable and has higher available chlorine than Sodium Hypochlorite.
- It is white solid which is not highly soluble in water and is more preferably used in soft to medium-hard water.

166.Which base is present in milk of magnesia?
A. Magnesium hydroxide
B. Ammonium hydroxide
C. Sodium hydroxide
D. Calcium hydroxide

Ans. A
Sol. It's the Magnesium hydroxide which is present in Milk of Magnesia. It is a laxative that is used to treat constipation, by drawing water into the intestines. Moreover it is also used as an antacid that works by lowering the amount of acid in the stomach.

167.Metals react with sodium hydroxide to produce _____.
A. oxygen gas
B. sodium
C. water
D. hydrogen gas

Ans. D
Sol. Reaction of Base with Metals: When alkali (base) reacts with metal, it produces salt and hydrogen gas.

Example: Sodium hydroxide gives hydrogen gas and sodium zincate when reacts with zinc metal. Sodium aluminate and hydrogen gas are formed when sodium hydroxide reacts with aluminium metal.

168.Bauxite is used as raw material by which industry?
A. Aluminium
B. Iron
C. Steel
D. Gold

Ans. A
Sol.

- Bauxite is an ore of aluminium which contains only 30–54% alumina.
- It is used by **aluminium industries** as raw material.
- Australia is the world's biggest bauxite producer.

169.
Aluminum salt commonly used to stop bleeding is
A. Aluminum nitrate
B. Aluminum sulphate
C. Aluminum Chloride
D. Potash alum

Ans. D
Sol. Aluminum salt commonly used to stop bleeding is Potash Alum. It is also known as aluminum potassium sulphate. It is commonly used in purification of drinking water. It is naturally transpiring mineral salt.
Hence option D is the right answer.

170.Chemical formula for sulphurous acid is
A. H_2SO_4
B. H_2SO_3
C. H_3SO_3
D. H_3SO_4

Ans. B
Sol.

- Sulphurous acid is a weak inorganic acid and considered an aqueous solution of sulfur dioxide in water.
- The chemical formula for sulphurous acid is H_2SO_3.
-

171.Minamata disease is a nervous disorder caused by eating fish, polluted with _____.
A. Iron
B. Mercury
C. Lead
D. Nickel

Ans. B
Sol.

- Minamata disease is a nervous disorder caused by eating fish, polluted with Mercury.
- The disease has symptoms like numbness in the hands and feet, general muscle weakness, loss of peripheral vision and damage to hearing and speech. It can be treated with surgical intervention.

172.Which acid is used in batteries?
A. Picric acid
B. Sulphuric acid
C. Hydrobromic acid
D. Perchloric acid

Ans. B
Sol. **Sulfuric acid** is used in batteries. Each cell of a **lead storage** battery consists of alternate plates of **lead (cathode)** and lead coated with **lead dioxide (anode)** immersed in an electrolyte of the **sulfuric acid** solution.

173.Which among the following is not a property of bases?
A. Bases are bitter in taste
B. The pH of a basic solution at standard conditions is greater than nine.
C. Aqueous solutions or molten bases dissociate in ions and conduct electricity.
D. All of the above

Ans. B

Sol. The **pH** of a basic solution at standard conditions is greater than **seven**.
General properties of bases include:
• Concentrated or strong bases are caustic on organic matter and react violently with acidic substances.
• Aqueous solutions or molten bases **dissociate in ions** and conduct **electricity**.
• Reactions with indicators: bases turn red litmus paper **blue**, phenolphthalein **pink**, keep bromothymol **blue** in its natural colour of **blue**, and turn methyl **orange yellow**.
• The pH of a basic solution at standard conditions is greater than **seven**.
• Bases are **bitter** in taste.

174.Who was the first Chancellor of Jamia Millia Islamia University?
A. Abdul Ghaffar Khan
B. Rajkumari Amrit Kaur
C. Hakim Ajmal Khan
D. Sir Sayyad Ahmad Khan

Ans. C
Sol.
- **Hakim Ajmal Khan** was one of the founders of the Jamia Millia Islamia University, becoming its first chancellor in 1920 and remaining in office until his death in 1927. T
- he University was established by Muslim leaders in 1920, prior to partition. Among the founding leaders, the main were the Ali Brothers, Moulana Mohammad Ali Jouhar and Moulana Shaukat Ali.

175.The school of Indian art which is also known as the Greco Roman Buddhist is the _____ school.
A. Mauryan
B. Shunga
C. Gandhara
D. Gupta

Ans. C
Sol. The interaction of Greek and Buddhist culture flourished in the area of Gandhara. Gandhāra was an ancient Indic kingdom situated in the northwestern region of Pakistan, around Peshawar. Gandhara existed since the time of the Rigveda and formed part of the Achaemenid Empire in the 6th century BC.

176.The only Viceroy to be assassinated in India was
A. Lord Harding
B. Lord Northbrook
C. Lord Ellenborough
D. Lord Mayo

Ans. D
Sol. Lord Mayo became the 4th Viceroy of India in 1869. During his tenure the first census took place in 1872. He was assassinated in Andaman during his visit.

177.Who was the first lady Governor of an Indian State?
A. Mrs. Sucheta Kripalani
B. Miss Padmaja Naidu
C. Mrs Tarkeswari Sinha
D. Mrs. Sarojini Naidu

Ans. D
Sol. First lady Governor of an Indian State was Sarojini Naidu. She headed the state of Uttar Pradesh. She was also known as the nightingale of India.

178.Which among the following is not correctly paired?
A. Shivaji -Afzal Khan
B. Humayun -sher shah suri
C. Akbar- Rana Pratap
D. Babar- Bairam Khan

Ans. D
Sol. Babar and Bairam khan were not enemy of each other. Rather bairam khan served in in the army of subsequent Mughal kings- Babar, Humayun and Akbar. However, during his last day of service to Mughal empire, he developed conflict with Akbar, which was later amicably resolved.

179.Which one of the following papers was edited by Gandhiji in South Africa?
A. Indian Opinion
B. Harijan
C. Young India

D. Both A and B

Ans. A
Sol.

- Indian opinion was edited by Mahatma Gandhi **in South Africa**. The publication was an important tool for the political movement led by Gandhi and the Indian national Congress to fight and win for the Indian immigrant community in South Africa. It existed between 1903 and 1915.
- Young India was a weekly paper or journal in English published by Mohandas Karamchand Gandhi from 1919 to 1931.

180.In which year did the Kakori conspiracy case take place?
A. 1925
B. 1924
C. 1926
D. 1927

Ans. A
Sol. Kakori conspiracy took place in 1925. This was done by Hindustan Republican Association (HRA) - a revolutionary outfit. This conspiracy was about robbing a train near Lucknow, in order to seize money, for carrying forward the group revolutionary activities.

181.Which among the following is not correctly paired?
A. Shivaji - Afzal Khan
B. Nurjahan - Mahabat Khan
C. Akbar - Rana Pratap
D. Babar - Bairam Khan

Ans. D
Sol. Babar and Bairam khan were not enemy of each other. Rather bairam khan served in in the army of subsequent Mughal kings- Babar, Humayun and Akbar. However, during his last day of service to Mughal empire, he developed conflict with Akbar, which was later amicably resolved.

182.The Sergeant Plan was introduced by_____?
A. Lord William Bentinck
B. Sir John Sergeant
C. Lord Curzon
D. Lord Dalhousie

Ans. B
Sol. Sir John Sergeant was the Educational Advisor to the Government of India . He introduced the Sergeant Plan which worked out by the Central Advisory Board of Education in 1944. This Plan stipulates universal , free and compulsory education for children in the 6 to 11 age group and a six year school course for the 11 to 17 age group.

183.Who introduced the term "Biodiversity Hotspot" ?
A. M Swaminarayan
B. Dr. James Smith
C. Norman Myers
D. None of these

Ans. C
Sol. The concept of "**biodiversity hotspots**" was originated by **Norman Myers**.

- A biodiversity hotspot is a **Bio Geographic region** with a significant reservoir of biodiversity that is under **threat from humans**.

184.Which of the following Hollywood actress has been named as UNESCO Goodwill Ambassador for Indigenous Peoples?
A. Angelina Jolie
B. Yalitza Aparicio
C. Salma Hayek
D. Emma Stone
E. Priyanka Chopra

Ans. B
Sol. * The United Nations Educational, Scientific and Cultural Organization (UNESCO) has named Mexican actress Yalitza Aparicio as a UNESCO Goodwill Ambassador for Indigenous Peoples.

* Ms. Aparicio is committed to the fight against racism and for the rights of women and indigenous peoples. She was chosen to play in Alfonso Cuarón's film Roma while studying to be a teacher.

* Her performance in the film, for which she had to learn the Mixtec language of her father's family, won her an Oscar nomination for best actress, the first indigenous Mexican woman to be so recognized by the US Academy Awards.

* TIME magazine (USA) listed her as one of the 100 most influential people in the world in 2019.

185.Former judge of Madras High Court Justice Vinod Kumar Sharma has been appointed as the Lokpal of which state?
A. Uttar Pradesh
B. Haryana
C. Punjab
D. Kerala
E. Telangana

Ans. C
Sol. * Punjab government has appointed Justice Vinod Kumar Sharma as Punjab Lokpal.

* This is done without amending Punjab Lokpal Act, 1996 in which CM of Punjab and cabinet ministers are out of its ambit.

* Justice Satish Kumar Mittal resigned from the post of Lokpal in April 2018 and became the chairman of Haryana Human Rights Commission, since then this post was lying vacant.

* Justice Sharma had worked as an advocate in Punjab and Haryana High Court from 1974 till his elevation as Judge of Punjab and Haryana High Court in March 2006.

* He retired as a judge of Madras High Court in May 2013. At least 3,000 of his judgments have been quoted in various law books and journals.

* The Lokpal holds the office for a term of six years.

186.Joint military training, Exercise Nomadic Elephant–XIV started on 5th October 2019. It is between which two countries?
A. India and Thailand
B. India and Singapore
C. India and Malaysia
D. India and China
E. India and Mongolia

Ans. E
Sol. * 14th edition of Indo – Mongolian joint military training, Exercise Nomadic Elephant–XIV started on 5th October.
* The exercise will be conducted from 05 to 18 Oct 19 at Bakloh. In this exercise, the Indian Army is being represented by a battalion of the RAJPUTANA RIFLES Regiment.
* Nomadic Elephant – XIV is the fourteenth edition between the two nations aimed at training troops in counter-insurgency & counter-terrorism operations under the United Nations mandate.
* The joint exercise will enhance defence co-operation and military relations between the two nations.

187.Who among the following has won the 2019 Japan Open single title in Tokyo, Japan?
A. Roger Federer
B. Rafael Nadal
C. Novak Djokovic
D. John Millman
E. Daniil Medvedev

Ans. C
Sol. * World number one Novak Djokovic won his first Japan Open title and the 76th of his career by defeating Australian John Millman in the final in Tokyo.

* It was a triumphant return to the tour for Djokovic, who had withdrawn from the U.S. Open in the fourth round due to a shoulder injury

* It was the 10th time Novak Djokovic had won a title on his tournament debut.

* Djokovic has already qualified for next month's season-ending ATP Finals in London.

188.Which of the following banks has launched UCash, a digital product that will enable customers to withdraw money

from ATMs through mobile banking without using a debit card?
A. Canara Bank
B. Bank of India
C. Uco Bank
D. Bank of Baroda
E. Punjab National Bank

Ans. C
Sol.
• Public sector lender, the Uco Bank has launched three new digital products namely UCash, Digilocker and an app.
• These new products were launched by the bank's managing director and CEO, A K Goel.
• UCash enables customers to withdraw money from ATMs through mobile banking without using a debit card.
• Digilocker aims to eliminate the use of physical documents and enables the sharing of verified electronic documents.
• The third product, the new mobile app, integrates four existing apps of the bank - UCO Mbanking, UCO UPI, UCO Mpassbook and UCO Secure- in a single interface.

189.Every year on which of the following dates the World Teachers' Day is celebrated?
A. 5th September
B. 15th September
C. 25th September
D. 2nd October
E. 5th October

Ans. E
Sol.
• World Teachers' Day or International Teachers' Days is being celebrated all across the world on October 5.
• It is being held annually since 1994 to commemorates the anniversary of the adoption of the 1966 ILO/UNESCO Recommendation concerning the Status of Teachers.
• The Recommendation concerning the Status of Higher-Education Teaching Personnel was adopted in 1997 to complement the 1966 Recommendation by covering teaching and research personnel in higher education.
• World Teachers' Day is co-convened in partnership with UNICEF, UNDP, the International Labour Organization, and Education International.
• This year's International Teachers' Day Theme is "Young Teachers: The future of the Profession."

190.Sushil Chandra Mishra is appointed as the MD & CEO of which PSUs?
A. Oil and Natural Gas Corporation
B. Oil India Limited
C. Bharat Petroleum Corporation Limited
D. Steel Authority of India Limited
E. Bharat Heavy Electricals Limited

Ans. B
Sol.
• Oil India Limited has appointed Sushil Chandra Mishra as the new Managing Director and Chief Executive Officer (CEO) of the company.
• Mr. Mishra replaces Utpal Bora, who ceased to be Chairman & Managing Director of the company on 30th September.
• Mishra started his professional journey as an executive trainee with OIL in 1984.
• He played a key role in framing and implementing procurement policies and procedures for inventory management, vendor development, framework agreement and its related strategies.
• He acquired significant Board level exposure at corporate office at the time of launch of OIL's IPO in 2009 and developing the Strategic Plan 2020.

191.National Basketball Association (NBA) brought to India the first-ever Floating Basketball Court in which of the following places?
A. Chennai, Tamil Nadu
B. Mumbai, Maharashtra
C. Kolkata, West Bengal
D. Bengaluru, Karnataka
E. Cuttack, Odisha

Ans. B
Sol.
• The National Basketball Association brought to India the first-ever Floating Basketball Court in the Arabian Sea near Bandra Worli Sealink.

• There were some sports enthusiasts enjoying the floating court and were accompanied by NBA legend Jason Williams.

192.What is the full form of TCP in relation of computer network?
(A) Transmission Control Protocol

(B) Transfer Cali Plan

(C) Transfer Control Process

(D) Transmission Call protocol

A. D
B. B

C. A
D. C

Ans. C
Sol.
* The full form of TCP in relation to a computer network **is Transmission Control Protocol.**
* *TCP*/IP is built into the UNIX operating system and is used by the Internet, making it the de facto standard for transmitting data over *networks*.
* It allows two or more computers to communicate. TCP and IP are basic rules defining the Internet. It determines how to break application data into packets that networks can delivers, sends packets to and accepts packets from the network layer.

193.Which of the following state has largest mangrove area of India?
(A) Gujarat (B) Andhra Pradesh

(C) Maharastra (D) West Bengal

A. C
B. D

C. A
D. B

Ans. B
Sol.
* **Mangrove forests are mainly found in West Bengal Coastal Area.**
* Mangrove is a small tree which is found in coastal saline or brackish water. They are also called as halophytes as they are salt tolerant trees.
* They are highly important from ecological and environment point of view.
* Mangrove area is also found in East coast of India in Andra Pradesh, Orissa and Tamil Nadu and these are also found in Kutch area of Gujrat.

194.A spoon which seems tilted in water, is an example of
(A) Reflection (B) Refraction

(C) Retention (D) Focus

A. A
B. B

C. D
D. C

Ans. B
Sol.
* **A spoon which seems tilted in water, is an example of Refraction.**
* Refraction refers to change in direction of a wave passing from one medium to another due to different refractive indexes of mediums.
* Refraction follows Snell's law, which states that, for a given pair of media, the ratio of the sines of the angle of incidence θ_1 and angle of refraction θ_2 is equal to the ratio of phase velocities (v_1 / v_2) in the two media.

195.In India, who is executive head of the state?
(A) President

(B) Governor

(C) Chief Minister

(D) The legislative assembly of the state

A. (D)

B. (C)

C. (A)

D. (B)

Ans. D
Sol.
* At the state level, **Governor** is acts as the **executive head** of the state.
* Governor acts as a **nominal head**.
* The real executive powers are exercised by the **Council of Ministers** headed by the **Chief Minister**.
* The Governor of a State is appointed by the **President of India**.
* **Article 153** stipulates that there shall be a Governor for each Indian states.
* **Article 155** of the Indian Constitution stipulates that the Governor of a State shall be appointed by the President by warrant under his hand and seal.

196.The headquarters of ISRO is located at
(A) Bengaluru

(B) New Delhi

(C) Pune

(D) Mumbai

A. (A)

B. (C)

C. (D)

D. (B)

Ans. A
Sol.
• The **Indian Space Research Organisation** (ISRO) is the space agency of the Government of India.

• It is headquartered in **Bengaluru**, **Karnataka**.

• It was formed on **15th August, 1969**.

• Its vision is to "harness space technology for national development while pursuing space science research and planetary exploration".

• It is managed by the Department of Space, which reports to the **Prime Minister of India**.

197.The concept of carbon credit originated from which one of the following?
A. Earth Summit, Rio de Janeiro
B. Kyoto Protocol
C. Montreal Protocol
D. G-8 Summit, Hciligendamm

Ans. B
Sol.
- The **Kyoto Protocol** is an international treaty, which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC) that commits State Parties to reduce greenhouse gases emissions, based on the premise that (a) global warming exists and (b) man-made CO_2 emissions have caused it.

198.The Khajuraho shrines built by chandellas are dedicated to _____.
A. Vishnu and Shiva
B. Indra and Varun
C. Shiva and Parvati
D. Vishnu and Brahma

Ans. A
Sol.
- The Khajuraho Group of Monuments is a group of Hindu temples and Jain temples in Madhya Pradesh.
- The Khajuraho shrines built by chandellas are **dedicated to Vishnu and Shiva.**
- The largest surviving Shiva temple is Khandarya Mahadeva, while the largest surviving Vaishnava group includes Chaturbhuja and Ramachandra.

199.Asiatic lion is the national animal of which of the following countries?
A. Bhutan
B. Turkey
C. Iraq
D. Iran

Ans. D
Sol.
• **Asiatic lion is the national animal of Iran.**
• Its scientific name is Panthera leo.
• On the IUCN Red List, it is listed as Endangered because of its small population size and area of occupancy.

200.Which of the following is the national heritage animal of India?
A. Tiger
B. Elephant
C. Cow
D. Lion

Ans. B
Sol.
• **Indian elephant is the national heritage animal of India since 2010.**
• India's Environment Ministry has declared the elephant a national heritage animal in order to increase protective measures for the country's nearly 29,000 elephants.
• There are a total of 138 state elephant corridors, 28 interstate corridors and 17 international state corridors where Indian elephant populations are found.

201.What is the full form of PRAGATI initiative?
A. Pro-Active Governance And Timely Institutie
B. Pro-Active Governance and True Implementation
C. Pro-Active Governance And Timely Implementation
D. Process Oriented Governance And Timely Implementation

Ans. C
Sol.
• **The full form of PRAGATI is Pro-Active Governance And Timely Implementation.**
• It is a unique integrating and interactive platform. The platform is aimed at addressing common man's grievances, and simultaneously monitoring and reviewing important programmes and projects of the Government of India as well as projects flagged by State Governments
• The PRAGATI platform uniquely bundles three latest technologies: Digital data management, videoconferencing and geo-spatial technology.

202.Who was the first Indian to summit Mount Everest without oxygen?
A. Tenzing Norgay
B. Phurba Tashi
C. Apa Sherpa
D. Phu Dorjee

Ans. D
Sol.
• **Phu Dorjee was the first Indian to summit Mt. Everest without oxygen.**
• He did so on 9 May 1984 on a solitary ascent from the South East Ridge. He died in 1987 on the Kanchanjunga Expedition of the Assam Rifles.

203.If two quantities M & N have different dimensions. Which mathematical operation may be physically meaningful?
A. M/N
B. M+N
C. M-N
D. M=N

Ans. A
Sol. • Quantities having different dimensions can't be added or subtracted and also it they can't be equal.

204.Who wrote"The Great Successor : The Divinely Perfect Destiny of Brilliant Comrade Kim Jong Un" ?
A. Anna fifield
B. Rory Power
C. Lisa Toddeo
D. Riley Sagar

Ans. A
Sol.

• **Anna Fifield** wrote"The Great Successor : The Divinely Perfect Destiny of Brilliant Comrade Kim Jong Un".
• She was Tokyo bureau chief for that paper from 2014 to 2018.
• In that role, she focused her attention on news and issues of Japan, North Korea, and South Korea.
• She has been to North Korea a dozen times.

205.Division of creamy and non creamy is based on _____.
A. Reservation
B. Milk products
C. Industries
D. Inflation

Ans. A
Sol.
* **Creamy layer** and **Non-Creamy layer** is a term used in Indian politics to refer to the relatively forward and better educated members of the **Other Backward Classes** (OBCs).
* The Creamy layer term was introduced by the **Sattanathan Commission** in **1971**.
* This commission directed that the "creamy layer" should be excluded from the **reservations**(quotas) of civil posts.
* The Creamy layer term was originally introduced in the **context of reservation of jobs** for certain groups in 1992

206.Which Indian state has most beautiful sea beaches?
A. Tamilanadu
B. Maharashtra
C. Goa
D. Karnataka

Ans. C
Sol.
* **Goa** is a land of most exotic beaches in India, these beaches of Goa are counted as the best tourist destination in India.
* Some of the famous beaches of Goa are Baga Beach, Calangute beach, Condolim, Majorda beach and Colva beach.
* **Calangute Beach** is one of the most popular beaches in Goa.

207.Which is the most important festival of Nagaland?
A. Bihu
B. Losar
C. Hornbill Festival
D. Hemis Festival

Ans. C
Sol.
• The **Hornbill Festival** is a celebration held every year from **1st to 10th December**.
• It is the most important festival of **Nagaland**.
• It is also called the '**Festival of Festivals**'.
• The festival is named after the **Indian hornbill**, the large and colourful forest bird.
• The first festival was held in **2000**.

208.Onam is a harvest festival of_____.
A. Tamil Nadu
B. Assam
C. Karnataka
D. Kerala

Ans. D
Sol.
• Onam is the biggest festival of **Kerala**.
• It is a **harvest festival**.
• It is celebrated all across the state by people of all communities.
• It is celebrated as the initiation of the **Malayalam calendar**.
• This festival falls between August-September.
• The festival lasts from 4-10 days.

209.The Revolt of 1857 cannot be merely called a sepoy mutiny because _____.
A. it was inspired by nationalistic sentiments and led by former rulers
B. it was the result of socio-economic causes not limited to only the sepoys
C. it was spread all over India
D. it involved the participation of all classes of society

Ans. B
Sol.
* The Revolt of 1857 cannot be called merely a sepoy mutiny because it was the

result of socio-economic causes not limited to only the sepoys.
* Though it was ignited by sepoy but later supported and contuined by rulers, zamindars, leaders etc.

210.Who has been appointed as the new additional principal secretary to the Prime Minister of India in June 2019?
A. Ajit Doval
B. P. K. Mishra
C. Amitabh Thakur
D. Nripendra Mishra

Ans. B
Sol.
• **P. K. Mishra** has been appointed as the **Additional Principal Secretary** to the Prime Minister of India on 11th June 2019.
• He is a retired **IAS officer**.
• **Dr**. **Nripendra Mishra** has been appointed as the Principal Secretary to Prime Minister Narendra Modi.
• He is a **1967-batch retired IAS officer** of Uttar Pradesh cadre.

211.Which algorithm is used to decide the path to transfer the packets from source to destination?
A. Routing
B. Pathing
C. Selecting
D. Directing

Ans. A
Sol.
- Path selection involves applying a routing metric to multiple routes to select (or predict) the best route.
- Routing is the process of selecting a path for traffic in a network, or between or across multiple networks. Routing is performed for many types of networks, including circuit-switched networks, such as the public switched telephone network (PSTN), computer networks, such as the Internet, as well as in networks used in public and private transportation, such as the system of streets, roads, and highways in national infrastructure.
- The sample routing algorithm states that the best path to any destination is the one that has the lowest metric value. A metric is a number that is used as a standard of measurement for the links of a network.

212.Which country is in the process of building the largest single Aperture Radio Telescope FAST
A. Japan
B. China
C. USA
D. Russia

Ans. B
Sol. The Five-hundred-meter Aperture Spherical radio Telescope is a radio telescope located in the Dawodang depression, a natural basin in Pingtang County, Guizhou Province, southwest China. It consists of a fixed 500 m (1,600 ft) diameter dish constructed in a natural depression in the landscape. It is the world's largest filled-aperture radio telescope, and the second-largest single-dish aperture after the sparsely-filled RATAN-600 in Russia. It has a novel design, using an active surface for pointing and focusing, rather than only correcting residual errors, and suspending the receiver on a computer-controlled winch system without any rigid connection to the primary.

213.Which one of the following is the sweetest natural sugar ?
A. Lactose
B. Glucose
C. Sucrose
D. Fructose

Ans. D
Sol.
- **Fructose** is a simple ketonic monosaccharide found in many plants, where it is often **bonded to glucose** to form the disaccharide sucrose.
- Pure, dry fructose is a very sweet, white, odourless, crystalline solid

and is the most water-soluble of all the sugars.

214.Which of the following causes Malaria?
A. Insect
B. Bacteria
C. Protozoa
D. Virus

Ans. C
Sol. Malaria is caused by the protozoan parasite Plasmodium. Human malaria is caused by four different species of Plasmodium: P. falciparum, P. malariae, P. ovale and P. vivax. Humans occasionally become infected with Plasmodium species that normally infect animals, such as P. knowlesi.

215.Bio-magnification implies
A. Toxic matters are magnified
B. Living beings are magnified
C. Light is magnified
D. Food is magnified

Ans. A
Sol. **Biomagnification** (or bioaccumulation) refers to the ability of living organisms to accumulate certain chemicals to a concentration larger than that occurring in their inorganic, non-living environment, or in the case of animals, in the food that they eat. Organisms accumulate any chemical needed for their nutrition

216.In plants water is absorbed by the root hairs by a process called:
A. Transpiration
B. Respiration
C. Perspiration
D. Osmosis

Ans. D
Sol.

- Plants absorb water from the soil through root hair, by the process of **osmosis.**

- Osmosis is a process by which the molecules of solvent (water) move from a region of low concentration to a region of high concentration through a semi permeable membrane.

217.The chemical substance present in bones and teeth is
A. Calcium phosphate
B. Calcium chloride
C. Calcium sulphate
D. Calcium borate

Ans. A
Sol. Seventy percent of bone is made up of hydroxyapatite, a calcium phosphate mineral (known as bone mineral). Tooth enamel is composed of almost ninety percent hydroxyapatite.

218.Second battle of Panipat was fought between which two armies?
A. Babur and Lodi Empire
B. Babur and Rana Sanga
C. Akbar and Hemu
D. Akbar and Rana of Mewar

Ans. C
Sol. The **Second Battle of Panipat** was fought between Mughal emperor, Akbar and Hindu General Hemu on November 5, 1556. The two armies clashed at Panipat not far from the site of the First Battle of Panipat of 1526. Mughal emperor Akbar defeated Hemu.

219.Who defeated Humayun in the battle of Chausa?
A. Muhammad Adil Shah
B. Firoz Shah Suri
C. Sikandar Shah Suri
D. Sher Shah Suri

Ans. D
Sol. Sher Shah Suri defeated Humayun in the battle of Chausa. It was fought on 26th June 1539.
Hence, Option D is the correct answer.

220.Article 370 of the Indian Constitution was related to which state?
A. Jammu and Kashmir
B. Gujarat
C. Tamil Nadu
D. Bihar

Ans. A
Sol.

- **Article 370** of the Indian Constitution earlier gave special status to Jammu and Kashmir.
- It gave autonomous status to the state of Jammu and Kashmir.
- Jammu and Kashmir will now be governed by the laws applicable to other Indian citizens as Article 370 is scrapped.

221.Fundamental duties are given in which part of India constitution?
A. Part I
B. Part II
C. Part III
D. Part IV A

Ans. D
Sol. The fundamental duties are given in Part IV (A) of the India Constitution while fundamental rights are given in Part III of the Indian Constitution. Hence, option D is the correct answer.

222.Which of the following is a vestigial organ in human body?
A. Tailbone
B. Spleen
C. Thyroid
D. Gall Bladder

Ans. A
Sol. Some examples of vestigial organ of human body are: tailbone, wisdom teeth, appendix, body hair etc.

223.The histogen, from which epidermis is formed is
A. Dermatogen
B. Periblem
C. Plerome
D. Calyptrogen

Ans. A
Sol. There are three meristematic layers in plants which consist of three sets of initials known as histogen. Dermotogen is the outer most layers, the cells of which divide anticlinally and give rise to the epidermeis,. Periblem and plerom are the other two histogene.

224.What is the name of grasslands of Africa?
A. Savannah
B. Pampas
C. Velds
D. Both A and C

Ans. D
Sol. The savannah and velds make up the central part of Africa in a band across the continent and down the middle into South Africa. Some of the countries with savannah are Kenya, Tanzania, Zambia, Chad, Sudan, Ethiopia, Somalia, Zimbabwe, Mozambique, Botswana, and South Africa.

225.Which among the following imaginary line lies at 0 ° latitude?
A. Equator
B. Tropic of Cancer
C. Tropic of Capricorn
D. Prime Meridian

Ans. A
Sol. The Equator is the line lies at 0 ° latitude and divides the Earth into two equal hemispheres- northern and southern hemispheres). *The Equator* is about 40,075 kilometers (24,901 mi) long, of which 78.7% lies across water and 21.3% over land. Indonesia is the country got the longest equatorial line lay across the water and land.

226.Barren Island is located in which of the following country?
A. Italy
B. Australia
C. India
D. Pakistan

Ans. C
Sol. The Barren island is located in India. It is located in the Andaman sea. It is the only active volcano in South Asia.

227.The only planet whose period of rotation is longer than the period of revolution around the sun?
A. Mercury
B. Jupiter
C. Venus

D. Neptune

Ans. C
Sol. Venus is the only planet whose period of rotation is longer than the period of revolution around the sun. The period of rotation of venus is 243 days and period of revolution of the sun is 225 days.

228.Which of the following is known as Black Current?
A. Gulf Stream
B. Kuroshio Current
C. California Current
D. Antarctic Current

Ans. B
Sol. The word 'Kuroshio' means 'Black Current' in Japanese. Also known as Japan Current, it is a warm ocean current which flows up the East coast of Asia and under the influence of the westerly winds towards North America. It is the counterpart of the Gulf Stream. However, the Antarctic Circumpolar Current is the largest oceanic current on Earth.
229.Which Chola King constructed the new capital Gangaikonda Cholapuram ?
A. Rajaraja Chola
B. Rajendra Chola I
C. Rajendra Kulottung
D. None of these

Ans. B
Sol. • **Rajendra Chola I** constructed the new capital **Gangaikonda Cholapuram .**
• He also constructed the **Brihadeswara** temple which comprises thirteen storeys and is crowned by a single block of granite . I
• n South India , the Chola Dynasty flourished under Rajaraja I and Rajendra Chola I. **Rajaraja I** was the founder of this dynasty

230.Which of the following bacterium causes crown gall disease in plants?
A. Bacillus thurigiensis
B. Agrobacterium tumefaciens
C. Pseudomonas fluorescens
D. None of these

Ans. B
Sol. Agrobacterium tumefaciens is the cause of the economically important disease, crown gall. Agrobacterium tumefaciens is cosmopolitan in distribution, affecting dicotyledonous plants in more than 60 different plant families. Crown gall can be found most often on stone fruit and pome trees as well as brambles and several species of ornamental plants.

231.Which of the following plays an important role in photosynthesis?
A. Chloroplast
B. Centrosome
C. Tonoplast
D. Nematoblast

Ans. A
Sol. Chloroplast plays an important role in photosynthesis. It is the structure in a green plant cell in which photosynthesis occurs. All green plant take part in the process of photosynthesis which converts energy into sugars and the byproduct of the process is oxygen that all animals breathe. The main role of chloroplasts is to conduct photosynthesis, where the photosynthetic pigment chlorophyll captures the energy from sunlight and converts it and stores it This process happens in chloroplasts.

232.What could be the function attributed to the transfusion tissue found in Cycas leaflets?
A. Mechancial
B. Conduction
C. Storage
D. Photosynthesis

Ans. B
Sol.
- The main function of the transfusion tissue is the transport of materials between the vascular bundles and the mesophyll.
- The transfusion tissue found in Cycas leaflets performs the function of conduction.

233.The hardness of water is due to the _____.

A. Calcium Carbonates
B. Magnesium Carbonates
C. Magnesium Chloride
D. All of the above

Ans. D
Sol. The hardness of water is due to the Calcium Carbonates, Magnesium Carbonates and Magnesium chloride. It has high mineral content. Hard drinking water may have moderate health benefits, but can pose critical and grieveous problems in industrial settings.

234.Which of the following can be found as pollutants in the drinking water in some parts of India?
1. Arsenic
2. Sorbitol
3. Fluoride
4. Formaldehyde
5. Uranium
Select the correct answer using the code given below
A. (1), (2), (3), (4) and (5)
B. (1) and (3)
C. (2), (4) and (5)
D. (1), (3) and (5)

Ans. D
Sol.
- Following can be found as pollutants in the drinking water in some parts of India:-
- Long-term exposure to **arsenic** in drinking **water** can cause cancer in the skin, lungs, bladder and kidney.
- Floride in water reduces iron absorption.
- Widespread **Uranium** Contamination Found in **India's** Groundwater.

235.Absolute Zero is defined as
A. The temperature at which all molecular motion ceases
B. At which water boils at 298K
C. At which liquid Helium boils
D. At which the volume becomes zero

Ans. A
Sol. **Absolute zero is defined** as precisely the temperature at which all molecular motion ceases.

8.Which process is responsible for the glittering of air bubble rising through water?
A. Reflection of light
B. Refraction of light
C. Total internal reflection of light
D. Scattering of light

Ans. C
Sol.
- Total internal reflection is responsible for glittering of air bubble rising through water which occurs when the light from a denser media(liquid) is trying to enter lesser denser media(air in the bubble).
- This reflected light by human eyes appears as glittering.

236.The antiparticle of an electron is
A. Positron
B. Gamma Particles
C. Alpha particles
D. Beta particles

Ans. A
Sol. Corresponding to most kinds of particles, there is an associated antiparticle with the same mass and opposite charge.
For example, the antiparticle of the electron is the positron (antielectron).

237.Who has been appointed as the new Director-General of Border Security Force (BSF) ?
A. Pankaj Pathak
B. Sanjay Sinha
C. Rajnikant Mishra
D. Vinay Meena

Ans. C
Sol. **IPS officer Rajinikant Mishra** will be the new **Director General (DG)** of the **Border Security Force (BSF)**. IPS officer **SS Deswal** has been appointed as DG of **Sashastra Seema Bal** (**SSB**). BSF's current DG **KK Sharma** retires on September 30, Mishra will replace him.

Rajnikant Mishra will be in the post till **August 31, 2019.**

238.Which Union Ministry has been officially decided to participate in Programme for International Student Assessment (PISA) after gap of nine years ?
A. Ministry of Home Affairs
B. Ministry of Sports
C. Human Resource Development (HRD)
D. Ministry of Science

Ans. C
Sol. Union Ministry of Human Resource Development (HRD has officially decided to participate in Programme for International Student Assessment (PISA) after gap of nine years. It will send team of officers to Paris to negotiate India's terms of participation in PISA 2021.

239.Who has been elected as President of Pakistan ?
A. Mamnun Hasan
B. Maulana Fazl ur Rehman
C. Aitzaz Ahsan
D. Dr Arif Alvi

Ans. D
Sol. Dr Arif Alvi, a close ally of Prime Minister Imran Khan and one of the founding members of the Pakistan Tehreek-e-Insaf party, was elected as the new President of Pakistan on 4th September. The 69-year-old former dentist defeated Pakistan Peoples Party candidate Aitzaz Ahsan and the Pakistan Muslim league-N nominee Maulana Fazl ur Rehman in a three-way contest to become the 13th President.

240.Which Indian-American was nominated for Assistant Secretary of Treasury for Financial Institutions on September 14, 2018 ?
A. Bimal Patel
B. Vivek Khanna
C. Tulsi Gabbard
D. Raja Krishnamoorti

Ans. A
Sol. US President Donald Trump has nominated Indian-American **Bimal Patel** for an important administrative post of the Finance Ministry.
* Georgia's Patel has been nominated for the post of assistant minister for financial institutions in the Finance Ministry.
* Bimal Patel has also been an Assistant Assistant Professor at Stanford University, he used to teach banking regulation to graduate students here.
* Bimal Patel has studied BA from Stanford University. Harvard University has taught JD from Kennedy School of Government, MPP and Georgetown University Law Center.

241.Which place is said to be the Manchester of South India?
A. Coimbatore
B. Salem
C. Thanjavur
D. Madurai

Ans. A
Sol. Coimbatore is known as the Manchester of south India. Manchester is actually a city in U.K. which is number one in cotton good production in the world with many textile industries. Similarly Coimbatore is also famous for its small, medium and large cotton firms that thrive on the regions ability to grow cotton crop.

242.Which is world's largest island?
A. Greenland
B. Iceland
C. New Guinea
D. Madagascar

Ans. A
Sol.
- Greenland is the world's largest island covering 2,175,597 square kilometres.
- It is a massive island and autonomous Danish territory between the North Atlantic and Arctic oceans.

243.Which of the following is a commercial crop?
A. Cotton

B. Bajra
C. Jowar
D. Paddy
Ans. A
Sol. Cotton is a commercial crop.

244.Which cricketer has written his autobiography named 'No Spin' ?
A. Shane Watson
B. Sachin Tendulkar
C. Shane Warne
D. Rahul Dravid
Ans. C
Sol. Australian cricketer **Shane Warne's** autobiography "**No Spin**" will have a global release on October 4, 2018. The memoir is written with cricketer and TV presenter **Mark Nicholas**. He officially retired from all cricket formats in 2013.

245.Who is the author of " The Rule Breakers" ?
A. Ramchandra Guha
B. P Chidambaram
C. Preeti Shenoy
D. Chandra Singh
Ans. C
Sol. **'The Rule Breakers'** is **Novel** which is written by **Preeti Shenoy**. She is a **Forbes** nominated author . The novel set in the '90s is the story of Veda who harbours big dreams but finds herself trapped in an arranged marriage and realizes that her opinions in real life don't matter.

246.Where is the headquarter of the International Court of Justice (ICJ)?
A. The Hague, Netherlands
B. Geneva, Switzerland
C. New York City, USA
D. Washington, USA
Ans. A
Sol. The headquarter of the International court of Justice (ICJ) is at the Peace Palace in The Hague, Netherlands.
• The International Court of Justice is the primary judicial branch of the United Nations (UN).
• The court settles legal disputes submitted to it by states and provides advisory opinions on legal questions submitted to it by duly authorized international branches, agencies, and the UN General Assembly.
• ICJ was established in 1945.
• The President of International Court of Justice is Mr. Ronny Abraham.

247.Who introduced the term "Biodiversity Hotspot" ?
A. M Swaminarayan
B. Dr. James Smith
C. Norman Myers
D. None of these
Ans. C
Sol. The concept of "**biodiversity hotspots**" was originated by **Norman Myers**.
• A biodiversity hotspot is a **Bio Geographic region** with a significant reservoir of biodiversity that is under **threat from humans**.

248.Which of the following Hollywood actress has been named as UNESCO Goodwill Ambassador for Indigenous Peoples?
A. Angelina Jolie
B. Yalitza Aparicio
C. Salma Hayek
D. Emma Stone
E. Priyanka Chopra
Ans. B
Sol. * The United Nations Educational, Scientific and Cultural Organization (UNESCO) has named Mexican actress Yalitza Aparicio as a UNESCO Goodwill Ambassador for Indigenous Peoples.
* Ms. Aparicio is committed to the fight against racism and for the rights of women and indigenous peoples. She was chosen to play in Alfonso Cuarón's film Roma while studying to be a teacher.
* Her performance in the film, for which she had to learn the Mixtec language of her father's family, won her an Oscar nomination for best actress, the first indigenous Mexican woman to be so recognized by the US Academy Awards.
* TIME magazine (USA) listed her as one of the 100 most influential people in the world in 2019.

249.Former judge of Madras High Court Justice Vinod Kumar Sharma has been appointed as the Lokpal of which state?
A. Uttar Pradesh
B. Haryana

C. Punjab
D. Kerala
E. Telangana
Ans. C
Sol. * Punjab government has appointed Justice Vinod Kumar Sharma as Punjab Lokpal.
* This is done without amending Punjab Lokpal Act, 1996 in which CM of Punjab and cabinet ministers are out of its ambit.
* Justice Satish Kumar Mittal resigned from the post of Lokpal in April 2018 and became the chairman of Haryana Human Rights Commission, since then this post was lying vacant.
* Justice Sharma had worked as an advocate in Punjab and Haryana High Court from 1974 till his elevation as Judge of Punjab and Haryana High Court in March 2006.
* He retired as a judge of Madras High Court in May 2013. At least 3,000 of his judgments have been quoted in various law books and journals.
* The Lokpal holds the office for a term of six years.

250.Joint military training, Exercise Nomadic Elephant–XIV started on 5th October 2019. It is between which two countries?
A. India and Thailand
B. India and Singapore
C. India and Malaysia
D. India and China
E. India and Mongolia
Ans. E
Sol. * 14th edition of Indo – Mongolian joint military training, Exercise Nomadic Elephant–XIV started on 5th October.
* The exercise will be conducted from 05 to 18 Oct 19 at Bakloh. In this exercise, the Indian Army is being represented by a battalion of the RAJPUTANA RIFLES Regiment.
* Nomadic Elephant – XIV is the fourteenth edition between the two nations aimed at training troops in counter-insurgency & counter-terrorism operations under the United Nations mandate.
* The joint exercise will enhance defence co-operation and military relations between the two nations.

gradeup

Gradeup Green Card

Features:

- 350+ Full-Length Mocks
- 30+SSC & Railways Exams Covered
- Tests Available in English & Hindi
- Performance Analysis & All India Rank
- Previous Year Question Papers in Mock Format
- Available on Mobile & Desktop

GET IT ON Google Play

www.gradeup.co