

## CDS II 2019 General Studies Paper: Solution

1. Ans. A.

Babur was the follower of Naqshbandiyya leader, Lhwaja Ubaydullah Ahrar.

2. Ans. C.

Maruta Makkal were the tribes of Ploughmen. Inhabiting fertile, Well watered tracts and living in villages called ur.

Kuravan Makkal were hill people who are foresters, and tell fortunes to other people.

Mullai Makkal also called Ayar were pastoralists.

Neytal Makkal or fishing people living in large coastal village called Pattinam or small ones called Pakkam.

3. Ans. C.

The Nayanars were the group of 63 saints in the 6-8<sup>th</sup> century who are devoted to the Hindu god Shiva in Tamil Nadu.

4. Ans. B.

Citrus fruits are the highest value fruit crops in-terms of International trade. It grows in warm climate such as Florida. Mediterranean regions are the important supplier of Citrus fruits. This regions enjoys the mild and moist winters hence the crops not get spoiled.

5. Ans. B.

Human development index is the static composite index of life expectancy, education and per capita income. It was developed by Pakistani economist Mahbub-UI-Haq.

6. Ans. D.

The sex ratio is the ratio of males to females in a population usually expressed as the number of males per thousand females. In India sex ratio is defined as number of females per thousand males.

The sex ratio for the entire world population is 101 males 100 females.

According to the UN estimates there were 2.24 billion men in Asia and Middle-East compared with the female population of 2.14 billion.

7. Ans. D.

The South-Indian region has a tropical climate and depends on monsoon and rainfall. It is characterized by moderate to high year-around temperature and seasonal heavy rainfall.

The diurnal range of temperature is also less and climatic conditions are more likely stable.

8. Ans. A.

Jhumri Telaiya is a city in Jharkhand situated in the Damodar valley.

Mandar hills is situated in Banka district under Bhagalpur division of state of Bihar.

9. Ans. C.

Agra is the city in the state of Uttar-Pradesh which situates in the bank of river Yamuna.

Bhagalpur is the city in the state of Bihar situates on the bank river Ganges.

Kanpur is the city in the state of Uttar-Pradesh and is on the banks of river Ganges.

Bhopal consist Bhoj lake and is comes under the states of Madhya-Pradesh.

10. Ans. B.

Bihar bordered by Nepal, Uttar-Pradesh, Jharkhand and west Bengal.

Uttarakhand bordered by Tibet, Uttar-Pradesh, Nepal, Haryana and Himachal-Pradesh.

Meghalaya bordered by Bangladesh, Assam.

Chhattisgarh bordered by Madhya-Pradesh, Uttar-Pradesh, Jharkhand, Telangana, Maharashtra and Odisha.

11. Ans. C.

Unitary constitution governs constitutionally as one single unit with one legislature in center.

Federal constitution is where powers are divided between national government and regional government.

Quasi-Federal refers to government organize similar to union of states under central government rather than the individual government of the states.

12. Ans. D.

Article 165 has provided the office of advocate general for the state. He is the highest law officer in the state.

He is appointed by the governor. He must be a person who is qualified to be appointed a judge of a high court.

High court enjoys jurisdiction in original, appellate and supervisory at the state level as provided in the constitution.

13. Ans. C.

Article 3 authorize the parliament to –

- Form a new state by separation of territory from any state or by uniting two or more states or parts of states.
- Increase the area of the any state.
- Diminish the area of any state.
- Alter the boundary of any state.
- Alter the name of every state.

Two condition should be followed-

The bill containing above changes can be introduced in the parliament with the prior recommendation of the president and president has to refer the same to the state legislature concern for expressing its views within a specific period.

14. Ans. A.

The fifth schedule of the constitution deals with the administration and control of scheduled areas as well as scheduled tribes residing in any state other than Assam, Meghalaya, Tripura, Mizoram. The president is empower to declare an area to be scheduled area and he can increase or decrease an area.

The governor has to submit a report to the president regarding the administration of such areas annually or whenever required.

Each state having scheduled areas has to establish a tribal advisory council to advice on welfare and advancement of the scheduled tribes.

15. Ans. C.

1 unit= 1 KWh (one kilo watt hour)

Where kilo=1000

It simply means if you have 100 watt bulb and you make on it for 10 hour it consume 1 unit of power.

100 watt bulb x 10hours=100 watt hour= 1 KWh=1 unit

According to the question used for 30 days then it will be 30 unit.

16. Ans. B.

Speed=distance/time

340=distance/5

Distance=340x5=1700meters

So, the distance of the reflecting surface from source is  $1700/2=850$  meters=0.85kms

17. Ans. C.

Uniform circular motion can be described as a motion of an object in a circle at a constant speed. As an object moves in a circle it continuously changes its direction. The acceleration of the car is because of changing directions. The direction of acceleration inwards. So the acceleration is non-zero quantity and because of change in velocity[changing direction] it is not a constant quantity.

18. Ans. A.

Indexation is a technique to adjust income payments by means of price index in order to maintain the purchasing power of the public after inflation, while the de-indexation is the unwinding of indexation.

19. Ans. A.

The price mechanism is the system of interaction of buyers and sellers in free markets enables goods, resources and services to be in the allocated price. This system where the forces of demand and supply determine the prices of commodity and the changes in it. It is the buyers and sellers who actually determine the prices of commodities.

20. Ans. A.

The total amount of money available for an individual or population to spend or save after taxes have been paid called personal disposable income. To calculate personal disposable income we have to subtract taxes from personal income.

21. Ans. D.

Quo Warranto means "by what authority or warrant. It is issued by the court to enquire into the legality of claim of a person to celcius office. The writ can be issued only in the case of substantive public office created by a statute or by the constitution. It cannot be issued in the case of ministerial office or private office.

22. Ans. A.

The managerial revolution was written by James Burnham and published in 1941, speculated on the fate of capitalism.

23. Ans. D.

The fundamental duties in the Indian constitution under article 51 A inspired by the constitution of erstwhile USSR. There is a list of duties defined in Indian constitution for every citizens of India.

- To respect ideology of constitution national flag and national anthem.
- To cherish and follow the noble ideals from national struggle for freedom.
- To uphold and protect the sovereignty and unity and integrity of India.
- To defend the country and render national services whenever called.
- To promote harmony and spirit of common brotherhood amongst all the people of India.
- To value and preserve the rich heritage og the country.
- To protect and improve the national environment.

- To develop scientific temper, humanism and spirit of equality.
- To safeguard public property and to abjure violence.
- To strive towards excellence in all spheres so that national constantly rise to higher levels.
- To provide opportunity for education to his child or ward between the age of 6 and 14 years. [86<sup>th</sup> constitution amendment act, 2002]

24. Ans. A.

SWAYAM stands for study webs of active learning for young aspiring minds. It comes under ministry of human resource development. This program initiated by government of India and designed to achieve the three cardinal principles of education policy namely access, equity and quality.

25. Ans. D.

The two houses in states called legislative assembly and legislative council. There are only seven states which have two tier of legislature- Uttar Pradesh, Bihar, Maharashtra, Karnataka, Andhra Pradesh, Telangana and Jammu Kashmir.

26. Ans. D.

Make in India is a kind of swadeshi movement covering 25 sectors of Indian economy launched on 25 September 2014 to encourage companies to manufacture their products in India and investment in to manufacturing.

27. Ans. A.

Sino Indian War also known as Indo china war between china and India that occurred in 1962. Soviet leader Khrushchev sided with Nehru and held china for the responsible of Sino Indian war of 1962.

28. Ans. C.

The Chandimangala is an important subgenre of mangalkavya, the most significant genre of medieval literature in Bengali.

The texts shows primarily some folk goddess like Chandi and Abhaya.

29. Ans. C.

Lord Minto started the Indian Agriculture Service in India.

30. Ans. A.

Plagues and People is a book on epidemiological history by William H. McNeill published in New York in 1976.

31. Ans. A.

Pteridophytes are the plant body which is differentiated into roots, stem and leaves and has specialized tissue for the conduction of water and other substances from one part of the plant body to another. In fact, they can be considered as the first terrestrial vascular plants, showing the presence of the vascular tissue, xylem, and phloem. Mostly, we find these plants in damp and shady places. Also, most ferns are grown as ornamental plants. Some examples are Marsilea, ferns, horsetails, Azolla, Pteridium and Salvinia.

Pteridophytes display differentiation. The plant body can be divided into true root, stem, and leaves. A sporophyte is the main plant body here. Some of the species belonging to this division have small leaves called the microphylls. The thallophytes, the bryophytes and the pteridophytes have naked embryos that are called spores. The reproductive organs of plants in all these three groups are very inconspicuous, and they are therefore called cryptogamae, or those with hidden reproductive organs.

32. Ans. D.

Animal cells do not have cell walls. Cell walls are found in plant cells. Other given organelles like Mitochondria, Nucleolus and Free ribosomes are present in animal cells.

The cell parts found only in plants but not in animals are:

- \* Cell wall
- \* Large central vacuole
- \* Chloroplasts (plastids)

The cell parts found only in animals but not in plants are:

- \* Lysosomes
- \* Centrioles
- \* Cilia (some animal sperm have flagella)

33. Ans. B.

Vitamin C, also known as ascorbic acid, is a vitamin. It is found fresh fruits, berries and vegetables. It is one of the water-soluble vitamins. Vitamin C was first discovered in 1928. In 1932, it was proved to stop the sickness called scurvy.

Vitamin C is important in wound healing. Without enough vitamin C, a person can get a sickness called scurvy. Vitamin C is an essential nutrient involved in the repair of tissue and the enzymatic production of certain neurotransmitters. It is required for the functioning of several enzymes and is important for an immune system function. It also functions as an antioxidant.

Lack of vitamin C was a serious health problem on long ocean trips where supplies of fresh fruit were quickly used up. Many people died from scurvy on such trips. Most animals make their own vitamin C. Some mammals cannot. Those that cannot include the main suborder of primates, the Haplorrhini: tarsiers, monkeys and apes, including humans. Others are bats, capybaras and guinea pigs.

34. Ans. B.

The scientist who first of all, showed that the atomic number is a more fundamental property of an element than its atomic mass was Henry Moseley. He declared this concept in the Year, 1913. He is best known for the Moseley's Law and contributions to Physics. Moseley is also associated with the publication of the very first Long Form or Modern periodic table that is used to date.

Moseley performed experiments and studied the frequencies of the rays emitted from the elements. With these experiments, he concluded that the atomic number is a more fundamental property of an element than its atomic mass.

The atomic number is a more fundamental property of an element than its atomic mass. On arranging elements in the increasing order of their atomic numbers, similarities appear in physical and chemical properties at regular intervals.

35. Ans. A.

Chromatography is a technique used to separate components in a mixture on the basis of them being mixed as mobile phase, i.e. liquid or gas and stationary phase, i.e. solid or liquid.

It is used to separate colours in a dye, pigments from natural colour besides drugs from the liquid.



Chromatography is a laboratory technique for the separation of a mixture. The mixture is dissolved in a fluid called the mobile phase, which carries it through a structure holding another material called the stationary phase. The various constituents of the mixture travel at different speeds, causing them to separate. The separation is based on differential partitioning between the mobile and stationary phases. Subtle differences in a compound's partition coefficient result in differential retention on the stationary phase and thus affect the separation.

Chromatographic techniques have been used in blood processing and purification since the 1980s. It has emerged as an effective method of purifying blood components for therapeutic use

36. Ans. A.

People prefer to wear cotton clothes in the summer season. This is due to the fact that cotton clothes are good absorbers of heat.

Cotton clothes are very good for the body, especially in summer. It helps to absorb the sweat of the body. It also protects the body from harmful sun rays.

Benefits of Cotton clothes are:

- \* It is comfortable to wear.
- \* It allows air circulation in the body.
- \* It minimizes fungal breeding.
- \* It gives cooling effects to the body.
- \* It is perfect for sensitive skins.
- \* It provides relief from allergies.
- \* It is easily manageable.

37. Ans. B.

A soap solution appears cloudy because the soap micelles are large enough to scatter light.

A soap is a water-soluble compound which is made via a process called saponification by the reaction between sodium hydroxide or potassium hydroxide with vegetable or animal oil (fats)

When soap is mixed in the water, a colloidal solution is formed. The soap solution has soap micelles which are an aggregate of soap molecules. These micelles are large, and they scatter light. That is why the soap solution appears cloudy. Soap is mixed with water to form micelle, which gives the solution a cloudy appearance when soap is added to the water the fatty acid ionizes. The polar water-soluble gets attracted to water while the non-polar tails attract each other. Then the ions are attracted to each other and form the special clusters and sometimes in the form of emulsions which gives a cloudy look.

38. Ans. B.

Graphite is an allotrope of carbon which is a semimetal and is also a form of coal. Graphite is the most

the stable form of carbon under standard conditions.

In Graphite, each carbon atom is bonded to three other carbon atoms in the same plane, giving a

hexagonal array. One of these bonds is a double bond, and hence the valency of the carbon is satisfied.

Graphite structure is usually formed by the hexagonal arrays being placed in layers one above the other.

It is also a good conductor of electricity, and it is also smooth and slippery.

39. Ans. D.

Monatomic compounds are composed of single atoms, and there are no chemical bonds between these atoms. Diatomic compounds are composed of molecules containing two atoms. Therefore, there are chemical bonds between these atoms.

Helium – monatomic

argon – monatomic

hydrogen – diatomic

nitrogen – diatomic

chlorine – diatomic

Sulphur – diatomic

oxygen – diatomic

ozone – triatomic

phosphorus – tetratomic

40. Ans. A.

The Alvars were Tamil poet-saints of South India who espoused bhakti (devotion) to the Hindu

Supreme god Vishnu or his avatar Krishna in their songs of longing, ecstasy and service. They are

venerated especially in Vaishnavism, which regards Vishnu or Krishna as the Supreme Being.

Many modern academics place the Alvars date between the 5th century to the 10th century C.E.

Orthodoxy posits the number of Alvars as ten, though there are other references that include Andal

and Madhurakavi Alvar, making the number twelve. Andal is the only female saint-poet in the 12

Alvars. Together with the contemporary sixty-three Shaiva Nayanars, they are among the most

important saints from Tamil Nadu.

The Nayanars were a group of 63 saints (also saint poets) in the 6th to 8th century who were devoted

to the Hindu god Shiva in Tamil Nadu. They, along with the Alvars, their contemporaries who were

devoted to Vishnu, influenced the Bhakti movement in Tamil. The names of the Nayanars were first

compiled by Sundarar. The list was expanded by Nambiyandar Nambi during his compilation of

material by the poets for the Tirumuraicollection and would include Sundarar himself and Sundarar's

parents.

41. Ans. C.

The United Provinces during the Non-Cooperation became one of the strongest bases of the Congress, with 3,28,966 members in July 1921 (a figure exceeded only by Bihar which claimed 3,50,000) and U.P. won from this time a leading position in national politics which it has retained till today.

The literary outcrop of Non-Cooperation in Bengal was quite meagre if compared to that of the 1905 days, and nationalists in the 1920s and 1930s had to make do very often with the old Swadeshi songs. But all this pales into relative insignificance when set beside the unique communal unity (particularly important for Bengal, where Hindus and Muslims were more or less evenly matched in numbers), the effective political leadership provided by C.R. Das and his three young lieutenants (Birendranath Sasmal in Midnapur, J.M. Sengupta in Chittagong, and Subhas Bose in Calcutta),

42. Ans. D.

The Oudh Kisan Sabha established in 1920 did not fail to bring under its wing any Kisan Sabhas. The differences were reflected in the U.P. Kisan Sabha, and soon the Non-cooperators set up an alternative Oudh Kisan Sabha at Pratapgarh on 17th October 1920. This new body succeeded in integrating under its banner all the grassroots Kisan sabhas that had emerged in the districts of Avadh in the past few months; through the efforts of Misra, Jawaharlal Nehru, Mata Badal Pande, Baba Ramchandra, Deo Narayan Pande and Kedar Nath, the new organization brought under its wing, by the end of October, over 330 Kisan sabhas.

The Oudh Kisan Sabha asked the Kisans to refuse to till the bedakhli land, not to offer hari and beggar (forms of unpaid labour), to boycott those who did not accept these conditions and to solve their disputes through panchayats. The first big show of strength of the Sabha was the rally held at Ayodhya, near Fyzabad town, on 20th and 21st December which was attended by roughly 100,000 peasants. At this rally, Baba Ramchandra turned upbound in ropes to symbolize the oppression of the kisans. A marked feature of the Kisan Sabha movement was that Kisans belonging to the high as well as the low castes were to be found in its rank.

43. Ans. B.

Non-Cooperation began in Punjab with a fairly successful Lahore student walk-out inspired by Lajpat Rai in January 1921, but the movement in the cities at that time seems to have remained relatively weak unlike in April 1919; perhaps precisely because memories of ruthless British reprisals at that time were still very fresh.

The Sikh-dominated central Punjab countryside was stirred to its depths, however, by the powerful Akali upsurge, initially quite an independent religious reform movement which for a time got closely identified with Non-Cooperation.

44. Ans. B.

The Greek travellers were most impressed by the fertility of India's soil and the energy and ability of the cultivators. The Greeks found it a great source of wonder that India produced two crops a year.

Ancient India knew the use of manure. The ordinary villagers of Ancient days cultivated the land much as they do then, ploughing with shallow wooden ploughs drawn by oxen, verified by Harappan discoveries.

45. Ans. D.

Wular Lake is the largest freshwater lake in India.

This lake is situated in the Kashmir and 40 km northwest from the Srinagar city of India. The depth of

the lake is 14 meters, and the size of the lake is 189 sq.km, and the length of the river is 16 km, and

its breadth is 10 km. Wular lake is very important to play a role in the hydrographic process of the

Kashmir to absorb the annual freshwater as the basin.

Fresh Water Lakes: They are mainly found in the Himalayan region. They are of glacial origin. They

are formed when glaciers dug out a basin, which was later filled with snowmelt. The Wular Lake is the

largest freshwater lake of India. Other freshwater lakes are the Dal Lake, Bhimtal, Loktak and Barapani.

46. Ans. B.

Due to the apparent northward movement of the Sun temperature start rising from March, toward the

end of the May a low-pressure trough is developed which extends from the Thar Desert in the northwest

to the Chotanagpur plateau in the east. In the heart of this low pressure through in the North West, dry

and hot winds blow in the afternoon. These hot and dry winds are locally known as Loo. Dust storms in

the evening very common during May in the northwestern part of the country. Sometimes they are

accompanied by light rains and pleas and cool breeze which give temporary relief from the oppressive

heat.

Pre-monsoon showers in Karnataka and Kerala that help in the ripening of mangoes are also called

"Mango Showers". Deficiency of these rains affects the mango harvest in South India.

In the eastern and North-Eastern parts of the subcontinent, violent thunderstorms at a speed of about

60 km to 80 km per hour are experienced. Their direction is mainly from the North-West; hence they

are called the Norwesters. These storms are accompanied by heavy showers and hails.

47. Ans. B.

The great historic barrier of the Caucasus Mountains rises up across the wide isthmus separating the Black and Caspian Seas in the region where Europe and Asia converge.

The great historic barrier of the Caucasus Mountains rises up across the wide isthmus separating the Black and Caspian seas in the region where Europe and Asia converge. Trending generally from northwest to southeast, the mountains consist of two ranges—the Greater Caucasus (Russian: Bolshoy Kavkaz) in the north and the Lesser Caucasus (Maly Kavkaz) in the south. Mount Elbrus in the Greater Caucasus range, at 18,510 feet (5,642 metres), is the highest peak.

48. Ans. B.

Key profile characteristics of Oxisols are very old & highly weathered, uniform texture, high amounts of

Fe and Al oxides with kaolinite clay (low activity clay), low cation exchange capacity (CEC), and small

amounts of exchangeable bases.

Entisols are defined as soils that do not show any profile development other than an A horizon.

An entisol has no diagnostic horizons, and most are basically unaltered from their parent material, which

can be unconsolidated sediment or rock.

Histosols have very low bulk density and are poorly drained because they are rich in organic Matter and

holds the water very well. Most are acidic, and many are very deficient in major plant nutrients which

are washed away in the consistently moist soil.

A Vertisol is a soil type in which there is a high content of expansive clay minerals and is highly basic

in nature, many of them known as montmorillonite, that form deep cracks in drier seasons or years.

Vertisols typically form from highly basic rocks, such as basalt, in climates that are seasonally humid or

subject to erratic droughts and floods, or that impeded drainage. In a phenomenon known as

argillipedoturbation, alternate shrinking and swelling causes self-ploughing, where the soil material

consistently mixes itself, causing some Vertisols to have an extremely deep A horizon and no B horizon

(A soil with no B horizon is called an A/C soil).

49. Ans. C.

Ecological succession is the process of change in the species structure of an ecological community over

time. The time scale can be decades (for example, after a wildfire), or even millions of years after a mass

extinction.

In 1916, Frederic Clements published a descriptive theory of succession and advanced it as a general ecological concept. His theory of succession had a powerful influence on ecological thought. Clements' concept is usually termed classical ecological theory. According to Clements, succession is a process involving several phases.

- \* Nudation: Succession begins with the development of a bare site, called Nudation (disturbance).
- \* Migration: refers to the arrival of propagules.
- \* Ecesis involves the establishment and initial growth of vegetation.
- \* Competition: as the vegetation becomes well established, grows, and spreads, various species begin to compete for space, light and nutrients.
- \* Reaction: during this phase, autogenic changes such as the buildup of humus affect the habitat, and one plant community replaces another.
- \* Stabilization: a supposedly stable climax community forms.

50. Ans. A.

Soil impoverishment actually means a number of conditions that can lead to degradation in the quality of soil, or degradation in its richness. It relates to soil erosion. This might be caused due to reckless cutting of trees, leading to deforestation of trees. We know that trees help to bind the soil to the earth, and hence once these are uprooted, the richness gets diminished. Also, land should not be used carelessly for other activities that can harm its fertility.

Soil impoverishment is based on the innate ability of prairie plants to tolerate and flourish in soils with low levels of nitrogen. Soil impoverishment, or reverse fertilization, involves the removal of nutrients from the soil. It is most often done by introducing large amounts of organic Matter to the soil.

51. Ans. D.

The Constitution of India established federal State due to which the Indian Parliament is bicameral in nature which ensures representation of states equally. The Rajya Sabha has been given special power by the Constitution.

Rajya Sabha in India's Parliament has certain exclusive powers with respect to the following:



- \* Enable the Parliament to make law on a matter of state list.
- \* Creation of new All India Services.
- \* Enforcing proclamation of emergency when Lok Sabha is dissolved.

52. Ans. D.

As per article 56 of the Indian Constitution, the President's resignation letter is accepted by the Vice President of India. In case the Vice President's position is vacant, the resignation letter is to be handed over to the CJI (Chief Justice of India).

The Vice President may resign his office by submitting his resignation to the President. The resignation

becomes effective from the day it is accepted.

By Article 148, Comptroller and Auditor-General of India. There shall be a Comptroller and Auditor-

General of India who shall be appointed by the President by warrant under his hand and seal and shall

only be removed from office in like manner and on like grounds as a Judge of the Supreme Court.

The tenure of a High Court judges is not fixed by the Constitution, but they hold office until they attain the age of 62 years. A judge of the High Court can resign his office by writing to the President any time after the appointment.

53. Ans. C.

An octave can be defined as an interval between two points where the frequency at the second point is twice the frequency of the first.

The frequency that is one octave higher than 500 Hz is

$$\log\left(\frac{f_1}{f_2}\right) / \log(2) = 1$$

$$f = \log_{10}(2) \times 500 \text{ Hz}$$

$$f = 2 \times 500 \text{ Hz}$$

$$f = 1000 \text{ Hz}$$

Thus, the frequency of a note that is one octave higher than 500 Hz is 1000 Hz.

54. Ans. A.

If the speed of a moving magnet inside a coil increases, the electric current in the coil increases.

As the changing magnetic field caused by the material's motion induces a current in the coil of wire proportional to the change in the field. If a 0 is represented, the magnetic field does not change between

the two domains of a bit, so no current is induced as the magnetic material passes the coil.

55. Ans. B.

Valency: It is the measure of the combining capacity of atoms or molecules. Therefore, it is the the capacity of an atom of a single element to react and combine with particular numbers of atoms of another element.

Elements: An element is a substance whose atoms all have the same number of protons: another way of saying this is that all of a particular element's atoms have the same atomic number. Elements are chemically the simplest substances and hence cannot be broken down using chemical reactions. Elements can only be changed into other elements using nuclear methods.

Isobars: They are atoms of chemical elements having same atomic mass, but a different atomic number are called Isobars, i.e. the sum of the number of protons and neutrons together from the atomic mass. Therefore, we can also say the number of nucleons present in the nucleus is equal to the atomic mass of an atom. It will have the same number of nucleons.

The mass number of an atom: The mass number of the atom (M) is equal to the sum of the number of protons and neutrons in the nucleus.

56. Ans. B.

Mixtures are constituted by more than one kind of pure form of Matter, known as a substance. A substance cannot be separated into other kinds of Matter by any physical process. We know that dissolved sodium chloride can be separated from water by the physical process of evaporation.

A substance cannot be separated into other kinds of Matter by any physical process. Whatever the source of a substance may be, it will always have the same characteristic properties. Therefore, we can say that a mixture contains more than one substance.

However, sodium chloride is itself a substance and cannot be separated by the physical process into its chemical constituents. Similarly, sugar is a substance because it contains only one kind of pure Matter and its composition is the same throughout. Soft drink and soil are not single substances. Whatever the source of a substance may be, it will always have the same characteristic properties. Therefore, we can say that a mixture contains more than one substance.

57. Ans. B.

If an object is at rest, then the time (X-axis) versus distance (Y-axis), then the graph is horizontal.

All motion represented on a distance-time graph is unidirectional since direction cannot be represented by a distance-time graph. If the line is a continuous straight line, then the object has a uniform speed. If the distance remains constant over time, represented by a straight line parallel to the x-axis, then the object is at rest at the given distance, i.e. If an object is not moving, the distance-time graph results in a horizontal line which shows that the object is at rest. If the graph has curves or lines which are not patternable, then the object is moving with non-uniform speed.

58. Ans. A.

The rate of evaporation is affected by the following factors:

- \* Temperature: The rate of evaporation increases with an increase in temperature.
- \* Surface area: The rate of evaporation increases with an increase in surface area.
- \* Humidity: The amount of water vapour present in the air is called humidity. The rate of evaporation decreases with an increase in humidity.
- \* Wind speed: Evaporation increases with an increase in wind speed.

59. Ans. C.

Characteristics of the particles of Matter:

The essential characteristics of particles of the Matter are the following:

- \* The particles of the Matter are microscopic.
- \* The particles of the Matter have space between them.
- \* Particles of the Matter intermix on their own.
- \* The particles of the Matter are continually moving.
- \* Particles of the Matter have a force acting between them.
- \* The particles of the Matter attract each other.

Some physical properties of Particles of the Matter are:

- \* All Matter has mass and also occupies some space.
- \* They can be broken into millions of tiny pieces further.

60. Ans. C.

In economics, the Gini coefficient is sometimes known as the Gini index, or Gini ratio is a measure of statistical dispersion intended to represent the income or wealth distribution of a nation's residents and is most commonly used to measure the income inequality. It was developed by the Italian statistician and sociologist Corrado Gini and published in his 1912 paper Variability and Mutability.

The Gini coefficient measures the inequality among values of a frequency distribution (for example, levels of income). A Gini coefficient of zero expresses perfect equality, where all values are the same (for example, where everyone has the same income). A Gini coefficient of one (or 100%) expresses maximal inequality among values (e.g., for a large number of people, where only one person has all the income or consumption, and all others have none, the Gini coefficient will be very nearly one).

The Gini coefficient can also be used to measure wealth inequality. This use requires that no one has a

negative net wealth. It is also commonly used for the measurement of discriminatory power of rating

systems in credit risk management.

61. Ans. C.

Access to banking and other financial provisions one of the following is not a dimension of the Human Development Index.

The Human Development Index (HDI) is a Statistical tool used to measure a Country's overall achievement in its Social and Economic.

Human Development Index (HDI) is a statistic composite index of life Expectancy, Education, and per capita income indicators, which are used to rank countries into four tiers of Human development. The 2010 Human Development Report introduced an Inequality-adjusted Human Development Index (IHDI).

62. Ans. C.

Cost of living index is Which one of the following factors is not considered in determining the Minimum Support Price (MSP) in India.

Minimum Support Price is Calculated by Cost of production. Changes in input prices. Input-Output price difference. Trends in market prices over a period of time (3-6 months) Demand and Supply of Commodities. Inter-crop price rates. Effect on the Industrial cost structure. Effect on cost of living of the Population.

63. Ans. D.

Maximum Retail Price (MRP) printed on the covers/packets of goods sold in India is one of the following is an example of a price floor.

A Price floor in economics is a minimum price imposed by a Government or Agency, for a particular product or service. An example of a price floor is minimum wage laws, where the government sets out the minimum hourly rate that can be paid for labour, When the minimum wage is set above the Equilibrium Market price for unskilled or low-skilled Labour, Employers hire fewer Workers.

64. Ans. B.

The value of the slope of a normal demand curve is Negative. As the Price decreases, while the Quantity increases, the slope of Demand curve is usually negative. It is to be noted that in the case of a straight-line demand curve the slope is the same on all its points. There is no specific value of it, the demand curve is downward sloping demonstrating the negative relationship with Price.

65. Ans. C.

An Economic-Model is a simplified version of reality that allows us to observe, understand, and make predictions about Economic behavior.

The Economic model is a simplified, often Mathematical, framework designed to illustrate complex Processes.

66. Ans. A.

Lysosomes are the cells which are known as suicidal-bags and they produce Golgi-body.

It is known as suicidal bags because it is containing a large number of enzymes which can digest foreign particles that enter the cell, and this process is known as autolysis.

67. Ans. B.

Magnification is observed size of specimen/actual size. Magnification is the process of enlarging the apparent size, not physical size, of something. This enlargement is quantified by a calculated number also called "Magnification". When this number is less than one, it refers to a reduction in size, sometimes called Minification or De-Magnification.

68. Ans. C.

Inter-Cropping - It is growing of two or more crops in definite row patterns.

In other words, intercropping is the Cultivation of two or more crops simultaneously on the same field. The most common goal of Intercropping is to produce a greater yield on a given piece of land by making use of resources or Ecological processes that would otherwise not be utilized by a single Crop.

69. Ans. D.

Biceps is one of the body parts/organs of the human body does not have smooth Muscles.

The term smooth muscle refers to a muscle of the Human body that is part of an Involuntary muscle group.

#### Functions of Smooth Muscles:

- The smooth muscle in the uterus helps a woman to push out her baby.
- In the bladder, smooth muscle helps to push out urine.
- Smooth muscle determines the flow of blood in the arteries.

- Smooth muscles move food through the digestive tract.
- In one's eye the pupillary sphincter muscles is responsible for shrinking the size of the pupil.
- In arteries, smooth muscle movements maintain the arteries' diameter.
- Smooth muscle regulates air flow in lungs.
- Smooth muscle help sperm to move along the reproductive tract

70. Ans. B.

Trypanosoma organisms is responsible for sleeping sickness.

African trypanosomiasis, also known as African sleeping sickness or simply sleeping sickness, is an insect-borne Parasitic infection of Humans and other Animals. It is caused by the species Trypanosoma Brucei. Humans are infected by two types, Trypanosoma brucei Gambiense (TbG) and Trypanosoma brucei Rhodesiense (TbR).

71. Ans. A.

Demographic Dividend'- A rise in the rate of economic growth due to a higher share of working age people in population.

According to United Nations Population Fund (UNFPA), Demographic Dividend means, "the Economic growth potential that can result from shifts in a Population's age structure, mainly when the share of the Working-Age population (15 to 64) is larger than the Non-Working-age share of the population (14 and younger, and 65 and older). India has one of the youngest Populations in an aging world. By 2020, the median age in India will be just 28, compared to 37 in China and the US, 45 in Western Europe, and 49 in Japan.

72. Ans. B.

Chlorophy - II in photosynthetic prokaryotic bacteria is associated with membranous vesicles.

photosynthetic prokaryotic although bacteria are prokaryotes and lack membrane-bound Organelles like Plastids, they are able to carry out the process of Photosynthesis. This is because-

- They contain a pigment called bacteriochlorophyll.
- This bacteriochlorophyll is not a cell organelle but is a pigment found in the folds of the cell membranes also called vesicles.

73. Ans. A.

Active transport: It is the movement of a substance against a diffusion gradient with the use of energy from respiration.

In *cellular biology*, active transport is the movement of Molecules across a membrane from a region of lower Concentration to a region of higher Concentration—against the Concentration Gradient. Active transport requires Cellular energy to achieve this movement.

74. Ans. C.

Food chain is passage of food (and thus energy) from one organism to another.

Food chain, in ecology, the sequence of transfers of Matter and Energy in the form of food from Organism to Organism. Food chains intertwine locally into a food web because most Organisms consume more than one type of Animal or Plant. Plants, which convert Solar Energy to food by Photosynthesis, are the primary food source.

75. Ans. B.

Rutherford's alpha particle scattering experiment on thin gold foil was responsible for the discovery of Proton.

Rutherford's Gold Foil Experiment proved the Existence of a small massive center to atoms, which would later be known as the nucleus of an atom. Ernest Rutherford, Hans Geiger and Ernest Marsden carried out their Gold Foil Experiment to observe the effect of Alpha particles on matter.

76. Ans. C.

The rate of evaporation of liquid does not depend upon its mass.

The rate of evaporation does not depend on the type of Particles because it completely depends upon the surface area of the liquid, if surface area is large Evaporation will be maximum. Evaporation also depends upon wind speed, if the Wind is flowing at a higher speed, then the rate of Evaporation increases

77. Ans. B.



Bose - Einstein Condensate is fifth state of Matter.

Bose-Einstein condensate (BEC), a state of matter in which separate atoms or subatomic particles, Cooled to near Absolute Zero (0 K, – 273.15 °C, or – 459.67 °F; K = kelvin), Coalesce into a single Quantum mechanical entity—that is, one that can be described by a Wave function — on a near-macroscopic scale.

78. Ans. B.

the author of the 16 th century Sanskrit text, the Vraja Bhakti Vilasa which focuses on the Braj region in North India is Narayana Bhatta.

Braj region is also known as Brajbhoomi. It is a region in India on both sides of Yamuna river with its centre at Mathura-Vrindavan in Uttar-Pradesh. It also includes Hodal in Haryana and Bharatpur district in Rajasthan.

79. Ans. C.

The first Greek scholar Eratosthenes is credited with the first use of the word Geography in the third century B.C.E He is also known as the "father of Geography" for his geographical writing and accomplishments, including the measurement of the circumference of the Earth. Geography~ the study of the World's surface, physical qualities, Climate, Population, Products, etc.

80. Ans. A.

The largest quantity of cichlids found in India at Backwaters of Kerala.

Lake Victoria is famous for its enormous diversity of endemic cichlid fish, which although never fully counted probably once numbered around 450 species.

Every different species of cichlid is only found in Africa and in very specific places. The cichlid is native to the Victoria, Malawi, and Edward Lakes of eastern Africa.

81. Ans. C.

Arikamedu is the site that gives us valuable information about India's maritime links on the Coromandel coast.

The coastline forms a part of Tamil Nadu and Andhra Pradesh. The important ports include Chennai, Thoothukkudi, Nellore, Ennore and Nagapattinam, which take advantage of their close proximity with regions rich in Natural and Mineral resources and good Transport Infrastructure.

82. Ans. C.

A story in *Divyavadana* attributes Ashoka's conversion to the Buddhist monk Samudra, who was an ex-merchant from Shravasti. According to this account, Samudra was imprisoned in Ashoka's "Hell", but saved himself using his miraculous powers. When Ashoka heard about this, he visited the monk, and was further impressed by a series of miracles performed by the monk. He then became a Buddhist.

In the *Ashokavadana* states that Samudra was a merchant's son, and was a 12-year-old boy when he met Ashoka; this account seems to be influenced by the Nigrodha story.

83. Ans. D.

Andhra Pradesh States in jute not significantly cultivated.

The jute crop is grown in nearly 83 districts of seven states - West Bengal, Assam, Orissa, Bihar, Uttar Pradesh, Tripura and Meghalaya. West Bengal alone accounts for over 50 percent raw jute production and the largest producer of the Jute in India. 60% to the total world production of Jute is cultivated in India.

84. Ans. C.

Coral reefs are not found in Gulf of Mannar regions.

Coral reefs flourish in ocean waters that provide few nutrients. they are most commonly found at shallow depths in tropical waters, but not in deep water and cold water.

Most reefs are located between the Tropics of Cancer and Capricorn, in the Pacific Ocean, the Indian Ocean, the Caribbean Sea, the Red Sea, and the Persian Gulf. Corals are also found farther from the equator in places where warm currents flow out of the tropics, such as in Florida and southern Japan.

85. Ans. C.

Anaimudi Peak is related to Annamali hill (in Tamilnadu and Kerala).

Doddabetta Peak is related to Nilgiri Hill (Western ghat in Western Tamilnadu).

Dhupgrh Peak is related to Satpura Hill (in Madhya Pradesh).

Guru Shikhar is related to Satpura Hill (in the Arbuda mountains of Rajasthan).

86. Ans. C.

The average temperature of Coniferous Forest Biome is 50 degrees Fahrenheit. The average winter temperature is  $-40^{\circ}\text{C}$  to  $20^{\circ}\text{C}$ , while the average summer temperature is  $10^{\circ}\text{C}$ . This biome experiences long, snowy winter months and hot wet summer months.

87. Ans. D.

A growing period of at least 100 frost free days is not a geographical requirement for cultivation of cotton.

Climate: Cotton grows well in warm and moist climate, where summer is long and where there is salinity in the Soil.

Temperature: Cotton grown well in a temperature of  $24^{\circ}\text{C}$ . High temperature is injurious.

Rainfall: 60-100 cm rainfall is essential for the cultivation of cotton.

88. Ans. C.

Participation of workers in management of industries is not a part of the Fundamental Rights (Part III) of the Constitution of India.

There are six fundamental rights have been recognized by the Indian constitution:

Right to equality (Articles 14-18)

Right to Freedom (Articles 19-22)

Right Against exploitation (Articles 23-24)

Right to Freedom of Religion (Articles 25- 28)

Cultural and Educational Rights (Articles 29-30)

Right to Constitutional Remedies (Articles. 32-35)

89. Ans. B.

The concept of "Four Pillar State", free from district magistracy for India was suggested by Ram Manohar Lohia. He was an activist in the Indian Independence Movement. Lohia believes in decentralization of economic and political powers. For giving a solution to the malady of Indian administration, he gives the concept of Four- Pillar.

90. Ans. B.

The Government of India Act 1919 was passed to expand participation of Indians in the Government of India. The Act embodied the reforms recommended in the report of the "Secretary of State for India, Edwin Montagu, and the Viceroy, Lord Chelmsford". The Act covered ten years, from 1919 to 1929. This Act represented the end of benevolent despotism and began the genesis of responsible government in India. It was set to be reviewed by the Simon Commission in 10 years. Also, this act provided for the first time, the establishment of a public service commission in India

91. Ans. C.

The Chota Nagpur Tenancy Act, 1908

\* the Chhota Nagpur Tenancy Act, 1908 is an important act for the tribal population of Jharkhand. It restricts transfer of tribal land to non tribals.

\* Mundari Khuntkatti is a customary institution found among Mundas of Chotanagpur which provides ownership of land among all the families of the same killi (clan), who cleared the forest and made land cultivable.

92. Ans. D.

\* THE Dutt-Bradley Thesis was published in International Press Correspondence (INPRECOR), the journal of Communist International, on February 29, 1936.

\* The Dutt-Bradley Theses primarily tried to answer the following crucial questions: 'How to transform the (then existing) situation? How can we unite and mobilise a powerful movement of resistance to British imperialism and for the needs of the masses? What shall be the policy of the national representatives who are elected? What shall be the future line of direction of the national struggles to defeat imperialism?'

\* "The realisation of a broad-based, all embracing and powerful Anti-Imperialist People's Front should rapidly open the way to new perspectives for the Indian National movement".

\* The Dutt-Bradley Theses greatly helped the communist movement. It is through the interventions of the communists during this period that a lot of cadre and new generation of leaders who contributed immensely in building and developing the communist movement in the country, emerged.

93. Ans. D.

Brahmaputra river takes a 'U' turn at Namcha Barwa and then continues to flow in Arunachal Pradesh and after that, it is called as "Dihang river or Siang river".

94. Ans. B.

\* The Mediterranean climate is characterized by dry and hot summer and cold and rainy winter.

\* The regions are located in the western parts of the continent between 30 and 45 degrees north and south of the equator.

\* The Mediterranean type of climate prevails in the lands around the Mediterranean Sea as well as in some other parts of the world including California, Western and Southern Australia, Central Chile and Asia, and the Southwestern South Africa.

95. Ans. D.

According to the Constitution of India, the total number of ministers in the council of ministers must not exceed 15% of the total number of members of the Lok Sabha. Ministers must be members of parliament. Any minister who is not a member of either of the houses of the parliament for six consecutive months is automatically stripped off his or her ministerial post.

96. Ans. B.

Article 348 deals with the language to be used in the Supreme Court and in the High Courts and for Acts, Bills, etc.

the authoritative texts:

I. of all Bills to be introduced or amendments thereto to be moved in either House of Parliament or in the House or either House of the Legislature of a State,

II. of all Acts passed by Parliament or the Legislature of a State and of all Ordinances promulgated by the President or the Governor of a State, and

III. of all orders, rules, regulations and bye laws issued under this Constitution or under any law made by Parliament or the Legislature of a State, shall be in the English language

97. Ans. C.

\* Article 361 is an exception to Article 14 (Right to Equality) of the Indian Constitution.

The features are as follows:

- \* The President or the Governor is not answerable to any court for the exercise of the powers and duties of his office.
- \* No criminal proceedings shall be conducted against the President or the Governor during his term of office.
- \* No arrest or imprisonment shall be made against the President or Governor during his term of office.
- \* Civil proceedings in which relief is claimed against the President or the Governor shall be instituted during his term of office in any court in respect of any act done or purporting to be done by him in his personal capacity, whether before or after he entered his office as President or Governor until the expiration of two months next after notice is given to him in writing.

98. Ans. D.

- \* The idea of creation of Zonal Councils was mooted by the first Prime Minister of India, Pandit Jawahar Lal Nehru in 1956.
- \* In the light of the vision of Pandit Nehru, five Zonal Councils were set up vide Part-III of the States Re-organisation Act, 1956.

The present composition of each of these Zonal Councils is as under:

- \* The Northern Zonal Council, comprising the States of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, National Capital Territory of Delhi and Union Territory of Chandigarh;
- \* The Central Zonal Council, comprising the States of Chhattisgarh, Uttarakhand, Uttar Pradesh and Madhya Pradesh;
- \* The Eastern Zonal Council, comprising the States of Bihar, Jharkhand, Orissa, Sikkim and West Bengal;
- \* The Western Zonal Council, comprising the States of Goa, Gujarat, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli;
- \* The Southern Zonal Council, comprising the States of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the Union Territory of Puducherry.

Note: The North Eastern States i.e. (i) Assam (ii) Arunachal Pradesh (iii) Manipur (iv) Tripura (v) Mizoram (vi) Meghalaya and (vii) Nagaland are not included in the Zonal Councils and their special problems are looked

after by the North Eastern Council, set up under the North Eastern Council Act, 1972. The State of Sikkim has also been included in the North Eastern Council vide North Eastern Council (Amendment) Act, 2002 notified on 23rd December 2002. Consequently, action for exclusion of Sikkim as member of Eastern Zonal Council has been initiated by Ministry of Home Affairs.

99. Ans. A.

\* Article 371A – Nagaland

\* Article 371A of the Constitution mainly states that no act of Parliament would apply to the state of Nagaland in matter relating to religious or social practices of Nagas, Naga customary law and procedure, administration of civil or criminal justice involving decisions according to Naga customary law and ownership and transfer of land and its resources.

\* The Legislative Assembly of Nagaland must pass a resolution for an act to be applicable to the state.

\* The governor is given special responsibilities with respect to law and order in the state as well.

100. Ans. A.

\* During Lord Ripon's time, the first Factories Act was adopted in 1881. Following this act, a Factory Commission was appointed in 1885. There was another Factories Act in 1891, and a Royal Commission on Labor was appointed in 1892. The result of these enactments was the limitation on the factory working hours.

\* In British India, the Vernacular Press Act (1878) was enacted to curtail the freedom of the Indian press and prevent the expression of criticism toward British policies—notably, the opposition that had grown with the outset of the Second Anglo-Afghan War (1878–80).] The Act was proposed by Lord Lytton, then Viceroy of India, and was unanimously passed by the Viceroy's Council on 14 March 1878.

\* The Indian Councils Act 1909, commonly known as the Morley-Minto or Minto-Morley Reforms, was an Act of the Parliament of the United Kingdom that brought about a limited increase in the involvement of Indians in the governance of British India.

\* The Cornwallis Code is a body of legislation enacted in 1793 by the East India Company to improve the governance of its territories in India. The Code was developed under the guidance of Charles, Earl (Lord) Cornwallis, who served as Governor of Bengal from 1786 to 1793.

Option A is correct.

101. Ans. D.

"Every year May 21 is observed as Anti-Terrorism day in India to wean away the youth from terrorism and showing as to how it is prejudicial to the national interest,"

102. Ans. A.

\* The President of the Republic of Indonesia (Indonesian: Presiden Republik Indonesia) is the head of state and also head of government of the Republic of Indonesia. The president leads the executive branch of the Indonesian government and is the commander-in-chief of the Indonesian National Armed Forces. Since 2004, the president and vice president are directly elected to a five-year term.

\* Joko Widodo is the 7th and current president of Indonesia. He assumed office on 20 October 2014.

103. Ans. B.

\* India's G.S. Lakshmi will become the first woman match referee to officiate at a global ICC event when the Women's T20 World Cup starts in Australia from February 21.

\* the International Cricket Council (ICC) announced the match officials for the league phase of the Women's T20 World Cup, with three match referees and 12 umpires set to take the reins for the 23-match tournament.

\* Lakshmi will officiate as match referee in the league match of the tournament to be played between former champions West Indies and first-timers Thailand on February 22 at WACA in Perth.

Option B is correct

104. Ans. A.

\* The United Nations Sasakawa Award is the most prestigious international award in the area of Disaster Risk Management.

\* It was instituted more than 30 years ago and is jointly organized by the UNDRR and the Nippon Foundation.

\* A total grant of USD 50,000 is distributed among the winners which can be either organizations or individuals.



\* The theme of the 2019 Sasakawa award was “Building Inclusive and Resilient Societies”. UNDRR received more than 61 nominations from 31 countries for the 2019 award.

\* United Nations Office for Disaster Risk Reduction (UNDRR) conferred Sasakawa Award 2019 for Disaster Risk Reduction to Dr. Pramod Kumar Mishra, Additional Principal Secretary to Prime Minister of India. The award was announced at the Award Ceremony during the ongoing 6th Session of Global Platform for Disaster Risk Reduction (GPDRR) 2019 at Geneva.

Option A is correct.

105. Ans. B.

The Reserve Bank of India (RBI) announced that it was constituting of a ‘high-level committee for deepening of digital payments’. Former UIDAI chairman and Infosys Co-founder Nandan Nilekani as the Chairman of the five-member committee.

106. Ans. D.

The Badminton World Federation (BWF) has launched two new formats of badminton game namely, AirBadminton and Triples. In contrast to traditional competitive badminton which is an indoor game the Airbadminton is an outdoor game.

AirBadminton

\* It was globally launched at Guangzhou in China by Badminton World Federation (BWF). It has new dimensions of court and an innovative outdoor shuttlecock called AirShuttle.

\* AirBadminton is designed to be played on hard, grass and sand surfaces such as that in playgrounds, gardens, parks, streets, and beaches. The aim is that AirShuttle could be used in winds up to 12 kmph.

\* The outdoor format will be played barefoot on an approved surface like sand and on courts of smaller dimensions.

Triples

\* In Triples format, badminton match will be played between a team of total three players. Each team will mandatory have at least one female athlete. Also, players are not allowed to hit returns successively.

107. Ans. B.

\* India, Singapore have completed SIMBEX 2019 Naval Exercises in South China Sea

\* INS Kolkata, the lead ship of the Kolkata-class guided missile destroyers, and INS Shakti, a Deepak-class fleet tanker, participated in the exercise.

108. Ans. A.

Karolins pliskova won the title, defeating Johanna Konta in the final by 6–3, 6–4.

109. Ans. C.

\* Its Headquarters is in Jeddah, Kingdom of Saudi Arabia.

\* The Organisation of Islamic Cooperation (OIC) is the second largest inter-governmental organisation after the United Nations, with the membership of 57 states, covering four continents

\* The organisation states that it is "the collective voice of the Muslim world" and works to "safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony".

\* The OIC has permanent delegations to the United Nations and the European Union. The official languages of the OIC are Arabic, English, and French.

110. Ans. B.

The 2019 Indian general election was held in seven phases from 11 April to 19 May 2019 to constitute the 17th Lok Sabha.

End date: 19 May 2019

Start date: 11 April

111. Ans. C.

\* The National Dope Testing Laboratory (NDTL) is a premier analytical testing & research organization established as an autonomous body under the Ministry of Youth Affairs and Sports, Government of India.

\* It is the only laboratory in the country responsible for human sports dope testing.

\* It is headed by Chief Executive Officer (CEO). Shri Radhey Shyam Julaniya who is Secretary to the Department of Sports, Ministry of Youth

Affairs and Sports, Government of India is the current CEO of NDTL ]Dr. Puran Lal Sahu is the Scientific Director of NDTL.

112. Ans. C.

\* 'Invest India' is India's official agency dedicated to investment promotion and facilitation. It is a not-for-profit, single window facilitator, set up in 2010 for prospective overseas investors and to those aspiring Indian investors desiring to invest in foreign locations, and acts as a structured mechanism to attract investment.

\* Invest India is essentially an Investment Promotion Agency in India.

\* In early 2010, Invest India is set up as a joint venture company between the Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce & Industry (35% equity), Federation of Indian Chambers of Commerce and Industry (FICCI) (51% equity), and State Governments of India (0.5% each).

113. Ans. C.

\* The National Institute of Ayurveda (NIA) is the apex institute for training and research in Ayurveda in India, established in 1976 at Jaipur, by the Ministry of Health & Family Welfare, Government of India.

\* National Institute of Homeopathy was established on 10 December 1975 as an autonomous organisation under the Ministry of Health and Family Welfare. It was located at Amherst Street, Kolkata and later shifted to the present location.]It started awarding Bachelor of Homeopathic Medicine and Surgery (B.H.M.S.) degrees in 1987.

\* National Institute of Unani Medicine (NIUM) is an autonomous organization for research and training in Unani medicine in India. It was established in 1984 at Bangalore under the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Ministry of Health and Family Welfare, Govt. of India in a joint venture with Government of Karnataka.

\* National Institute of Siddha is an institute for study and research of Siddha medicine. It was established in 2005 at Tambaram, Chennai, India. It is one of the eight national institutes established across nation, for training and research in "Indian Systems of Medicine and Homeopathy education", by Department of AYUSH, Government of India,

114. Ans. C.

The Public Financial Management System (PFMS) is a web-based online software application designed, developed, owned and implemented by the controller general of accounts.

\* Public Financial Management System (PFMS) initially started as a Plan scheme named CPSMS of the Planning Commission in 2008-09 as a pilot in four States of Madhya Pradesh, Bihar, Punjab and Mizoram for four Flagship schemes e.g. MGNREGS, NRHM, SSA and PMGSY.

\* After the initial phase of establishing a network across Ministries / Departments, it has been decided to undertake National rollout of CPSMS (PFMS) to link the financial networks of Central, State Governments and the agencies of State Governments. The scheme was included in 12th Plan initiative of Planning Commission and Ministry of Finance.

115. Ans. B.

\* The five founding members of the Bank include Brazil, Russia, India, China and South Africa.

\* Bank's Articles of Agreement specify that all members of the United Nations could be members of the bank, however the share of the BRICS nations can never be less than 55% of voting power.

\* Abbreviation: NDB, or NDB BRICS

\* Parent organization: BRICS

\* Headquarters: Shanghai, China

\* President: K.V. Kamath

116. Ans. D.

\* The South Asian Association for Regional Cooperation (SAARC) was established with the signing of the SAARC Charter in Dhaka on 8 December 1985.

\* SAARC comprises of eight Member States: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

117. Ans. C.

Under Article 112 of the Constitution, a statement of estimated receipts and expenditure of the Government of India has to be laid before Parliament in respect of every financial year which runs from 1st April to 31st March. Annual Financial Statement is the main Budget document and is commonly referred to as the Budget Statement.

118. Ans. A.

\* UNCCD अच्छी भूमि के लिए एक अंतर्राष्ट्रीय समझौता है। यह समुदायों और देशों को धन बनाने, अर्थव्यवस्थाओं को विकसित करने और पर्याप्त भोजन और पानी और ऊर्जा को सुरक्षित करने में मदद करता है, यह सुनिश्चित करके कि भूमि उपयोगकर्ताओं के पास टिकाऊ निर्माण प्रबंधन के लिए सक्षम वातावरण है।

\* साझेदारी के माध्यम से, कन्वेंशन के 197 दलों ने सूखे और तुरंत प्रभावी ढंग से प्रबंधित करने के लिए मजबूत सिस्टम स्थापित किए। एक साउंड पॉलिसी और विज्ञान पर आधारित अच्छी भूमि का नेतृत्व सतत विकास लक्ष्यों की उपलब्धि को एकीकृत और तेज करने में मदद करता है, जलवायु परिवर्तन के प्रति लचीलापन बनाता है और जैव विविधता हानि को रोकता है।

\* भारत संयुक्त राष्ट्र कन्वेंशन फॉर डेजर्टाईजेशन (UNCCD) का हस्ताक्षरकर्ता है।

\* पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय (MoEFCC) भारत सरकार (भारत सरकार) का नोडल मंत्रालय है जो देश में कन्वेंशन के कार्यान्वयन की देखरेख करता है।

119. Ans. D.

DEPARTMENTS OF MHA (Ministry of home affairs)

\* Department Of Border Management

\* Department Of Internal Security

\* Department Of Jammu, Kashmir And Ladakh Affairs

\* Department Of Home

\* Department Of Official Language

\* Department Of States

120. Ans. A.

\* The NCC is the largest uniformed youth organization. Its Motto is 'Unity and Discipline'. The NCC in India was formed the National Cadet Corps Act in 1948.

\* Governor of United kingdom was the founder of the NCC.