

# PRESTORMING<sup>TM</sup> 2020 MOCK TEST 8 - EXPLANATION

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# PRESTORMING™ 2020 MOCK TEST 8 - EXPLANATION

# 1. The term "Xenobots", sometimes seen in the news, is related to which one of the following?

- (a) It is an auto programmable malware that creates random online pinging
- (b) Indian Railways robot which assists for COVID screening and surveillance
- (c) World's first living robot with self-healing capabilities
- (d) World's first artificial humans capable of conversing and sympathizing like real human beings

#### **EXPLANATION:**

Scientists in the United States have created the world's first "living robots" named "xenobots". The tiny robots have been built from the cells of the African clawed frog. Scientists have repurposed living cells scraped from frog embryos and assembled them into entirely new life-forms. Xenobots even have self-healing capabilities; when the scientists sliced into one robot, it healed by itself and kept moving. **So, option (c) is correct.** 

# ADDITIONAL INFORMATION:

- Scientists in the United States have created the world's first "living robots" named "xenobots".
- The tiny robots have been built from the cells of the African clawed frog. Scientists have repurposed living cells scraped from frog embryos and assembled them into entirely new life-forms.
- The robots have been named after the species of aquatic frog Xenopus laevis, found across sub-Saharan Africa from Nigeria and Sudan to South Africa.
- While humans have been manipulating organisms for their benefit since at least the dawn of agriculture, and genetic editing has created a few artificial organisms in recent years, the latest research is a breakthrough because it designs, for the first time ever, "completely biological machines from scratch".
- The xenobots can move toward a target, perhaps pick up a payload (like a medicine
  that needs to be carried to a specific place inside a patient) and heal themselves
  after being cut.
- Many useful applications of these living robots include searching out nasty compounds or radioactive contamination, gathering microplastic in the oceans, travelling in arteries to scrape out plaque, etc.

# **SOURCE:**

https://indianexpress.com/article/explained/xenobot-the-worlds-first-living-machines-built-with-frogs/



- 2. When the Reserve Bank of India was purchasing the Government Securities and the Treasury bills from the Indian market, then
  - 1. the Interest rate will decrease in the market.
  - 2. the Interest rate will increase in the market.
  - 3. the Liquidity of the currency will increase in the market.
  - 4. the Liquidity of the currency will decrease in the market.
  - 5. the people will directly sell their holdings of the Government securities and the Treasury bills automatically to the RBI.

Select the correct answer using the code given below.

- (a) 2 and 4 only
- (b) 2, 4 and 5 only
- (c) 1 and 3 only
- (d) 1, 3 and 5 only

# **EXPLANATION:**

When the Reserve Bank of India was purchasing the Government securities and the Treasury bills from the market then the Liquidity of the currency will increase in the market. Hence, the Interest rate will decrease in the market. **So, option (c) is correct.** 

When the Reserve Bank of India was selling the Government securities and the Treasury bills in the market then the Liquidity of the currency will decrease in the market. Hence, the Interest rate will increase in the market.

#### ADDITIONAL INFORMATION:

#### **Open Market Operations (OMOs)**

- OMOs are the market operations conducted by the RBI by way of sale/ purchase of G-Secs to/ from the market with an objective to adjust the rupee liquidity conditions in the market on a durable basis.
- When the RBI feels that there is excess liquidity in the market, it resorts to sale of securities thereby sucking out the rupee liquidity.
- Similarly, when the liquidity conditions are tight, RBI may buy securities from the market, thereby releasing liquidity into the market.
- 3. Which of the following statements are correct about the newspapers started by B.R. Ambedkar?
  - 1. Mooknayak and Bahishkrit Bharat were two weeklies started by him.
  - 2. The main aim of these newspapers was to raise the consciousness of depressed classes against social oppression.
  - 3. These newspapers were vocal against Indian Independence or exit of Britishers from India.

Select the correct answer using the code given below.

(a) 1 and 2 only



- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

Mooknayak and Bahishkrit Bharat were two weeklies started by Dr B.R. Ambedkar. **So, statement 1 is correct.** 

The main aim of these newspapers was to raise the consciousness of depressed classes against social oppression. **So, statement 2 is correct.** 

These newspapers were not vocal against Indian Independence or exit of Britishers from India. **So, statement 3 is not correct.** 

# ADDITIONAL INFORMATION:

- With the help of ShahuMaharaj of Kolhapur, a sympathizer of the cause for the upliftment of the depressed classes, he started a fortnightly newspaper, the "Mooknayak" (Dumb Hero) on January 31, 1920.
- In July 1924, he founded the BahishkritHitkarainiSabha (Outcastes Welfare Association).
- In 1929, Ambedkar made the controversial decision to co-operate with the all-British Simon Commission.
- On September 24, 1932, Dr. Ambedkar and Gandhiji reached an understanding, which became the famous Poona Pact. According to the pact the separate electorate demand was replaced with special concessions like reserved seats in the regional legislative assemblies and Central Council of States.
- Dr. B.R. Ambedkar set up the "Independent Labor Party" in August 1936 to contest the elections in the Bombay province.
- In 1937, Dr. Ambedkar introduced a Bill to abolish the "khoti" system of land tenure in the Konkan region, the serfdom of agricultural tenants and the Mahar "watan" system of working for the Government as slaves.
- In 1955, he founded the BharatiyaBauddhaMahasabha, or the Buddhist Society of IndiaHe completed his final work, The Buddha and His Dhamma, in 1956 which was published posthumously.
- On October 14, 1956 he embraced Buddhism along with many of his followers.
- 4. The Chief Justice of India (CJI) cannot hold/attain which of the following posts/offices after his/her retirement from the office?
  - 1. Chairperson of the National Human Rights Commission
  - 2. Member of Parliament
  - 3. Attorney General of India
  - 4. Pleader of law in the Supreme Court

Select the correct answer using the code given below.



- (a) 4 only
- (b) 3 and 4 only
- (c) 2 and 4 only
- (d) 1 and 3 only

#### **EXPLANATION:**

Chairperson of the National Human Rights Commissionshould be a retired chief justice of India andmembers should be serving or retired judges of the Supreme Court, a servingor retired chief justice of a high court and two persons having knowledge or practical experience with respect to human rights.

A Member of Parliament is any member of the two houses of Indian Parliament, i.e., Lok Sabha and Rajya Sabha. There is no restriction on the retired chief justice of India to participate in the election.

The retired judges of the Supreme Court including chief justice of India are prohibited from pleading or acting in any Court or before any authority within the territory of India. This ensures that they do not favour any one in the hope of future favour. Hence, he could not hold the office of Attorney General of India. **So, option (b) is correct.** 

# SOURCE:

Indian Polity by M Lakmikanth

- 5. In the context of recent space developments in India, IN-SPACe is
  - (a) Providing Wi-Fi connectivity to Space Station and Space Shuttes
  - (b) India's first Space Station which will be placed in Low Earth Orbit by 2023
  - (c) Aimed at boosting private participation in space activities
  - (d) World's first luxurious hotel which plans to welcome its first guests in 2022
- 6. Apart from the gravitational forces of Sun and the Moon, which of the following factors can influence nature of Tides?
  - 1. Shape of the shoreline
  - 2. Shape of Bays and Estuaries
  - 3. Strong offshore winds

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3



#### **EXPLANATION:-**

#### factors can influence tides:-

- The relative distances and positions of the sun, moon and Earth
- the shape of the shoreline.
- mid-oceanic islands not near continental margins
- The shape of bays and estuaries
- Local wind and weather patterns also can affect tides.
- Strong offshore winds
- Onshore winds
- High pressure systems
- low-pressure systems

# so option (d) is correct

# **ADDITIONAL INFORMATION:**

# Explanation for the above factors:-

The relative distances and positions of the sun, moon and Earth all affect the size and magnitude of the Earth's two tidal bulges. At a smaller scale, the magnitude of tides can be strongly influenced by the shape of the shoreline. When oceanic tidal bulges hit wide continental margins, the height of the tides can be magnified. Conversely, mid-oceanic islands not near continental margins typically experience very small tides of 1 meter or less (Thurman, H.V., 1994).

The shape of bays and estuaries also can magnify the intensity of tides. Funnel-shaped bays in particular can dramatically alter tidal magnitude. The Bay of Fundy in Nova Scotia is the classic example of this effect, and has the highest tides in the world – over 15 meters (Thurman, H.V., 1994). Narrow inlets and shallow water also tend to dissipate incoming tides. Inland bays such as Laguna Madre, Texas, and Pamlico Sound, North Carolina, have areas classified as non-tidal even though they have ocean inlets. In estuaries with strong tidal rivers, such as the Delaware River and Columbia River, powerful seasonal river flows in the spring can severely alter or mask the incoming tide.

Local wind and weather patterns also can affect tides. Strong offshore winds can move water away from coastlines, exaggerating low tide exposures. Onshore winds may act to pile up water onto the shoreline, virtually eliminating low tide exposures. High – pressure systems can depress sea levels, leading to clear sunny days with exceptionally low tides. Conversely, low-pressure systems that contribute to cloudy, rainy conditions typically are associated with tides than are much higher than predicted.

#### SOURCE:-

 $https://oceanservice.noaa.gov/education/tutorial\_tides/tides08\_othereffects.html\#: \sim: text=The\%20 relative\%20 distances\%20 and\%20 positions, the\%20 shape\%20 of\%20 the\%20 shoreline the following the following the following the following the following the following them to the followin$ 

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- 7. Arrange the following Indian historical monuments of medieval architecture in the correct chronological order based on their construction.
  - 1. Buland Darwaza
  - 2. Red Fort
  - 3. Outb Minar
  - 4. Bibi Ka Maqabara

Select the correct answer using the code given below.

- (a) 1-2-3-4
- (b) 3-4-1-2
- (c) 3 1 2 4
- (d) 1-2-4-3

#### **EXPLANATION:**

QutubuddinAibakfounder of the Delhi Sultanate, started construction of the QutbMinar's first storey in **1199**.

BulandDarwaza or the "Door of victory", was built in **1602** A.D.by Mughal emperor Akbar to commemorate his victory over Gujarat. It is the main entrance to the Jama Masjid at FatehpurSikri, which is 43 km from Agra, India.

The Red Fort is a historic fort in the city of Delhi (in Old Delhi) in India that served as the main residence of the Mughal Emperors. Emperor Shah Jahan commissioned reconstruction of the Red Fort on 12 May **1638**, when he decided to shift his capital from Agra to Delhi.

The BibiKaMaqbara is a tomb located in Aurangabad, Maharashtra, India. It was commissioned in **1660** by the Mughal emperor Aurangzeb in the memory of his first and chief wife DilrasBanu Begum. **So, option (c) is correct.** 

- 8. Consider the following statements about the "Bay of Bengal Large Marine Ecosystem" (BOBLME):
  - 1. It is a project led by the United Nations Environment Programme.
  - 2. Countries not sharing its border with Bay of Bengal are also part of this project.
  - 3. India is a signatory to this project.

Which of the statements given above is/are correct?

- (a) 3 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 2 and 3 only

#### **EXPLANATION:**

Bay of Bengal Large Marine Ecosystem (BOBLME) project is led by the UN Food and Agriculture Organisation (FAO). So, statement 1 is not correct.

India is a signatory to the umbrella BOBLME Project. India has shown its commitment to the BOBLME Project by providing its annual cash contribution. **So, statement 3 is** 



#### correct.

Maldives, India, Sri Lanka, Bangladesh, Myanmar, Thailand, Indonesia and Malaysia have each committed to working with BOBLME. Inclusing Indonesia, every country shares border with Bay of Bengal. **So, statement 2 is not correct.** 

#### ADDITIONAL INFORMATION:

- The Bay of Bengal Large Marine Ecosystem Project (BOBLME) seeks to create a regional initiative that effectively addresses the issues confronting the coastal communities of the Bay of Bengal.
- More than 400 million people in the region depend on coastal and marine resources for their food, livelihoods and security.
- BOBLME seeks to lay the foundation for a coordinated plan of action to improve the lives of the coastal populations through improved regional management of the Bay of Bengal environment and its fisheries.
- Maldives, India, Sri Lanka, Bangladesh, Myanmar, Thailand, Indonesia and Malaysia have each committed to working with BOBLME.

#### SOURCE:

https://www.boblme.org/project\_overview.html

- 9. Consider the following statements about the "Basic Exchange and Cooperation Agreement":
  - 1. It is a bilateral agreement between India and the European Union.
  - 2. This agreement includes free trade of both goods and services.
  - 3. This agreement is valid for ten years and needs renewal for further benefits.

# Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) None of the Above

# **EXPLANATION:**

BECA will allow India and US to share geospatial and satellite data with each other. India has not signed BECA yet. **So, statement 1 is not correct.** 

BECA would facilitate exchange of geospatial information between India and US for both military and civilian use. **So, statement 2 is not correct.** 

This agreement has not signed yet, so there is no need for concern for validityand renewal for further benefits. **So, statement 3 is not correct.** 

# ADDITIONAL INFORMATION:

Four Foundational Agreements" between the US and its Partners



General Security Of Military Information Agreement (GSOMIA)

- GSOMIA allows militaries to share the intelligence gathered by them.
- Signed by India in 2002.

Logistics Exchange Memorandum of Agreement (LEMOA)

- LEMOA allows both countries to have access to each other's designated military facilities for refueling and replenishment.
- Signed by India in 2016.

Communications and Information Security Memorandum of Agreement (CISMOA)

- COMCASA(Communications Compatibility and Security Agreement) is the India specific version of CISMOA.
- Valid for 10 years, COMCASA aims to provide a legal framework for the transfer of highly sensitive communication security equipment from the US to India that will streamline and facilitate interoperability between their armed forces.
- Signed by India in 2018.

Basic Exchange and Cooperation Agreement (BECA)

- BECA will allow India and US to share geospatial and satellite data with each other.
- India has not signed BECA yet.

# 10. With reference to the India's Annual Financial Statement, which one of the following expenditures is not included for the calculation of the "Effective Revenue Deficit"?

- (a) Allocation to One Rank One Pension scheme
- (b) Allocation to Pradhan Mantri Gram Sadak Yojana
- (c) Grants to Indian States for Disaster Management
- (d) Repaying the interest of external loan borrowed by the Government

# **EXPLANATION:**

Effective Revenue Deficit is the difference between revenue deficit and grants for the creation of capital assets. In other words, the Effective Revenue Deficit excludes those revenue expenditures which were done in the form of grants for the creation of capital assets.

Government launched the Pradhan Mantri Gram Sadak Yojana on 25th December, 2000 to provide all-weather access to unconnected habitations. The Ministry of Rural Development along with state governments is responsible for the implementation of PMGSY. Here, allocation to Pradhan Mantri Gram Sadak Yojanawas done in the form of grants for the creation of capital assets. **So, option (b) is correct.** 

# **ADDITIONAL INFORMATION:**

 Rural Road Connectivity is not only a key component of Rural Development by promoting access to economic and social services and thereby generating increased



agricultural incomes and productive employment opportunities in India, it is also as a result, a key ingredient in ensuring sustainable poverty reduction.

 Hence, Government launched the Pradhan Mantri Gram Sadak Yojana on 25th December, 2000 to provide all-weather access to unconnected habitations. The Ministry of Rural Development along with state governments is responsible for the implementation of PMGSY.

#### PMGSY - Phase III

- Phase III was approved by the Cabinet during July 2019. It involves consolidation of Through Routes and Major Rural Links connecting habitations to Gramin Agricultural Markets (GrAMs), Higher Secondary Schools and Hospitals.
- Under the PMGSY-III Scheme, it is proposed to consolidate 1, 25,000 Km road length in the States.
- The duration of the scheme is 2019-20 to 2024-25. The funds would be shared in the ratio of 60:40 between the Centre and State for all States except for 8 Northeastern and 3 Himalayan States (Jammu & Kashmir, Himachal Pradesh & Uttarakhand) for which it is 90:10. Major source of funds for PMGSY is Central Road Fund

#### SOURCE:

https://vikaspedia.in/social-welfare/rural-poverty-alleviation-1/schemes/pradhan-mantrigram-sadak-yojana

- 11. Consider the following statements about the "Permanent Court Of Arbitration" (PCA):
  - 1. PCA was the first permanent intergovernmental organization to provide a forum for the resolution of international disputes through arbitration and other peaceful means.
  - 2. PCA is one of the six principal organs of the United Nations.
  - 3. Decision of PCA is binding on the parties involved.
  - 4. It can also hear disputes between States and private parties.

# Which of the statements given above is/are correct?

- (a) 1 only
- (b) 3 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

## **EXPLANATION:**

The PCA was the first permanent intergovernmental organization to provide a forum for the resolution of international disputes through arbitration and other peaceful means. **So, statement 1 is correct.** 

The PCA organization is not a United Nations agency, but the PCA is an official United Nations Observer. **So, statement 2 is not correct.** 



#### ADDITIONAL INFORMATION:

- The Permanent Court of Arbitration (PCA) is an intergovernmental organization located in The Hague, Netherlands.
- It is not a court in the traditional sense, but provides services of arbitral tribunal to resolve disputes that arise out of international agreements between member states, international organizations or private parties.
- The cases span a range of legal issues involving territorial and maritime boundaries, sovereignty, human rights, international investment, and international and regional trade.
- The PCA is constituted through two separate multilateral conventions with a combined membership of 122 states.
- The organization is not a United Nations agency, but the PCA is an official United Nations Observer
- Structure: The PCA has a three-part organizational structure consisting of:
  - o Administrative Council- to oversee its policies and budgets,
  - o Members of the Court- a panel of independent potential arbitrators, and
  - o International Bureau- its Secretariat, headed by the Secretary-General.
- It has Financial Assistance Fund which aims at helping developing countries meet part of the costs involved in international arbitration or other means of dispute settlement offered by the PCA.

# SOURCE:

https://pca-cpa.org/en/about/introduction/

# 12. Which of the following is/are the disadvantage(s) of "Factory Farming"?

- 1. Deforestation
- 2. Increase in methane emission
- 3. Decrease in practice of monocultures

Select the correct answer using the code given below.

- (a) 2 only
- (b) 1 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

# **EXPLANATION:**

List of the Disadvantages of Factory Farming

- Intensive farming doesn't take animal welfare into its profit equation.
- Greenhouse gas emissions are significant from factory farmsincluding methane.
- major contributor to water and air pollution as well as deforestation
- Animals on factory farms have their movements restricted
- The mesh floors on factory farms can hurt the feet of the animals.
- Chickens and livestock become an unnatural size.
- There is more aggression with dairy production in factory farming.



- Intensive farming changes the activities of the animals under its care.
- Genetic manipulation is a possibility at factory farms.
- Family separations occur frequently with intensive farming methods.
- Animals are prevented from expressing their natural behaviours.
- Veterinary care is not always a priority with intensive farming.
- Factory farms can encourage soil erosion.

Factory farming encourages the increase in practice of monocultures. So, option (c) is correct.

#### ADDITIONAL INFORMATION:

- Factory farming is a process that rears livestock with methods that are generally intensive.
- Most facilities will raise cattle, pigs and swine, or poultry indoors using this method under conditions which receive strict controls.
- The goal of this operational method is to maximize the levels of food productivity while minimizing the costs of production.
- Many of the eggs, milk, and meat products that humans consume today come from this practice.

#### 13. Consider the following statements about the "Home Rule League" in India:

- 1. They were organized on the lines of the Russian Home Rule Leagues.
- 2. The Home Rule agitation was joined by Jawaharlal Nehru and Mohammad Ali Jinnah.
- 3. The Bal Gangadhar Tilak's Home Rule League demanded the formation of linguistic states.
- 4. Annie Besant's League was loosely organized as compared to Tilak's League.

# Which of the statements given above are correct?

- (a) 1, 2 and 3 only
- (b) 2, 3 and 4 only
- (c) 3 and 4 only
- (d) 1, 2, 3 and 4

# **EXPLANATION:**

Two Indian Home Rule Leagues were organised on thelines of the Irish Home Rule Leagues. **So, statement 1 is not correct.** 

The Home Rule agitation was later joined by MotilalNehru, Jawaharlal Nehru, Bhulabhai Desai, Chittaranjan Das,Madan Mohan Malaviya, Mohammad Ali Jinnah, Tej BahadurSapru and Lala Lajpat Rai. **So, statement 2 is correct.** 

The Bal Gangadhar Tilak's Home Rule League demands included swarajya, formation of



linguistic states andeducation in the vernacular. So, statement 3 is correct.

Annie Besant's League was loosely organized as compared to Tilak's League. So, statement 4 is correct.

#### ADDITIONAL INFORMATION:

Some of the factors leading to the formation of the HomeRule Movement were as follows.

- A section of the nationalists felt that popular pressure was required to attain concessions from the government.
- The Moderates were disillusioned with the Morley-Minto reforms.
- People were feeling the burden of wartime miseries caused by high taxation and a rise in prices, and were readyto participate in any aggressive movement of protest.
- The war, being fought among the major imperialist powers of the day and backed by naked propaganda againsteach other, exposed the myth of white superiority.
- Tilak was ready to assume leadership after his release in June 1914, and had made conciliatory gestures— to the government reassuring it of his loyalty and to the Moderates that he wanted, like the Irish Home Rulers, a reform of the administration and not an overthrow of the government. He also admitted that the acts of violence had only served to retard the pace of political progress in India. He urged all Indians to assist the British government in itshour of crisis.
- Annie Besant, the Irish theosophist based in India since 1896, had decided to
  enlarge the sphere of her activities to include the building of a movement for home
  rule on the lines of the Irish Home Rule Leagues.

# **SOURCE:**

A Brief History of India by Spectrum

# 14. Lok Adalats do not have jurisdiction in which one of the following cases?

## (a) Cases relating to divorce

- (b) Compoundable offenses
- (c) Land acquisition cases
- (d) Bank recovery cases

#### **EXPLANATION:**

The Lok Adalat shall have no jurisdiction in respect of matters relating to divorce or matters relating to an offence not compoundable under any law. **So, option (a) is correct.** 

# **ADDITIONAL INFORMATION:**

- Lok Adalat is one of the alternative dispute redressal mechanisms, it is a forum where disputes/cases pending in the court of law or at pre-litigation stage are settled/ compromised amicably.
- Lok Adalats have been given statutory status under the Legal Services Authorities Act, 1987.



- Under the said Act, the award (decision) made by the Lok Adalats is deemed to be a decree of a civil court and is final and binding on all parties and no appeal against such an award lies before any court of law.
- If the parties are not satisfied with the award of the Lok Adalat though there is no provision for an appeal against such an award, but they are free to initiate litigation by approaching the court of appropriate jurisdiction by filing a case by following the required procedure, in exercise of their right to litigate.
- There is no court fee payable when a matter is filed in a Lok Adalat.
- If a matter pending in the court of law is referred to the Lok Adalat and is settled subsequently, the court fee originally paid in the court on the complaints/petition is also refunded back to the parties.
- The persons deciding the cases in the Lok Adalats are called the Members of the Lok Adalats, they have the role of statutory conciliators only and do not have any judicial role; therefore they can only persuade the parties to come to a conclusion for settling the dispute outside the court in the Lok Adalat and shall not pressurize or coerce any of the parties to compromise or settle cases or matters either directly or indirectly.
- The Lok Adalat shall not decide the matter so referred at its own instance, instead the same would be decided on the basis of the compromise or settlement between the parties. The members shall assist the parties in an independent and impartial manner in their attempt to reach amicable settlement of their dispute.

#### SOURCE:

Indian polity by M Laxmikanth

- 15. Consider the following statements about the "Synthetic Biology":
  - 1. It is otherwise called as 'genome editing' which edits the biological components of existing life.
  - 2. It involves in fabricating the biological components of organisms that do not already exist in the world.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### **EXPLANATION:**

Synthetic Biology is a field of science that involves redesigning of organisms for useful purposes by engineering them with new enhanced abilities. It stitches together long stretches of DNA and insert them into an organism. But genome editing uses tools to delete or add small stretches of DNA in the genome. It is different from Synthetic Biology.

#### So, statement 1 is not correct.

It aims at redesigning and fabrication of biological components and systems that do not already exist in the natural world and also edit the genetic composition of available life.



So, statement 2 is correct.

# ADDITIONAL INFORMATION:

#### Applications:

- It identifies and categorize standardized genomic parts that can be used (and synthesized quickly) to build new biological systems.
- It redesigns existing biological parts and expand the set of natural protein functions for new processes.
- For example, the Modified rice to produce beta-carotene a nutrient usually associated with carrots, that prevents Vitamin A deficiency.
- The Natural Product Synthesis is a use of microbe to produce all of the necessary enzymes and biological functions to perform complex multistep production of natural products.
- For example, Microorganisms harnessed for bioremediation use of living microorganisms to degrade environmental contaminants into less toxic forms to clean pollutants from water, soil and air.
- Synthetic Genomics is a design and construct of a 'simple' genome for a natural bacterium.
- For example, Yeast is used to produce rose oil as an eco-friendly and sustainable substitute for real roses that perfumers use to make luxury scents.

# 16. Which one of the following best describes the term "Storm surges"?

- (a) Abnormal increase in sea level during cyclonic activity
- (b) Increase in cyclonic depressions due to climate change
- (c) Rapid intensification of a super cyclone
- (d) Breaking of magnetosphere due to solar winds

# **EXPLANATION:**-

A storm surge, storm flood, tidal surge or storm tide is a coastal flood or tsunami-like phenomenon of rising water commonly associated with low pressure weather systems (cyclone). Its severity is affected by the shallowness and orientation of the water body relative to storm path, as well as the timing of tides. **So option (a) is correct.** 

#### ADDITIONAL INFORMATION:

Storm surge is the abnormal rise in seawater level during a storm, measured as the height of the water above the normal predicted astronomical tide. The surge is caused primarily by a storm's winds pushing water onshore. The amplitude of the storm surge at any given



location depends on the orientation of the coast line with the storm track; the intensity, size, and speed of the storm; and the local bathymetry.

Storm tide is the total observed seawater level during a storm, resulting from the combination of storm surge and the astronomical tide. Astronomical tides are caused by the gravitational pull of the sun and the moon and have their greatest effects on seawater level during new and full moons—when the sun, the moon, and the Earth are in alignment. As a result, the highest storm tides are often observed during storms that coincide with a new or full moon.

# SOURCE:-

NCERT

- 17. Consider the following statements about the "Integrated Tiger Habitat Conservation Programme" (ITHPC):
  - 1. It is a grant-making initiative which contributes to the Global Tiger Recovery Programme.
  - 2. This programme was launched by the International Union for Conservation of Nature.

# Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### **EXPLANATION:**

The Integrated Tiger Habitat Conservation Programme (ITHCP) or 'Tiger Programme' is a grant-making initiative which contributes to the Global Tiger Recovery Programme (GTRP), a global effort to double tiger numbers in the wild by 2022. **So, statement 1 is correct.** 

The programme was launched by the International Union for Conservation of Nature (IUCN) and KfW (German Development Bank). **So, statement 2 is correct.** 

# **ADDITIONAL INFORMATION:**

# **Integrated Tiger Habitat Conservation Program**

- Launched in 2014, the ITHCP is a strategic funding mechanism that aims to save tigers in the wild, their habitats and to support human populations in key locations throughout Asia.
- It has already facilitated 12 projects in six countries (Bangladesh, Bhutan, India, Indonesia, Nepal and Myanmar) to better manage Tiger Conservation Landscapes.
- It is contributing to the Global Tiger Recovery Programme (GTRP), a global effort to double tiger numbers in the wild by 2022.
- The Tiger Programme is based on three pillars:
  - o Protecting tiger species and their prey from the threat of poaching;



- o Preserving tiger habitats, including core habitats, buffer zones and corridors;
- Supporting human populations living in tiger landscapes.

#### SOURCE:

https://www.iucn.org/theme/species/our-work/action-ground/integrated-tiger-habitat-conservation-programme

- 18. If the Reserve Bank of India (RBI) needs to depreciate the value of Indian currency against the USA's currency, then what is/are the option(s) available to the RBI?
  - 1. It will sell the US Dollar in the Indian market.
  - 2. It will buy the US Dollar from the Indian market.
  - 3. It will restrict the Gold imports from the foreign country.
  - 4. It will raise External Commercial Borrowings from Foreign country in the Indian Currency.

Select the correct answer using the code given below.

- (a) 1, 3 and 4 only
- (b) 2 and 3 only
- (c) 1 only
- (d) 2 and 4 only

# **EXPLANATION:**

If the Reserve Bank of India needs to depreciate the value of Indian Currency against the USA's currency, then it will buy the USA dollar in the market. So, the availability of Dollar decreases despite of high demand. So, amount of Indian currency chasing very few dollars increases. It will decrease the value of Indian rupee. **So, statement 2 is correct.** 

If Gold import is decreased, then amount of US Dollar in Indian market will be high. So, Indian rupee will appreciate aginst US Dollars. **So, Statement 3 is not correct.** 

If more Indian currency flows in the market, then its value depreciates. **So, Statement 4** is correct.

#### ADDITIONAL INFORMATION:

- The Reserve Bank of India intervenes in the currency market to support the rupee as a weak domestic unit can increase a country's import bill.
- In contrast, a weak rupee is considered good for exports, which is why exports-dependant nations love to keep the currency low.
- There are a variety of methods by which RBI intervenes. It can intervene directly in the currency market by buying and selling dollars.
- If RBI wishes to prop up rupee value, then it can sell dollar and when it needs to bring down rupee value, it can buy dollars.
- The central bank can also influence the value of rupee by the way of monetary policy.



• RBI can tweak the repo rate (the rate at which RBI lends to banks) and the liquidity ratio (the portion of money banks are required to invest in government bonds) to control rupee.

#### SOURCE:

https://economic times.indiatimes.com/markets/forex/so-how-can-a-rbi-rate-hike-help-stem-the-rupee-slide/articleshow/66071179.cms? from=mdr

- 19. Which of the following event(s) was/were associated with the Non-Cooperation Movement (NCM)?
  - 1. Arrest of Annie Besant
  - 2. Mappila revolt of Malabar
  - 3. Chauri Chaura violence
  - 4. Gandhi and Reading Talks

Select the correct answer using the code given below.

- (a) 3 only
- (b) 3 and 4 only
- (c) 1 and 2 only
- (d) 1, 2, 3 and 4

#### **EXPLANATION:**

In June 1917, Besant was arrested for participating in Indian political matters. It was not associated with the Non-Cooperation Movement (NCM).

The Malabar Rebellion in 1921 started as resistance against the British colonial rule, the prevailing feudal system, and in favour of the Khilafat Movement in South Malabar but ended in communal violence between Hindus and Muslims. These were a series of clashes between the Mappila peasantry and their landlords, supported by the British, throughout the 19th and early 20th centuries. It was not associated with the Non-Cooperation Movement (NCM).

The Chauri Chaura incident took place at Chauri Chaura in the Gorakhpur district of the United Province, (modern Uttar Pradesh) in British India on 4 February 1922, when a large group of protesters, participating in the Non-cooperation movement, clashed with police, who opened fire. In retaliation the demonstrators attacked and set fire to a police station, killing all of its occupants. The incident led to the deaths of three civilians and 22 policemen. Mahatma Gandhi, who was strictly against violence, halted the non-cooperation movement on the national level on 12 February 1922, as a direct result of this incident.

The British India government had tried, through the Gandhi-Reading talks, to persuade Gandhiji to ask the Ali Brothers to withdraw from their speeches those passages that contained suggestions of violence. It was associated with the Non-Cooperation Movement (NCM). **So, option (b) is correct.** 



- 20. Which of the following are the important functions of the "Delimitation Commission" of India?
  - 1. To determine the boundaries of electoral constituencies in the state.
  - 2. To increase the number of constituencies in the state according to the population.
  - 3. To identify the seats reserved for Scheduled Castes and Scheduled Tribes.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

Delimitation Commission of India determines the boundaries of electoral constituencies in the state. **So, statement 1 is correct.** 

Delimitation is the act of redrawing boundaries of LokSabha and state Assembly seats to represent changes in population. The main objective of delimitation is to provide equal representation to equal segments of a population. Delimitation is not to increase the number of constituencies in the state according to the population. **So, statement 2 is not correct.** 

It also identifies the seats reserved for Scheduled Castes and Scheduled Tribes, wherever their population is relatively large. **So, statement 3 is correct.** 

#### ADDITIONAL INFORMATION:

- The Delimitation Commission is appointed by the President of India and works in collaboration with the Election Commission of India.
- Delimitation literally means the act or process of fixing limits or boundaries of territorial constituencies in a country to represent changes in population.
- It determines the number and boundaries of constituencies to make the population of all constituencies nearly equal.
- It also identifies the seats reserved for Scheduled Castes and Scheduled Tribes, wherever their population is relatively large.
- In case of difference of opinion among members of the Commission, the opinion of the majority prevails.
- The Delimitation Commission in India is a high power body whose orders have the force of law and cannot be called in question before any court.

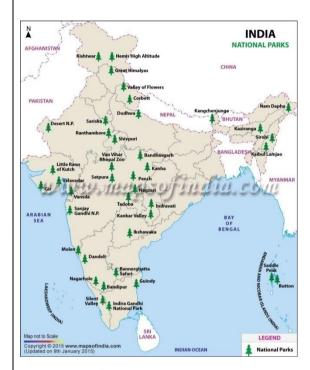
#### 21. Pench National Park is shared between which of the following states?

- (a) Madhya Pradesh and Chhattisgarh
- (b) Chhattisgarh and Odisha
- (c) Maharashtra and Chhattisgarh
- (d) Maharashtra and Madhya Pradesh



#### **EXPLANATION:-**

Pench National Park is shared between Maharashtra and Madhya Pradesh



So option (d) is correct.

- 22. Consider the following statements about the "PM Svandihi scheme", which was recently seen in the news:
  - 1. It is a special micro-credit facility plan to provide affordable loan of up to Rs10,000 to more Rural Landless persons.
  - 2. Small Industries Development Bank of India is the technical partner for implementation of this scheme.
  - 3. It has been launched and monitored by the Ministry of Housing and Urban Affairs.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

# **EXPLANATION:**

PM Svandihi schemeis a special micro-credit scheme to provide affordable loan of up to



Rs 10,000 to street vendors, a move aimed at restarting their livelihoods affected due to coronavirus-triggered lockdown. **So, statement 1 is not correct.** 

Small Industries Development Bank of India is the technical partner for implementation of this scheme. **So, statement 2 is correct.** 

It has been launched and monitored by the Ministry of Housing and Urban Affairs. **So, statement 3 is correct.** 

# **ADDITIONAL INFORMATION:**

# PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi)

- The Ministry of Housing and Urban Affairs has signed MoU with Small Industries Development Bank of India (SIDBI) in order to engage SIDBI as the Implementation Agency for PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) a Special Micro-Credit Facility for Street Vendors.
- It is a special micro-credit facility plan to provide affordable loan of up to ₹10,000 to more than 50 lakh street vendors, who had their businesses operational on or before 24 March.
- The scheme is valid until March 2022.
- Small Industries Development Bank of India is the technical partner for implementation of this scheme.
- It will manage the credit guarantee to the lending institutions through Credit Guarantee Fund Trust for Micro and Small Enterprises.
- Under the scheme, vendors can avail working capital loan of up to ₹10,000, which is repayable in monthly instalments within one year.
- On timely/early repayment of the loan, an interest subsidy of 7% per annum will be credited to the bank accounts of beneficiaries through Direct Benefit Transfer (DBT) on six-months basis.
- There will be no penalty on early repayment of loan.
- The scheme is applicable to vendors, hawkers, thelewalas, rehriwalas, theliphadwalas in different areas/contexts who supply goods and services. Street vendors belonging to the surrounding peri-urban/rural areas are also included.

## **SOURCE:**

https://pib.gov.in/PressReleasePage.aspx?PRID=1628329

- 23. For the first time in 18 years, India recently witnessed the trade surplus in the context of external sector. What could be the possible reasons for this phenomenon?
  - 1. India completely prohibited imports of all sin goods from China.
  - 2. There were plenty of heavy investment announcements by foreign firms into the Indian Market.
  - 3. There were increased inflows of foreign remittances into India.
  - 4. There was a growth of Exports from India.



# Select the correct answer using the code given below.

#### (a) 4 only

- (b) 1 and 4 only
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4

#### **EXPLANATION:**

India not completely prohibited all the imports, from the Foreign country, especially from China. It is not a possible reason for the trade surplus phenomenon.

There was plenty of heavy investment announcements such as Google into the Indian Market. But it is not a possible reason for the trade surplus phenomenon.

There was an increased inflow of Foreign remittance into India. But it affects current account of the country not trade surplus.

Exports are demand for domestic goods by foreign buyers, whereas imports constitute a leakage of domestic incomes on foreign goods, and the trade surplus is the difference between the two. It is due to the growth of Exports from India. So, option (a) is correct.

#### SOURCE:

https://www.hindustantimes.com/india-news/june-saw-india-make-its-first-trade-surplus-in-18-years-but-this-isn-t-good-news/story-yhThGOLNr9qkDu7cRxicHN.html

# 24. Consider the following passage:

"It is an orbit around the earth with an operating height of about 200 km to 2000 km above the earth's surface. It is high enough to cross all the mountains, so that even atmospheric drags won't bring back the satellites to the earth again. Most of the man-made satellites are placed in this orbit. The only outer space lab that exists in the current decade in the name of International Space Station gets operated from this orbit. It is the orbit most commonly used for satellite imaging, as being near to the surface of the earth which allows it to take images with higher resolution. This orbit is less useful for the telecommunication services because they move so fast across the sky and therefore requires a lot of effort to track from the ground stations. Instead, of communications it works as a part of larger constellation of multiple satellites to give a constant coverage. In order to increase the coverage, some constellations like this, consists of several of the same or satellites are launched together to create a "net" around the earth. This lets them to cover large areas of earth simultaneously by working together."

Which one of the following orbit is referred in the above passage?

- (a) Near Earth Orbit
- (b) Lower Earth Orbit
- (c) Polar Orbit
- (d) Geostationary Orbit



#### **EXPLANATION:**

A low Earth orbit (LEO) is an orbit around Earth with an altitude above Earth's surface from 200 kms to 2,000 kilometers (1,200 miles). LEO is high enough to cross all the mountains and also high enough that atmospheric drag won't bring satellites right back home again. It is worth to mention that objects below approximately 160 kilometers (99 mi) will experience very rapid orbital decay and altitude loss.

Most satellites, the Space Shuttle, the International Space Station and the Hubble Space Telescope are also present in LEO. Most manmade objects in space are in LEO. Most navigation satellites by military are also in LEO.

Low Earth Orbit is used for things that we want to visit our Space Shuttle, like the International Space Station (ISS), Hubble Space Telescope and other military and communication satellites. It also helps the country in having a close eye on the cross border activates through navigation satellites. **So, option (b) is correct.** 

#### ADDITIONAL INFORMATION:

Advantages of LEO

- LEO is good for the human experiments because of its low distance from the earth.
- LEO is convenient for fixing broken or damaged things, inspecting damage and installing new instruments etc.
- LEO is less time and money consuming. The scientists can do the experiments; fix the problems and return back in short time.
- Communication and Navigation Satellites in this orbit provide good services at the low cost.

## Disadvantages of LEO

- This orbit is too close to earth that is why is has some atmospheric drag. Over the time objects in this orbit slow down and their orbits slowly decay this allows the influence of gravity to pull the object towards the Earth.
- As we know that most the satellites are sent in the LEO only so LEO is becoming increasingly congested with space debris.

# 25. Recently, National Green Tribunal banned mining activities around which one of the following Tiger Reserves in India?

# (a) Sariska Tiger Reserve

- (b) Nagarhole Tiger Reserve
- (c) Dampa Tiger Reserve
- (d) Palamau Tiger Reserve

# **EXPLANATION:**

Following a plea challenging the environmental clearance granted to mines within 10 km of the Sariska Tiger Reserve, the National Green Tribunal has banned all mining activity



around the area. Any further activity is subject to the clearance of leases by the National Board of Wildlife. **So, option (a) is correct.** 

#### ADDITIONAL INFORMATION:

- Sariska Tiger Reserve is located in Aravali hills and forms a part of the Alwar District of Rajasthan.
- The Reserve is immensely rich in flora and fauna, and is famous for Royal Bengal Tiger. The park has populations of leopards, Nilgai, Sambar, chital etc. It also shelters a large population of Indian peafowl, crested serpent eagles, sand grouse, golden backed woodpeckers, great Indian horned owls, tree pies, vultures, etc.
- Sariska was declared a wildlife sanctuary in 1955 and was declared the tiger reserve later in 1978, making it a part of India's Project Tiger.
- The Sanctuary houses ruined temples, forts, pavilions and a palace.
- Kankarwadi fort is located in the center of the Reserve and it is said that Mughal emperor Aurangzeb had imprisoned his brother Dara Shikoh at this fort in struggle for succession to the throne.
- The Reserve also houses a famous temple of lord Hanuman at Pandupole related to Pandavas.

#### SOURCE:

https://www.thehindu.com/sci-tech/energy-and-environment/ngt-bans-mining-close-to-sariska-reserve/article25808627.ece

# 26. Why do we need the Upper House (Council of States) in the Indian Democratic System?

- 1. To maintain the federal equilibrium in the Political system.
- 2. To control the dominance of Lower House in the Legal administration.
- 3. To reflect the voices of eminent persons from the various spheres of the society.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

The Rajya Sabha (upper house of House of States) is required to maintain the federal equilibrium by protecting the interests of the states against the undue interference of the Centre. **So, statement 1 is correct.** 

The Rajya Sabha represents the states of Indian Federation, while the Lok Sabha represents the people of India as a whole. Rajya Sabha exists to control the dominance of Lower House in the Legal administration. **So, statement 2 is correct.** 



The president nominates 12 members to the Rajya Sabha from people who have special knowledge or practical experience in art, literature, science and social service. It is to reflect the voices of eminent persons from the various spheres of the Society. **So, statement 3 is correct.** 

# **ADDITIONAL INFORMATION:**

The federal features of the Constitution of India are explained below:

#### **Dual Polity**

• The Constitution establishes a dual polity consisting of the Union at the Centre and the states at the Periphery. Each is endowed with sovereign powers to be exercised in the field assigned to them respectively by the Constitution. The Union government deals with the matters of national importance like defence, foreign affairs, currency and communication and so on. The state governments, on the other hand, look after the matters of regional and local importance like public order, agriculture, health, local government and so on.

#### Written Constitution

• The Constitution is not only a written document but also the lengthiest Constitution of the world. Originally, it contained a Preamble, 395 Articles (divided into 22 Parts) and 8 Schedules. At present (2013), it consists of a Preamble, about 465 Articles (divided into 25 Parts) and 12 Schedules. It specifies the structure, organization, powers and functions of both the Central and state governments and prescribes the limits within which they must operate. Thus, it avoids the misunderstandings and disagreements between the two.

# Division of Powers

• The Constitution divided the powers between the Centre and the states in terms of the Union List, State List and Concurrent List in the Seventh Schedule. The Union List consists of 100 subjects (originally 97), the State List 61 subjects (originally 66) and the Concurrent List 52 subjects (originally 47). Both the Centre and the states can make laws on the subjects of the concurrent list, but in case of a conflict, the Central law prevails. The residuary subjects (ie, which are not mentioned in any of the three lists) are given to the Centre.

# Supremacy of the Constitution

• The Constitution is the supreme (or the highest) law of the land. The laws enacted by the Centre and the states must confirm to its provisions. Otherwise, they can be declared invalid by the Supreme Court or the High Court through their power of judicial review. Thus, the organs of the government (legislative, executive and judicial) at both the levels must operate within the jurisdiction prescribed by the Constitution.

# Rigid Constitution

• The division of powers established by the Constitution as well as the supremacy of the Constitution can be maintained only if the method of its amendment is rigid.



Hence, the Constitution is rigid to the extent that those provisions which are concerned with the federal structure (i.e., Centre-state relations and judicial organisation) can be amended only by the joint action of the Central and state governments. Such provisions require for their amendment a special majority4 of the Parliament and also an approval of half of the state legislatures.

## Independent Judiciary

• The Constitution establishes an independent judiciary headed by the Supreme Court for two purposes: one, to protect the supremacy of the Constitution by exercising the power of judicial review; and two, to settle the disputes between the Centre and the states or between the states. The Constitution contains various measures like security of tenure to judges, fixed service conditions and so on to make the judiciary independent of the government.

#### Bicameralism:-

• The Constitution provides for a bicameral legislature consisting of an Upper House (Rajya Sabha) and a Lower House (Lok Sabha). The Rajya Sabha represents the states of Indian Federation, while the Lok Sabha represents the people of India as a whole. The Rajya Sabha (even though a less powerful chamber) is required to maintain the federal equilibrium by protecting the interests of the states against the undue interference of the Centre.

# **SOURCE:**

Indian Polity by M Lakmikanth

# 27. The plan of Sir Stafford Cripps envisaged that after the Second World War

- (a) India should be granted complete independence
- (b) India should be partitioned into two before granting independence
- (c) India should be made a republic with the condition that she will join the Commonwealth
- (d) India should be given Dominion status

#### **EXPLANATION:**

The main proposals of the Cripps mission was that after the Second World War an Indian Union with a dominion status would beset up; it would be free to decide its relations with the Commonwealth and free to participate in the United Nations and other international bodies. **So, option (d) is correct.** 

# **ADDITIONAL INFORMATION:**

The main proposals of the crippsmission were as follows.

An Indian Union with a dominion status would be set up; it would be free to decide
its relations with the Commonwealth and free to participate in the United Nations
and other international bodies.



- After the end of the war, a constituent assembly would be convened to frame a new constitution. Members of this assembly would be partly elected by the provincial assemblies through proportional representation and partlynominated by the princes.
- The British government would accept the new constitution subject to two conditions: (i) any province not willing to join the Union could have a separate constitution and form a separate Union, and (ii) the new constitutionmaking body and the British government would negotiate a treaty to effect the transfer of power and to safeguard racial and religious minorities.
- In the meantime, defence of India would remain in British hands and the governorgeneral's powers wouldremain intact.

#### SOURCE:

A Brief History of India by Spectrum

- 28. In the context of Planning in India, the Primary Sector or Agricultural Sector was given upper hand over the other sectors under which of the following proposals of planning?
  - 1. Sarvodaya Plan by Acharya Vinoba Bave
  - 2. Bombay Plan by India's leading capitalists
  - 3. Visvesvarayya Plan by M Visvesvarayya
  - 4. Congress Plan by JL Nehru
  - 5. Gandhian Plan by Sriman Narayan Agarwal

Select the correct answer using the code given below.

# (a) 1 and 5 only

- (b) 1, 4 and 5 only
- (c) 2, 3 and 4 only
- (d) 5 only

# **EXPLANATION:**

Sarvodaya Idea of VinobaBhave plan **emphasized on agriculture** and small & cottage industries.

The Bombay plan was a set of proposal of a small group of influential business leaders in Bombay for the development of the post-independence economy of India. The plan emphasizes the importance of basic industries, but also calls for the development of consumption goods industries in the early years of the plan.

In 1934, Sir M. Visvesvaraya had published a book titled "Planned Economy in India", in which he presented a constructive draft of the development of India in next ten years. His core idea was to lay out a plan to shift labor from agriculture to industries and double up National income in ten years.

In 1938, National Planning Commission was set-up under the chairmanship of Jawaharlal Nehru by the Indian National Congress.It stated that the objective of planning was to ensure an adequate standard of living for the masses. It emphasised on heavy industry and land reforms.



Espousing the spirit of the Gandhian economic thinking, Sriman Narayan Agarwal formulated this plan in 1944. This plan laid **more emphasis on agriculture**. **So, option** (a) is correct.

- 29. Which of the following Union Territory/Territories of India have a coast in the Arabian Sea?
  - 1. Dadra and Nagar Haveli and Daman and Diu
  - 2. Lakshadweep
  - 3. Puducherry

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

# **EXPLANATION:**-

Dadra and Nagar Haveli and Daman and Diu is along Gujarat. It shares border with Arabian sea.

Lakshadeep is an island in Arabian sea.

Pondicheery is divided into 3 parts yanam (andra) mahe (kerala) Puducherry (tamiilnadu) so Mahe shares border with Arabian Sea. **So option (d) is correct.** 

- 30. Which of the following methods were used by Indian intelligentsia to protest against the policies of the British Raj in later decades of the 19th century?
  - 1. Funding the secret societies against government.
  - 2. Boycotting the British goods.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# **EXPLANATION:**

The Early Nationalists believed in patience and conciliation rather than confrontation, adopting orderly progress and constitutional means to realise their aims. To educate the people, to arouse political consciousness, and to create powerful public opinion in favour of their demands they organised annual sessions. Processions and meetings were held, speeches delivered and discussions held on various economic, social and political



questions. Following these discussions, resolutions were adopted. They also drafted petitions and memorandums before submitting them to the government. The Early Nationalists wanted to convey their feelings to the government, so as to gradually bring the authorities around to their viewpoint. To influence the British government and to enlighten the British public and its political leaders, the Early Nationalists sent deputations of leading Indian leaders to England.

Funding the secret societies against the government and Boycotting the British goods are methods taken by extremists. **So, option (d) is correct.** 

#### ADDITIONAL INFORMATION:

- The Early Nationalists, also known as the Moderates, were a group of political leaders in India active between 1885 and 1907.
- Their emergence marked the beginning of the organised national movement in India. Some of the important moderate leaders were Pherozeshah Mehta and Dadabhai Naoroji.
- With members of the group drawn from educated middle-class professionals including lawyers, teachers and government officials, many of them were educated in England.
- They are known as "Early Nationalists" because they believed in demanding reforms while adopting constitutional and peaceful means to achieve their aims.
- The Early Nationalists had full faith in the British sense of justice, fair play, honesty, and integrity while they believed that British rule was a boon for India.
- The Early Nationalists were staunch believers in open-minded and moderate politics.
- 31. If the Karnataka State government seeks to include some of its tribal communities in the list of Scheduled Tribes of the State of Karnataka, then what are the procedures to be followed?
  - 1. A notified Order of the President is to be released in this regard.
  - 2. A notified Order of the Governor of Karnataka is to be released in this regard.
  - 3. The Constitution (Scheduled Tribes) Order (Amendment) Bill is to be passed by the Parliament in this regard.
  - 4. The Constitution (Scheduled Tribes) Order (Amendment) Bill is to be passed by the State Legislature of Karnataka in this regard.

Which of the statements given above are correct?

- (a) 1 and 3 only
- (b) 1 and 4 only
- (c) 2 and 3 only
- (d) 2 and 4 only

#### **EXPLANATION:**

According to Article 342, the President may, with respect to any State or Union territory, and where it is a state, after consultation with the Governor there of by public



notification, specify the tribes or tribal communities or parts of or groups within tribes or tribal communities which shall, for the purposes of this constitution, is deemed to be scheduled tribes in relation to that state or Union Territory, as the case may be.**So, statement 1 is correct.** 

Recently parliament passed the Constitution (Scheduled Tribes) Order (Second Amendment) Bill, 2019 by a voice vote. The Bill seeks to include the Taliwara, Parivara and Siddi tribal communities in the Scheduled Tribes (ST) list, which will ensure that they get reservation and other benefits provided by the government in Karnataka. **So, statement 3 is correct.** 

#### ADDITIONAL INFORMATION:

- The Constitution (Scheduled Tribes) Order (Second Amendment) Bill, 2019 seeks to include the Taliwara, Parivara and Siddi tribal communities in the Scheduled Tribes (ST) list, which will ensure that they get reservation and other benefits provided by the government in Karnataka.
- The Billamends the 1950 order by granting ST status to and including the communities ""Parivara and Talawara as Synonyms of 'Nayaka' at Sl. No.38 and (ii) "Siddi" community of Dharwad and Belagavi districts along with existing 'Siddi' community of Uttar Kannada district at Sl. No. 50, in the list of Scheduled Tribes of Karnataka."

# SOURCE:

https://indianexpress.com/article/explained/karnataka-scheduled-tribes-list-amendment-rajya-sabha-6167331/

- 32. Consider the following statements about the "iCommit Initiative' which sometimes seen in news recently:
  - 1. In this initiative, Government of India is uniting a diverse set of players such as Corporate, Multilateral and Bilateral Organisations, Think Tanks and Individuals to create a sustainable future.
  - 2. It aims to drastically increase the green cover in the urban areas of India by active participation of its residents.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# **EXPLANATION:**-

Recently, the iCommit initiative was launched on the occasion of the World Environment day (5th June). The initiative is driven by Energy Efficiency Services Limited (EESL), under the administration of the Ministry of Power, Government of India. In this initiative, Government of India is uniting a diverse set of players such as Corporate, Multilateral and



Bilateral Organisations, Think Tanks and Individuals.

#### So statement 1 is correct.

iCommit initiative is centred around the idea of building an energy resilient future. It does not aim to increase the green cover in the urban areas by voluntarily conservation by the people. **So statement 2 is not correct.** 

#### ADDITIONAL INFORMATION:

- iCommit initiative is centred around the idea of building an energy resilient future.
- It is a clarion call to all stakeholders and individuals to continue moving towards energy efficiency, renewable energy, and sustainability to create a robust and resilient energy system in the future.
- The prerequisite for this goal is to create a flexible and agile power system.
- A healthy power sector can help the nation in meeting the objective of energy access and security for all.
- It seeks to bring together a diverse spectrum of government and private players to build a new energy future for India.

# **SOURCE:**-

https://pib.gov.in/PressReleasePage.aspx?PRID=1629635

- 33. Recently, Japan seems to have emerged as the winner by defeating U.S.A. and China by developing their fastest supercomputer "Fugaku". Which one of the following statement best describes about the term "Fugaku"?
  - (a) It got emerged as the world's first exaflop supercomputer
  - (b) It gets operated with more than one operating system in a simultaneous fashion
  - (c) It runs the applications for discovering drugs along with climate forecasting in a side-by-side manner
  - (d) Its current performance can be scaled up to reach a target of 1 Teraflop to make it much faster

# **EXPLANATION:**

A Japan based Supercomputer, Fugaku developed by Fujitsu and the Riken Research Institute has been named the fastest supercomputer in the world. Fugaku will use a "light-weight multi-kernel operating system" named IHK/McKernel. The operating system uses both Linux and the McKernel light-weight kernel operating simultaneously and side-by-side. Hence, it gets operated with more than one operating system in a simultaneous fashion. **So, option (b) is correct.** 



#### SOURCE:

https://www.thehindu.com/sci-tech/technology/japans-fugaku-tops-worlds-fastest-supercomputer-list/article31904759.ece

- 34. Which of the following is/are the possible effect(s) of the desalination process of the sea water?
  - 1. Rise in sea temperature.
  - 2. Increase in oxygen content of the sea.
  - 3. Decrease in the salinity of the sea.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

# **EXPLANATION:**

The possible effects of the desalination process of the sea water are as follows

- There is an increase in the sea temperature
- Decrease in oxygen content of the sea
- Increase in the salinity of the sea
- Desalination requires large amount of energy to process seawater, which is met by burning fossil fuels contributing to global warming.

So, option (a) is correct.

# **ADDITIONAL INFORMATION:**

- Desalination is the process of removing salts from water to produce water that meets the quality (salinity) requirements of different human uses.
- Seawater desalination can extend water supplies beyond what is available from the hydrological cycle, providing an "unlimited", climate-independent and steady supply of high-quality water.
- 35. With reference to the system of Tax and Currency administration during the ancient period of India, which one of the following statements is *not* correct?
  - (a) During the Gupta Period, land taxes grew in number compared to earlier rulers
  - (b) During the Satavahana period, the practice of granting tax-free villages started to Brahmanas and Buddhists monks
  - (c) The Indo-Greek rulers were the first to issue Gold coins in India
  - (d) The Punch Marked coins formed the imperial currency of Kushans administration



#### **EXPLANATION:**

In Gupta Period, land taxes increased in number and those on trade and commerce decreased. The given statement is correct.

The Satavahanas started the practice of granting tax-free villages to brahmanas and Buddhist monks. The cultivated fields and villages granted to them were declared free from intrusion by royal policemen, soldiers, and other royal officers. The given statement is correct.

The Indo-Greeks were the first rulers in India to issue coins which can definitely be attributed to the kings. They were the first to issue gold coins in India. The given statement is correct.

Silver Punch Marked Coins issued initially by merchant Guilds and later by States, the coins represented a trade currency belonging to a period of intensive trade activity and urban development. They are broadly classified into two periods: the first period (attributed to the Janapadas or small local states) and the second period (attributed to the Imperial Mauryan period). Hence, the Punch Marked coins are not formed the imperial currency of Kushans Administration. **So, option (d) is correct.** 

#### SOURCE:

Old NCERT Ancient India by R S Sharma

# 36. Which one of the following Acts amended both Articles 13 and 368 of the Indian Constitution?

## (a) 24th Amendment act, 1971

- (b) 25th Amendment act, 1971
- (c) 26th Amendment act, 1971
- (d) 27th Amendment act, 1971

# **EXPLANATION:**-

both Articles 13 and 368 is amended in 24th Amendment act,1971. So option (a) is not correct.

#### ADDITIONAL INFORMATION:

24th Amendment Act 1971

In order to remove difficulties created by the decision of Supreme Court in GOLAKNATH'S case parliament enacted the 24th amendment Act. The amendment has made the following amendments:

It has added a new clause (4) to article 13 which provides that 'nothing in this article shall apply to any amendment of this constitution made under article 368.



It substituted a new marginal heading to article 368 in place of the old heading "procedure for amendment of the constitution". The new heading is "power of parliament to amend the constitution and procedure thereof."

It inserted a sub clause (1) in article 368 which provides that "notwithstanding anything in this constitution, parliament may, in exercise of its constituent power may amend by way of addition, variation, or repeal any provision of this constitution in accordance with the procedure laid down in article"

It substituted the words "it shall be presented to the president who shall give his assent to the bill and thereupon" for the words "it shall be presented to the president for his assent and upon such assent being given to the Bill." Thus it obligatory for the president to give his assent to the bill amending the constitution.

It has added a new clause (3) to article 368 which provides that "nothing in article 13 shall apply to any amendment made under this article."

#### SOURCE:-

Indian Polity - Laxmikanth

- 37. Recently, India and Japan signed a currency swap agreement for the amount of \$100 billion. In this context, consider the following statements:
  - 1. India can import up to \$100 billion worth of goods from Japan and can to pay this amount in the currency of India.
  - 2. Japan can import up to \$100 billion worth of services from India and can pay this amount in the currency of Japan.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 Nor 2

## **EXPLANATION:**

Now India can import up to 100\$ billion from Japan and has to pay this amount in the currency of India. Similarly, Japan can also import up to 100\$ billion from India and has to pay this amount in the currency of Japan. **So, statements 1 and 2 are correct.** 

#### ADDITIONAL INFORMATION:

- The word swap means exchange. A currency swap between the two countries is an agreement or contract to exchange currencies with predetermined terms and conditions.
- Central banks and Governments engage in currency swaps with foreign counterparts to meet short term foreign exchange liquidity requirements or to ensure adequate foreign currency to avoid Balance of Payments (BOP) crisis till longer arrangements can be made.



- India and Japan in the year 2018 signed a bilateral currency swap agreement.
- RBI will get a certain amount of yen and the Bank of Japan will get an equivalent amount in Indian rupees on a decided swap rate.
- After a specified period, both the countries will repay the amount at the same swap rate.

#### SOURCE:

https://economictimes.indiatimes.com/markets/forex/india-japan-sign-75-billion-currency-swap-agreement/articleshow/66415790.cms?from=mdr

#### 38. Which of the following is/are correct regarding the Muslim League?

- 1. One of its immediate reasons for its foundation was the Swadeshi movement.
- 2. Its foundation was staunchly opposed by the Muslim leaders of Aligarh Movement.
- 3. One aim of its foundation was to prevent any hostility between Hindus and Muslims.
- 4. Muhammad Ali Jinnah was its founding member, holding the dual membership of Congress and Muslim League in 1906.

Select the correct answer from the given code below.

- (a) 1 and 4 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2, 3 and 4

#### **EXPLANATION:**

One of the immediate reasons for the foundation of the Muslim League was the Swadeshi movement. **So, statement 1 is correct.** 

Its foundation was supported by the Muslim leaders of Aligarh Movement. **So, statement 2 is not correct.** 

One aim of its foundation was to prevent any hostility between Hindus and Muslims. **So, statement 3 is correct.** 

Muhammad Ali Jinnah joined the Muslim League in 1913. So, statement 4 is not correct.

#### **ADDITIONAL INFORMATION:**

#### The All-India Muslim League

• On 30 December 1906, around 3000 delegates attended a conference of the Muhammadan Educational Conference at Dhaka in which the ban on politics was



removed and a motion was moved to form the AIML. The name was proposed by Nawab Khawaja Sir Salimullah Bahadur and seconded by Hakim Ajmal Khan.

- The AIML was the first Muslim political party of India.
- The idea was that the Congress Party was only catering to the needs of the Hindus. This was an erroneous idea since the Congress always meant to include every community of the country and had many Muslim leaders as members.
- The founders of the Muslim League were: Khwaja Salimullah, Vikar-ul-Mulk, Syed Amir Ali, Syed Nabiullah, Khan Bahadur Ghulam and Mustafa Chowdhury.
- The first Honorary President of the League was Sir Sultan Muhammad Shah (Aga Khan III).
- The AIML was essentially a party of educated elite Muslims, at least in the beginning.
- The party's chief aim was to promote and secure civil rights for Muslims. It espoused loyalty to the British government as a means to achieve more political and civil rights.
- The objectives of the league were:
  - o To create among Muslims the feelings of loyalty towards the British Government.
  - o To safeguard the political rights of the Muslims and to convey the same to the government.
  - o To prevent the rise of prejudice against other communities of India among the Muslims.

# 39. Which of the following is/are guaranteed under "Article 19" of the Indian Constitution?

- 1. Right to form associations or unions or cooperative societies.
- 2. Right to move freely throughout the territory of India.
- 3. Right to acquire, hold and dispose off property.
- 4. Right to employment and appointment to any office of the state.

Select the correct answer using the code given below.

#### (a) 1 and 2 only

- (b) 1 and 4 only
- (c) 1, 2 and 4 only
- (d) 3 and 4 only

# **EXPLANATION:**

Article 19 guarantees to all citizens the six rights. These are:

- Right to freedom of speech and expression.
- Right to assemble peaceably and without arms.
- Right to form associations or unions or co-operative societies.
- Right to move freely throughout the territory of India.
- Right to reside and settle in any part of the territory of India.



- Right to practice any profession or to carry on any occupation, trade or
- business.

Originally, Article 19 contained seven rights. But, the right to acquire, holdand dispose of property was deleted by the 44th Amendment Act of 1978. So, option (a) is correct.

#### **ADDITIONAL INFORMATION:**

- The six rights under Article 19 are protected against only state action and not private individuals.
- Moreover, these rights are available only to the citizens and to shareholders of a company but not to foreigners or legal persons likecompanies or corporations, etc.
- The State can impose 'reasonable' restrictions on the enjoyment of these six rights only on the grounds mentioned in the Article 19 itself and not onany other grounds.

#### SOURCE:

Indian polity by M Laxmikanth

- 40. With reference to the World Drug Report of 2020, which one of the following regions is the major source for Cocaine?
  - (a) South East Asia
  - (b) West Africa
  - (c) Andean Countries
  - (d) Mexico and Central America

# **EXPLANATION:**-

Based on World Drug Report 2020 Andean regions is the major source for cocaine. **So, Option (c) is correct.** 

#### **ADDITIONAL INFORMATION:**

Drug seizures in India and neighbourhood

- The maximum of 644 tonnes of opium was seized in Iran, followed by 27 tonnes in Afghanistan and 19 tonnes in Pakistan.
- In India, the figure stood at four tonnes in 2018.

# Heroin

- Heroin is manufactured from the morphine extracted from the seed pod of opium poppy plants.
- Iran reported the highest seizure of heroin (25 tonnes), followed by Turkey, United States, China, Pakistan and Afghanistan.
- India was at the 12th position in the world.



#### Global pattern

- 97% of the total global production of opium in the past five years came from only three countries.
- About 84% of the total opium was produced in Afghanistan, from where it is supplied to neighbouring countries, Europe, west Asia, south Asia and Africa.
- From Myanmar, which accounts for 7% of the global opium production, and Laos, where 1% of the opium is produced, it is supplied to east and south-east Asia and Oceania.
- Mexico accounts for 6% of the global opium production, while Colombia and Guatemala account for less than 1% of global production.

#### Some other details

- The report said that the global area under opium poppy cultivation declined for the second year in a row in 2019.
- It went down by 17% in 2018 and by 30% in 2019.
- Despite the decline in cultivation, opium production remained stable in 2019, with higher yields reported in the main opium production areas.
- Quantities of seized opiates remained concentrated in Asia, notably in south-west Asia (70%).
- Asia is host to more than 90% of global illicit opium production.
- Also, it is the world's largest consumption market for opiates and also accounts for almost 80% of all opiates seized worldwide in 2018.

# SOURCE:-

https://wdr.unodc.org/wdr2020/index.html

- 41. In the context of Public Finance of India, the divestment of Public sector Company into a foreign entity, will be categorised under which head/category?
  - (a) Profits and Dividends of the Public Sector Unit
  - (b) External Grants from Abroad
  - (c) Loan recovery from the Public Sector Unit
  - (d) None of the option given above

#### ADDITIONAL INFORMATION:

Salient features of NIF:

- The proceeds from disinvestment of CPSEs will be channelised into the National Investment Fund which is to be maintained outside the Consolidated Fund of India
- The corpus of the National Investment Fund will be of a permanent nature
- The Fund will be professionally managed to provide sustainable returns to the Govt., without depleting the corpus. Selected Public Sector Mutual Funds will be entrusted with the management of the corpus of the Fund



- 75% of the annual income of the Fund will be used to finance selected social sector schemes, which promote education, health and employment. The residual 25% of the annual income of the Fund will be used to meet the capital investment requirements of profitable and revivable CPSEs that yield adequate returns, in order to enlarge their capital base to finance expansion/ diversification
- 42. 'Black Box' is an electronic recording device placed in an aircraft to facilitate the investigation of aviation accidents and incidents. In this context, consider the following statements about the characteristic feature of a Black Box:
  - 1. It gets mounted in the wing region of an aircraft that are more likely to survive after a flight crash.
  - 2. It is made up of Titanium that prevents its damage after a crash.
  - 3. It emits ultrasonic sound to trace its location either on land or in water.
  - 4. It is capable to record terabytes of data in a single flight.

Select the correct answer using the code given below.

- (a) 4 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 3 and 4 only

# **EXPLANATION:**

From the security point of view, the black box is generally kept at the back side of the airplane, not on the wing region of an aircraft. **So, statement 1 is not correct.** 

This Box is made of Titanium metal and is enclosed in a Titanium box which gives it strength to withstand any shock if it falls in sea or falls from the height. It is extremely rare for a black box to be destroyed. It would take a concentrated fire beyond its design strength, or an impact so high that it would be beyond what it could withstand. Hence, Black box made up of titanium never gets damaged after a crash is not true. **So, statement 2 is not correct.** 

When this box is lost anywhere, it keeps on emitting the waves along with a beep sound for about 30 days. This voice can be identified by the investigators from a distance of about 2-3 Kilometers. An interesting fact with regard to Black box is that it can emit waves from the depth of 14000 feet in the sea.it does not emit an ultrasonic sound to trace its location. **So, statement 3 is not correct.** 

The black box records all relevant flight data, in addition to conversations in the cockpit. It is also capable to record terabytes of data in a single flight. **So, statement 4 is correct.** 



#### ADDITIONAL INFORMATION:

- Black Box is also known as the 'Flight Data Recorder'. The Black Box or Flight Data
  Recorder of an Airplane is an instrument which records all the activities of the
  airplane during its flight.
- Black Box is generally kept at the back side of the airoplane for the security point of view. This Box is made of Titanium metal and is enclosed in a Titanium box which gives it strength to withstand any shock if it falls in sea or falls from the height.
- The Black Box has two separate boxes:
- 1. Flight Data Recorder: This box can contain information about direction, altitude, fuel, speed, turbulence, cabin temperature etc. About 88 such values for about 25 hours can be recorded. This box can withstand a temperature of about 11000°C for one hour and a temperature of 260°C for 10 hours. These boxes are red or pink in color so that can be found easily.
- 2. Cockpit Voice Recorder: This box records the sound of the airplane during the last two hours. It records the sound of engine, emergency alarm, cabin and cockpit in order to predict the conditions of the plane before any accident occurred
- Black Box is made up of a strong metal. It can work for 30 days without any electricity. It can withstand a temperature of 11000°C. When this box is lost anywhere, it keeps on emitting the waves along with a beep sound for about 30 days.
- This voice can be identified by the investigators from a distance of about 2-3 Kilometers. An interesting fact with regard to Black box is that it can emit waves from the depth of 14000 feet in the sea.

#### SOURCE:

https://www.thehindubusinessline.com/opinion/all-you-wanted-to-know-about-black-box/article22506672.ece

- 43. Consider the following statements about the "State Rooftop Solar Attractiveness Index" (SARAL):
  - 1. The index is solely developed by the Union Ministry for Power.
  - 2. The State of Gujarat has been placed at the first rank in this Index. Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

# **EXPLANATION:**

State Rooftop Solar Attractiveness Index (SARAL) has been designed by the Ministry of New and Renewable Energy (MNRE), Shakti Sustainable Energy Foundation, Associated Chambers of Commerce and Industry of India and Ernst & Young. **So, statement 1 is** 



#### not correct.

Karnataka has been placed at the first rank in the index followed by Telangana, Gujarat and Andhra Pradesh. **So, statement 2 is not correct.** 

#### ADDITIONAL INFORMATION:

#### State Rooftop Solar Attractiveness Index-SARAL

- Ministry of New and Renewable Energy (MNRE) has launched the State Rooftop Solar Attractiveness Index–SARAL.
- It is the first of its kind index to provide a comprehensive overview of state-level measures adopted to facilitate rooftop solar deployment.
- The index has been designed by MNRE, Shakti Sustainable Energy Foundation, Associated Chambers of Commerce and Industry of India and Ernst & Young.
- The index evaluates states based on their attractiveness for rooftop development.
- The index captures five key aspects namely (a)Robustness of policy framework (b)Implementation environment (c)Investment climate (d)Consumer experience and (e)Business ecosystem.
- The index has ranked Karnataka at first followed by Telangana, Gujarat and Andhra Pradesh.
- The Ministry of New and Renewable Energy (MNRE) has set a target of 175 GW of renewable energy capacity by 2022, of which 100 GW solar power is to be operational by March 2022. Under which, 40 GW is expected to come from grid connected solar rooftops

#### SOURCE:

https://vikaspedia.in/energy/policy-support/renewable-energy-1/state-rooftop-solar-attractiveness-index

- 44. Consider the following statements about the "Keeladi Excavation" in Tamil Nadu, which was recently in the news:
  - 1. It is evidence that the urban civilisation existed in Tamil Nadu on the banks of the river Vaigai.
  - 2. The results suggest that this was the second urbanization occurred in India after the Indus Valley Civilization.
  - 3. The Graffiti marks extracted from the Keeladi excavations reflects the symbols of Mauryan Civilization.

#### Which of the statements given above are correct?

- (a) 1 and 3 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3



#### **EXPLANATION:**

Excavations in Keeladi prove that an urban civilisation existed in Tamil Nadu in the Sangam era on the banks of the river Vaigai. **So, statement 1 is correct.** 

The results suggest that this was the second urbanization occurred in India after the Indus Valley Civilization. **So, statement 2 is correct.** 

The Graffiti marks extracted from the Keeladi excavations reflects the symbols of Indus Valley Civilisation. **So, statement 3 is not correct.** 

#### ADDITIONAL INFORMATION:

#### Keeladi excavations:

- Excavations in Keeladi prove that an urban civilisation existed in Tamil Nadu in the Sangam era on the banks of the river Vaigai.
- Many antiquities have been unearthed that provide crucial evidence to understanding the missing links of the Iron Age [12th century BCE to 6th century BCE] to the Early Historic Period [6th century BCE to 4th century BCE] and subsequent cultural developments.
- Tamil Brahmi letters found were inscribed when the pot was wet or after the pot became dry. This clearly suggests literacy levels in the 6th century BC.
- Skeletal fragments of cow/ox, buffalo, sheep, goat, nilgai, blackbuck, wild boar and peacock were found.
- Long walls, Well-laid floors along with roof tiles in a collapsed state, iron nails fastened to the poles and rafters prove a high standard of living during the Sangam age.
- Brick structures, terracotta ring wells, fallen roofing with tiles, golden ornaments, broken parts of copper objects, iron implements, terracotta chess pieces, ear ornaments, spindle whorls, figurines, black and redware, rouletted ware and a few pieces of Arretine ware, besides beads made of glass, terracotta and semi-precious stones.
- Graffiti marks are found in earthenware, caves and rocks in or near the excavation sites.

#### SOURCE:

https://www.thehindu.com/news/national/tamil-nadu/unearthing-an-ancient-civilisation/article29856930.ece

# 45. Consider the following statements:

- 1. All loans raised by the Government of India by the issue of Treasury Bills are credited to the Public Account of India.
- 2. All loans raised by the Government of India by the issue of Ways and Means of Advances are credited to the Consolidated Fund of India.
- 3. Contingency Fund of India is placed at the disposal of the President of India.



### Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

All loans raised by the Government by the issue of Treasury Bills are credited to the Consolidated Fund of India. **So, statement 1 is not correct.** 

All loans raised by the Government by loans or ways and means of advances are credited to the Consolidated Fund of India. **So, statement 2 is correct.** 

Article 267 of the Constitution authorises the existence of a Contingency Fund of India, which is an imprest (corpus) placed at the disposal of the President of India to facilitate meeting of urgent unforeseen expenditure by the government, pending an authorisation from Parliament. **So, statement 3 is correct.** 

#### ADDITIONAL INFORMATION:

#### Consolidated Fund of India

• It is a fund to which all receipts are credited and all payments are debited. In other words, (a) all revenues received by the Government of India; (b) all loans raised by the Government by the issue of treasury bills, loans or ways and means of advances; and (c) all money received by the government in repayment of loans forms the Consolidated Fund of India. All the legally authorised payments on behalf of the Government of India are made out of this fund. No money out of this fund can be appropriated (issued or drawn) except in accordance with a parliamentary law.

## Public Account of India

 All other public money (other than those which are credited to the Consolidated Fund of India) received by or on behalf of the Government of India shall be credited to the Public Account of India. This includes provident fund deposits, judicial deposits, savings bank deposits, departmental deposits, remittances and so on. This account is operated by executive action, that is, the payments from this account can bymade without parliamentary appropriation. Such payments are mostly in thenature of banking transactions.

#### Contingency Fund of India

• The Constitution authorised the Parliament to establish a 'Contingency Fund of India', into which amounts determined by law are paid from time to time. Accordingly, the Parliament enacted the contingency fund of India Act in 1950. This fund is placed at the disposal of the president, and he can make advances out of it to meet unforeseen expenditure pending its authorisation by the Parliament. The fund is held by the finance secretary on behalf of the president. Like the public account ofIndia, it is also operated by executive action.



#### SOURCE:

Indian polity by M Laxmikanth

- 46. Recently, the Reserve Bank of India (RBI) increased the limit of Ways and Means Advances (WMA) over and above of 60%. What will be the impacts of this increase in the Indian Financial System?
  - 1. Now, both the Central and Government can borrow from the RBI on a temporary basis.
  - 2. Now, the Public Sector Banks can borrow from the RBI on the basis of reporate.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### **EXPLANATION:**

Ways and Means Advances (WMA) is a temporary liquidity arrangement with RBI that enables the Centre and states to borrow up to 90 days from the central bank to tide over mismatches between revenues and expenditure. The Reserve Bank of India increased the limit of Ways and Means Advances (WMA) over and above of 60%. Now both the Central and State Government can borrow from the RBI on a temporary basis. **So, statement 1** is correct.

WMA is available only to Central and State Government not for Public Sector banks. **So, statement 2 is not correct.** 

#### ADDITIONAL INFORMATION:

Ways and Means Advances

- The RBI gives temporary loan facilities to the centre and state governments as a banker to the government. This temporary loan facility is called WMA.
- It is a mechanism to provide to States to help them tide over temporary mismatches in the cash flow of their receipts and payments.
- It was introduced on April 1, 1997, after putting an end to the four-decade-old system of adhoc (temporary) Treasury Bills to finance the Central Government deficit.
- Under Section 17(5) of RBI Act, 1934, the RBI provides Ways and Means Advances (WMA) to the central and State/UT governments.
- This facility can be availed by the government if it needs immediate cash from the RBI.
- The WMA is to be vacated after 90 days.
- The interest rate for WMA is currently charged at the repo rate.
- The limits for WMA are mutually decided by the RBI and the Government of India.



#### SOURCE:

https://www.livemint.com/industry/banking/rbi-raises-wma-limit-for-central-government-11587388128386.html

### 47. Consider the following statements about the "Indian Ocean Commission":

- 1. Membership in BIMSTEC is one of the necessary pre-condition to get full membership of this commission.
- 2. It is an intergovernmental organization that links all the littoral states of Indian Ocean.
- 3. The main principle of this commission is Collective Security.

#### Which of the statements given above is/are not correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

Membership in BIMSTEC is not one of the necessary pre-condition to get full membership of this commission. **So, statement 1 is not correct.** 

The Indian Ocean Commission (IOC) is an intergovernmental body created in 1984 to protect the interests of the Western Indian Ocean islands. So, statement 2 is not correct.

IOC's principal mission is to strengthen the ties of friendship between the countries and to be a platform of solidarity for the entire population of the African Indian Ocean region.IOC's mission also includes development, through projects related to sustainability for the region, aimed at protecting the region, improving the living conditions of the populations and preserving the various natural resources that the countries depend on.Collective Security is not the main principle of this commission. **So, statement 3 is not correct.** 

#### ADDITIONAL INFORMATION:

#### **Indian Ocean Commission (IOC)**

- The IOC is an intergovernmental organization that was created in 1982 at Port Louis, Mauritius and institutionalized in 1984 by the Victoria Agreement in Seychelles.
- The IOC is composed of five African Indian Ocean nations: Comoros, Madagascar, Mauritius, Réunion (an overseas region of France), and Seychelles.
- These five islands share geographic proximity, historical and demographic relationships, natural resources and common development issues.
- The COI works on four pillars which have been adopted in 2005 by the Summit of Heads of States:
  - o Political and diplomatic cooperation



- o Economic and commercial cooperation
- Sustainable development in a globalisation context, cooperation in the field of agriculture, maritime fishing, and the conservation of resources and ecosystems
- o Strengthening of the regional cultural identity, cooperation in cultural, scientific, technical, educational and judicial fields.

#### SOURCE:

https://www.thehindu.com/todays-paper/tp-national/india-joins-indian-ocean-commission-as-observer/article31006737.ece

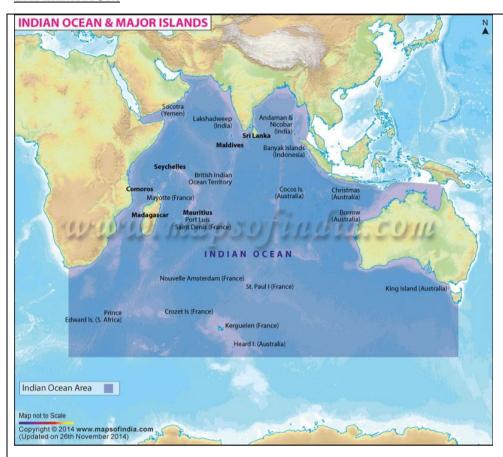
- 48. Historically, South and Southeast Asia were the colonies of European countries. Presently, which of the European country/countries have territory/territories in the Indian Ocean?
  - 1. United Kingdom
  - 2. The Netherlands
  - 3. France

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3



#### **EXPLANATION:-**



Islands like deigo gratia is controlled by UK. Some islands are controlled by Australia. Netherland does not control any island. **So option (c) is correct.** 

# 49. Consider the following passage:

"Under his Viceroyship, a white paper on constitutional reforms was published, containing provisions for a federal set-up and provincial autonomy. This person also established an airfield in Delhi and has an island in Kerala named after him. Burma was separated from India during his tenure. He outlawed the Indian National Congress and banned Congress youth organizations during the term of his office."

Which one of the following Viceroys of India described in the above passage?

# (a) Lord Willingdon

- (b) Lord Irwin
- (c) Lord Linlithgow
- (d) Lord Reading

#### **EXPLANATION:**

Under Lord Willingdon Viceroyship, a white paper on constitutional reforms was published, containing provisions for a federal set-up and provincial autonomy. This



person also established an airfield in Delhi and has an island in Kerala named after him. Burma was separated from India during his tenure. He outlawed the Indian National Congress and banned Congress youth organizations during the term of his office. So, option (a) is correct.

#### **ADDITIONAL INFORMATION:**

Lord Willingdon 1931-1936

- Second Round Table Conference (1931) and failure of the conference, resumption of Civil DisobedienceMovement.
- Announcement of Communal Award (1932) underwhich separate communal electorates were set up.
- 'Fast unto death' by Gandhi in Yeravada prison, broken after the Poona Pact (1932).
- Third Round Table Conference (1932).
- Launch of Individual Civil Disobedience (1933).
- The Government of India Act of 1935.
- Establishment of All India KisanSabha (1936) andCongress Socialist Party by AcharyaNarendraDevand Jayaprakash Narayan (1934).
- Burma separated from India (1935).

#### SOURCE:

A Brief History of India by Spectrum

# 50. Consider the following statements:

- 1. Powers of the Rajya Sabha is equal to that of the Lok Sabha in the passage of Constitutional Amendment Bills.
- 2. Powers of the Rajya Sabha is equal to that of the Lok Sabha in the approval of the proclamation of National Emergency by the President.
- 3. Powers of the Rajya Sabha is equal to that of the Lok Sabha in the revocation of the National Emergency.
- 4. Powers of the Rajya Sabha is equal to that of the Lok Sabha in creating new All-India Services common to both the Centre and states.

Which of the statements given above is/are correct?

#### (a) 1 and 2 only

- (b) 1, 2 and 3 only
- (c) 1, 2 and 4 only
- (d) 1, 2, 3 and 4

# **EXPLANATION:**

Powers of the Rajya Sabha is equal to that of the Lok Sabha in the passage of Constitutional Amendment Bills. **So, statement 1 is correct.** 

Powers of the Rajya Sabha is equal to that of the Lok Sabha in the approval of the



proclamation of National Emergency by the President. So, statement 2 is correct.

A resolution for the discontinuance of the national emergency can be passed only by the Lok Sabha and not by the Rajya Sabha. **So, statement 3 is not correct.** 

Due to the federal character, the Rajya Sabha has been given exclusive orspecial powers that are not enjoyed by the Lok Sabha. It can authorise the Parliament to create new All-India Services commonto both the Centre and states (Article 312). **So, statement 4 is not correct.** 

#### **SOURCE:**

Indian polity by M Laxmikanth

#### 51. Consider the following pairs:

Space Mission's Objective

1. Tianwen - Martian Seismology

2. LUCY - Jupiter Trojan

**Asteroids** 

3. Bepi Colombo - Venusian

**Atmosphere** 

4. HOPE - Lunar Geology

#### Which of the pairs given above are not correctly matched?

- (a) 1 and 2 only
- (b) 1 and 4 only
- (c) 1, 2 and 3 only
- (d) 1, 3 and 4 only

# **EXPLANATION:**

China Mars mission Tianwen-1: The spacecraft consists of an orbiter, a lander and a rover, and the mission aims to study the thickness and sub-layer distribution of the Martian soil. The scientific goals of the mission include studying Martian topography and geology and determining the composition of the surface material, climate and environment. Its mission is not to study Martian Seismology. **So, pair 1 is not correctly matched.** 

The Lucy mission will comprise a 12-year journey with a fly-by to seven different asteroids — six Trojan asteroids and a Main Belt asteroid — more than any other previous asteroid mission. The mission will get us up-close with both the clusters of Trojan asteroids. **So, pair 2 is correctly matched.** 

BepiColombo is a joint mission of the European Space Agency (ESA) and the Japan Aerospace Exploration Agency (JAXA) to the planet Mercury. The mission comprises two satellites launched together: the Mercury Planetary Orbiter (MPO) and Mio (Mercury Magnetospheric Orbiter, MMO). The mission will perform a comprehensive study of Mercury, including characterization of its magnetic field, magnetosphere, and both



interior and surface structure. So, pair 3 is not correctly matched.

'Hope' mission is launched by United Arab Emirates(UAE) to study Mars. It aims to provide a complete picture of the Martian atmosphere for the first time, studying daily and seasonal changes. **So, pair 4 is not correctly matched.** 

#### SOURCE:

https://indianexpress.com/article/explained/china-mars-mission-tianwen-1-explained-6521179/

https://www.nasa.gov/content/goddard/lucy-overview

# 52. Which one of the following statements is *not* correct about the Air (Prevention and Control of Pollution) Act, 1981 of India?

- (a) States not having water pollution boards were required to set up air pollution boards
- (b) All industries operating within designated air pollution control areas must obtain consent from the State Boards
- (c) It empowers only central pollution control board to close a defaulting industrial plant
- (d) The states are required to prescribe emission standards for industry and automobiles after consulting the central board

### **EXPLANATION:**

Under Air (Prevention and Control of Pollution) Act of 1981, states not having water pollution boards were required to set up air pollution boards. So, the given statement is correct.

Under Air (Prevention and Control of Pollution) Act of 1981, all industries operating within designated air pollution control areas must obtain a "consent" (permit) from the State Boards. So, the given statement is correct.

The 1988 amendment of Air (Prevention and Control of Pollution) Act empowered state pollution control board (SPCB) and central pollution control board (CPCB) to close a defaulting industrial plant. So, the given statement is not correct. So, option (c) is correct.

The states are required to prescribe emission standards for industry and automobiles after consulting the central board and noting its ambient air quality standards. So, the given statement is correct.

# **ADDITIONAL INFORMATION:**

Important provisions of Air (Prevention and Control of Pollution) Act of 1981are given below:

- The Air Act's framework is similar to that of the Water Act of 1974.
- The Air Act expanded the authority of the central and state boards established under the Water Act, to include air pollution control.



- States not having water pollution boards were required to set up air pollution boards.
- Under the Air Act, all industries operating within designated air pollution control areas must obtain a "consent" (permit) from the State Boards.
- The states are required to prescribe emission standards for industry and automobiles after consulting the central board and noting its ambient air quality standards.
- The Act grants power to SPCB and to test equipment and to take the sample for the purpose of analysis from any chimney, fly ash or dust or any other.
- Prior to its amendment in 1988, enforcement under the Act was achieved through criminal prosecutions initiated by the Boards.
- The 1988 amendment act empowered SPCB and CPCB to close a defaulting industrial plant.
- Notably, the 1987 amendment introduced a citizen's suit provision into the Air Act and extended the Act to include noise pollution.

#### 53. Consider the following pairs:

#### Community Native region

Rohingyas - Myanmar
 Mahadesis - Nepal
 Kurds - Philippines
 Uighurs - China

#### Which of the pairs given above are correctly matched?

- (a) 1, 2 and 3 only
- (b) 1, 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 2, 3 and 4 only

#### **EXPLANATION:**

The Rohingya people a stateless Indo-Aryan ethnic group who predominantly follow Islamand reside in Rakhine State, Myanmar. **So, pair 1 is correctly matched.** 

The term Madheshi peopleis used by academics for people of Indian ancestry residing in the Terai of Nepal and comprising various cultural groups such as Hindu caste groups, Muslims, Marwaris and indigenous people of the Terai. **So, pair 2 is correctly matched.** 

Kurds or Kurdish people are an Iranic ethnic group native to a mountainous region of Western Asia known as Kurdistan, which spans southeastern Turkey, northwestern Iran, northern Iraq, and northern Syria. **So, pair 3 is not correctly matched.** 

The Uyghurs are a Turkic-speaking minority ethnic group originating from and culturally affiliated with the general region of Central and East Asia. The Uyghurs are recognized as nativeto the Xinjiang Uyghur Autonomous Region in Northwest China. So, pair 4 is correctly matched.



#### 54. The festival "Ulambana" is associated with which one of the following religion?

- (a) Buddhism
- (b) Jainism
- (c) Sikhism
- (d) Hinduism

# **EXPLANATION:**-

Ullambana, or the Ghost Festival, is the most popular Buddhist festival. On this day, it is believed that the "Gates of the Hell" are opened and the dead souls visit their loved ones. During this festival, offerings are made to the spirits of the dead and to the hungry ghosts in order to bring good fortune and luck. It is celebrated on the 15th day of the 7th month of the lunar calendar. Ullambana is a festival of liberation, which advocates and reinforces the concept of filial piety. The word 'Ullambana' is a transliteration of the Sanskrit word meaning 'deliverance from suffering', and specifically refers to the salvation that is granted to tormented souls in hell. On this day, Buddhists offer prayers both to their departed forefathers and to their living parents and elders. **So option (a) is correct.** 

# 55. Which one of the following pairs of Indian cities has the maximum difference in annual rainfall?

- (a) Trivandrum and Cochin
- (b) Mumbai and Panaji
- (c) Bhubaneswar and Kolkata
- (d) Jaisalmer and Murshidabad

#### **EXPLANATION:**-

Jaisalmer and murshidabad is has high difference in their latitude and longitude. So they show high difference in rainfall. Also jaisalmer is a desert. It is one of the place in India which has lowest rainfall. Murshidabad is in eastern region. This region receives high rainfall.

Other pairs are in close latitude and longitude.

So option (d) is correct.

# 56. In the context of Economic concepts, the situation of "Reflation" in a country is crossing the cycle of

- (a) High inflation, high unemployment and high demand
- (b) Low inflation, low unemployment and high demand
- (c) Low inflation, high unemployment and low demand
- (d) Low inflation, high unemployment and high demand



#### **EXPLANATION:**

Reflation is situation often deliberately brought by the government to reduce unemployment and increase demand by going for higher levels of economic growth. Governments go for higher public expenditures, tax cuts, interest rate cuts, etc. Fiscal deficit rises, extra money is generally printed at higher level of growth, wages increase and there is almost no improvement in unemployment.

Reflation can also be understood from a different angle—when the economy is crossing a cycle of recession (low inflation, high unemployment, low demand, etc.) and government takes some economic policy decisions to revive the economy from recession, certain goods see sudden and temporary increase in their prices, such price rise is also known as reflation. **So, option (c) is correct.** 

- 57. Consider the following statements about the "organic agriculture":
  - 1. Genetically Modified Organisms can be used in the handling stage of organic agriculture.
  - 2. Organic certification is provided by FSSAI accredited testing centres in India.

### Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### **EXPLANATION:-**

Genetically modified organisms are not organic it cannot be used in organic agriculture. **So statement 1 is not correct.** 

India Organic is a certification is issued by testing centres accredited by the Agricultural and Processed Food Products Export Development Authority (APEDA). **So statement 2 is not correct.** 

#### **ADDITIONAL INFORMATION:**

India Organic is a certification mark for organically farmed food products manufactured in India. The certification mark certifies that an organic food product conforms to the National Standards for Organic Products established in 2000.

Those standards ensures that the product or the raw materials used in the product were grown through organic farming, without the use of chemical fertilizers, pesticides, or induced hormones. The certification is issued by testing centres accredited by the Agricultural and Processed Food Products Export Development Authority (APEDA). under the National Program for Organic Production of the Government of India.



Even though the standards are in effect since 2000, the certification scheme and hence the certification mark came into existence in 2002.

Just like green & red dots on products to signify if they are vegetarian or non-vegetarian, the Food Safety and Standards Authority of India (FSSAI) in December 2017, introduced the Jaivik Bharat logo to help customers identify authentic organic food.

Food safety regulator FSSAI has permitted small organic producers, having an annual turnover of over Rs 12 lakh, to sell their produce directly to end consumers without certification till April 2020, but can not use 'Jaivik Bharat logo' on their products. Organizations are encouraging government to promote the Jaivik Bharat logo and certification process to make organic food more trustworthy and easy to recognize in India.

#### **SOURCE:-**

https://jaivikbharat.fssai.gov.in/

- 58. With reference to the Indian National Movement, consider the following statements about the "Justice Party":
  - 1. In 1920, it won the first direct elections in the Madras presidency and formed the government.
  - 2. This party-led government was the first government to legislate reservations among the Public services in the Indian legislative history.
  - 3. In 1928, it actively supported the launch of Anti-Simon Commission protest.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

In 1920, the Justice Party won the first direct elections in the Madras presidency and formed the government. **So, statement 1 is correct.** 

It was the first Government to legislate reservations among the Public services in the Indian legislative history. **So, statement 2 is correct.** 

In 1928, the Justice Party did not supported the launch of Anti Simon Commission Protest.**So, statement 3 is not correct.** 

#### **ADDITIONAL INFORMATION:**

# Justice party

• The root of the Dravidian movement lies in Brahmin-non-Brahmin conflict.



- The non-Brahmans started demanding their right and questioned the dominance of Brahmins in each and every sphere.
- In 1916, Zamindars and Maharajas in order to counter growing clout of Brahmins in society and politics, established South India Welfare Association in Madras Presidency.
- The organization had eminent non-Brahman leaders as Dr TM Nair, Theagaroya Chetty, Dr C Natesa Mudaliar, Panagal's Raja and Sir A Ramaswamy Mudaliar.
- It started publishing English newspaper 'Justice', with growing popularity the society came to be known as Justice Party.
- This Justice party contested the election and for the first time in 1921 Indian cabinet was formed in Madras Presidency.

### SOURCE:

A Brief History of India by Spectrum

- 59. With reference to the Indian Judicial System, consider the following statements:
  - 1. The strength of judges of a High Court is determined by the Parliament of India from time to time.
  - 2. A High Court's jurisdiction from a Union Territory can be removed by the Parliament of India.
  - 3. The territorial jurisdiction of a High Court is co-terminus with the territory of that state.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

The number of judges in a high court is decided by dividing the average institution of main cases during the last five years by the national average, or the average rate of disposal of main cases per judge per year in that High Court, whichever is higher. **So, statement 1 is not correct.** 

Parliament may by law extend the jurisdiction of a High Court to, or exclude the jurisdiction of a High Court from, any Union territory. **So, statement 2 is correct.** 

The territorial jurisdiction of a high court is co-terminus with the territory of a state. **So, statement 3 is correct.** 

#### **ADDITIONAL INFORMATION:**

• A High Court Judge is appointed by the President of India. He is solely responsible for the appointment of any judge in a High Court. However, he may consult the



Governor of the State, the acting Chief Justice of India and Chief Justice of that particular state's High Court.

A High Court judge is also liable to get transferred to other High Courts. This
decision is entirely dependent on the Chief Justice of India. Transfer of judges is
done with an aim to ensure proper and just trial for every case fought in the court of
law.

### SOURCE:

Indian polity by M Laxmikanth

- 60. India has now reached the 'Conclusive Stage' in the procurement of S-400 TRIMUF from Russia. Consider the following statements about the "S-400 TRIMUF":
  - 1. It is a kind of multi targetable anti-air field defence system.
  - 2. Surface-to-air missiles alone are capable to be fired from this system.
  - 3. Targets can be intercepted both inside as well as outside the atmosphere.
  - 4. Interception of target takes place from any launching platform.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 2, 3 and 4 only

#### **EXPLANATION:**

The S-400 is one of the most sophisticated surface-to-air defence systems in the world. It has a range of 400km (248 miles) and can shoot down up to 80 targets simultaneously, aiming two missiles at each one. Hence, It's a kind of multi targetable anti-air field defence system. **So, statement 1 is correct.** 

The S-400 Triumf — NATO calls it SA-21 Growler — is a modern long-range surface-to-air missile (MLR SAM) system. It has only this system but can engage all types of aerial targets such as aircraft, ballistic and cruise missiles, unmanned aerial vehicles (UAV), which are within the range of 400km, at an altitude of up to 30km. **So, statement 2 is correct.** 

It can engage all types of aerial targets which are within the range of 400km, at an altitude of up to 30km. Hence, targets can be intercepted only inside the atmosphere. **So, statement 3 is not correct.** 

Interception of the target takes place from S-400 Triumf launch vehicle which acts as a platform. **So, statement 4 is not correct.** 



#### ADDITIONAL INFORMATION:

- The S-400 Triumf NATO calls it SA-21 Growler is a modern long-range surface-to-air missile (MLR SAM) system developed by Russia.
- First used in 2007, the S-400 is an upgrade of the S-300 series of missile systems put in place for the defence of Moscow.
- India and Russia have been discussing the purchase of the S-400 Triumf since 2015. Several countries have shown interest in the S-400, which is considered way ahead of the American THAAD (Terminal High Altitude Area Defense) system though both are different weapon systems.
- The missile system integrates a multifunction radar, autonomous detection and targeting systems, anti-aircraft missile systems, launchers, and command and control centre. It can provide a layered defence as it is capable of firing three types of missiles.
- The S-400 Trimuf can engage all types of aerial targets such as aircraft, ballistic and cruise missiles, unmanned aerial vehicles (UAV), which are within the range of 400km, at an altitude of up to 30km.
- It can track 100 airborne targets, including super fighters such as the American built F-35, and engage six of them simultaneously.

#### SOURCE:

https://indianexpress.com/article/what-is/what-is-s-400-triumf-missile-system-5383776/

- 61. Consider the following statements about the "Draft National Forest Policy, 2018" of India:
  - 1. It aims to bring a minimum of one-third of India's total geographical area under forest cover.
  - 2. The Union Ministry of Environment, Forest and Climate Change have suggested increasing the environment cess under this policy.
  - 3. It suggests setting up of a National Board of Forestry for better management of the country's forests.

#### Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

# **EXPLANATION:**

The National Forest Policy aims at bringing a minimum of one-third of India's total geographical area under forest cover. **So, statement 1 is correct.** 

There is no mention of the environment cess under the Draft National Forest Policy, 2018. **So, statement 2 is not correct.** 

It also suggests setting up of two national-level bodies—National Community Forest



Management Mission(CFM) and National Board of Forestry (NBF)—for better management of the country's forests. **So, statement 3 is correct.** 

#### ADDITIONAL INFORMATION:

#### **Key features of the Draft National Forest Policy**

- The policy proposes to restrict schemes and projects which interfere with forests that cover steep slopes, catchments of rivers, lakes, and reservoirs, geologically unstable terrain and such other ecologically sensitive areas
- The draft policy suggests that the ecologically sensitive catchment areas shall be stabilized with suitable soil and water conservation measures, and also by planting suitable trees and grass-like bamboo
- It also suggests setting up of two national-level bodies—National Community Forest Management Mission(CFM) and National Board of Forestry (NBF)—for better management of the country's forests.
- The draft mentions that NBF needs to be headed by the central minister in charge of forests.
- The draft policy calls for state boards of forestry headed by state ministers in charge of forests to be established for ensuring inter-sectoral convergence, simplification of procedures, conflict resolution, among other things.
- Public-Private Participation: The Draft policy stated that Public-private participation models will be developed for undertaking afforestation and reforestation activities in degraded forest areas and forest areas available with forest development corporations and outside forests
- Harmonization of policies and Laws: The new draft also says efforts will be made to achieve harmonization between policies and laws like the Forest Rights Act (FRA) 2006
- As far as community forest resources management under Forest Rights Act is concerned, the new policy will address the same under participatory forest management and the same will be addressed through the proposed community forest management mission the draft said
- It also suggested for the strengthening of the participatory forest management approach for which a National Community Forest Management (CFM) Mission will be launched.
- On the issue of finances required for management of forests, the draft stated that the compensatory afforestation fund which is being transferred to the states would be a major source of funds for taking up afforestation and rehabilitation works in degraded forest areas as well as for bringing new areas under forest and tree cover.
- The objective of the proposed policy is to safeguard the ecological and livelihood security of people, of present and future generations, based on sustainable management of the forests for the flow of ecosystem services.
- The Policy continues with the target of having 33% of India's geographical area under forest and tree cover and in the hills and mountainous regions, the aim will be to maintain two-thirds of the area under forest and tree cover.



- The policy also calls for "promotion of trees outside forests and urban greens", while stating that it will be taken up in "mission mode".
- With respect to forest fires, it states that adequate measures would be taken to safeguard ecosystems from forest fires, map the vulnerable areas and develop and strengthen early warning systems and methods to control fire, based on remote sensing technology and community participation.
- It emphasized on integrating climate change concerns into forest management while noting that forests acts as a natural sink of carbon dioxide thereby assisting in climate change mitigation.
- The policy also stressed that wildlife-rich areas and corridors outside protected areas would be identified and maintained for ensuring ecological and genetic continuity.
- Human-Wildlife Conflict: To tackle rising human-wildlife conflict, the draft outlined short-term and long-term actions. It mentions that quick response, dedicated teams of well equipped and trained personnel, mobility, strong interface with health and veterinary services, rescue centres, objective and speedy assessment of damage and quick payment of relief to the victims would be at the core of the short-term action. Monitoring and management of the population of wildlife would be adopted on a long-term basis within and outside forests for maintaining the balance.
- 62. According to the "Article 359" of the Indian Constitution, during a National Emergency,
  - 1. all the fundamental rights, except articles 20 and 21, as notified by the President are suspended.
  - 2. any law abridging fundamental rights, ceases to have effect after a period of six months from the date when the emergency ceases to operate.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# **EXPLANATION:**

According to Article 359 of the Constitution, all the fundamental rights, except articles 20 and 21, as notified by the President are suspended. **So, statement 1 is correct.** 

Any law abridging fundamental rights, ceases to have effect after a period of six months from the date when the emergency ceases to operate. **So, statement 2 is correct.** 

#### **ADDITIONAL INFORMATION:**

• Article 359 authorises the president to suspend the right to move any court for the enforcement of Fundamental Rights during a National Emergency.



- This means that under Article 359, the Fundamental Rights as such are not suspended, but only their enforcement.
- The said rights are theoretically alive but the right to seek remedy is suspended. The suspension of enforcement relates to only those Fundamental Rights that are specified in the Presidential Order.
- Further, the suspension could be for the period during the operation of emergency or for a shorter period as mentioned in the order, and the suspension order mayextend to the whole or any part of the country.
- It should be laid before each House of Parliament for approval.
- While a Presidential Order is in force, the State can make any law or can take any executive action abridging or taking away the specified Fundamental Rights.
- Any such law or executive action cannot be challenged on the ground that they are inconsistent with the specified Fundamental Rights.
- When the Order ceases to operate, any law so made, to the extent of inconsistency with the specified Fundamental Rights, ceases to have effect.
- But no remedy lies for anything done during the operation of the order even after the order ceases to operate.
- This means that the legislative and executive actions taken during the operation of the Order cannot be challenged even after the Order expires.

#### **SOURCE:**

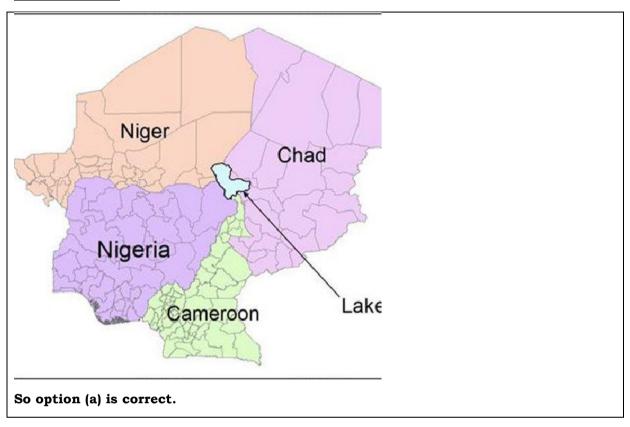
Indian polity by M Laxmikanth

# 63. Lake Chad does not share its border with which one of the following countries?

- (a) Central African Republic
- (b) Nigeria
- (c) Cameroon
- (d) Niger



#### **EXPLANATION:-**



- 64. Consider the following statements about the "Border Adjustment Tax":
  - 1. It is a duty to be imposed on imported goods in addition to the customs levy.
  - 2. The World Trade Organization rules prohibit the imposition of Border Adjustment Tax in all circumstances.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# **EXPLANATION:**-

 BAT is a duty that is proposed to be imposed on imported goods in addition to the customs levy that gets charged at the port of entry.

# So statement 1 is correct.

• The World Trade Organization (WTO) rules allow for the adjustment of certain types of internal taxes at the border under certain conditions. The main conditions are:

The tax must be applied equally to imports and "like" domestic products.

The tax must be "borne" by a product and not be "direct".

A permitted border tax adjustment must not subsidize exports.

#### So statement 2 is not correct.



#### ADDITIONAL INFORMATION:

- BAT is a duty that is proposed to be imposed on imported goods in addition to the customs levy that gets charged at the port of entry.
- BAT is a fiscal measure that imposes a charge on goods or services in accordance with the destination principle of taxation.
- Under this principle, a government taxes products based on the location of their sale to the final consumer rather than on the location of their production or origin.
- Thus, to adjust a tax "at the border," a country:
- taxes imported products and domestically produced products sold on its market on the same basis and at the same rate; and
- exempts from this tax products exported for sale to foreign consumers.
- Generally, BAT seeks to promote "equal conditions of competition" for foreign and domestic companies supplying products or services within a taxing jurisdiction.
- The World Trade Organization (WTO) rules allow for the adjustment of certain types of internal taxes at the border under certain conditions. The main conditions are:
- The tax must be applied equally to imports and "like" domestic products.
- The tax must be "borne" by a product and not be "direct".
- A permitted border tax adjustment must not subsidize exports.

# **SOURCE:**-

https://www.investopedia.com/terms/b/border-adjustment-tax.asp

- 65. With reference to cultural history of India, consider the following statements about "Purandara Dasa":
  - 1. He was one of the chief founding-proponents of South Indian classical music (Carnatic music).
  - 2. He was actively supported by the prominent Rashtrakuta king Krishna I.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### **EXPLANATION:**

Purandara Dasa was a composer, singer and one of the chief founding-proponents of South Indian classical music (Carnatic music). **So, statement 1 is correct.** 

He was actively supported by the king Krishnadevaraya of Vijayanagara kingdom. **So, statement 2 is not correct.** 



#### ADDITIONAL INFORMATION:

- Purandara Dasa belonged to the Vaishnava tradition during the Vijayanagar rule.
- Prior to the adoption of Vaishnava tradition, he was a rich merchant and was called Srinivasa Nayaka.
- The proponents of the theory that Puranadara Dasa was born in Malnad, refer to his older name and point out that Nayaka title was attributed to locally influential people, including wealthy merchants in Malnad during the Vijayanagar rule.
- He was a great devotee of Lord Krishna, a poet and a musician. He is considered the father of Carnatic Music.
- He formalized the music system which was a blend of various traditions of South India and the musical science as explained in the Vedas.
- He identified 84 ragas and devised a system of teaching Carnatic music in graded lessons.
- He composed songs in Kannada and Sanskrit with the pen name Purandara Vithala.
- In his compositions, he expressed his love for Sri Krishna describing various aspects of Krishna's life.

#### SOURCE:

https://www.thehindu.com/news/national/karnataka/purandara-dasas-birthplace-archaeology-dept-to-start-research-in-village-in-shivamogga-dist/article31673889.ece

### 66. Consider the following statements about the "Crypto currency":

- 1. It is a non-volatile digital currency that uses encryption techniques.
- 2. Transaction details are stored with the help of a highly secured closed ledger.
- 3. These currencies can be stored either with online or with offline wallets.
- 4. Even though it follows decentralization, some sorts of cyber attacks were seen.

#### Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

#### **EXPLANATION:**

Cryptocurrency is a volatile digital currency that uses encryption techniques because it does not have any support from the central bank of any sovereign country. **So, statement 1 is not correct.** 

Incorporation of blockchain technology creates electronic ledgers, where every transaction is recorded and is open to verification by many persons while maintaining confidentiality. **So, statement 2 is not correct.** 

Cryptocurrencies can be stored either with online or with offline wallets. A cryptocurrency wallet is a software program that stores private and public keys and interacts with



various blockchain to enable users to send and receive digital currency and monitor their balance. Cryptocurrency Hardware wallet differs from software wallets in that they store a user's private keys on a hardware device like a USB. Although hardware wallets make transactions online, they are stored offline which delivers increased security. **So, statement 3 is correct.** 

Hacking and phishing attacks are among the biggest security threats to cryptocurrencies when using it online. Eventhough cryptocurrencies follows decentralization some sort of cyber attacks were seen. **So. statement 4 is correct.** 

#### **ADDITIONAL INFORMATION:**

- A crypto currency is a digital asset designed to work as a medium of exchange that uses strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets.
- A crypto currency is a digital or virtual currency that uses cryptography for security.
- A crypto currency is difficult to counterfeit because of this security feature.
- Many crypto currencies are decentralized systems based on block chain technology, a distributed ledger enforced by a disparate network of computers.
- The first block chain-based crypto currency was Bit coin, which still remains the most popular and most valuable.

# 67. Consider the following statements about the office of the Speaker of Lok Sabha:

- 1. She/he holds the office during the pleasure of the President of India.
- 2. She/he need not be a member of the House at the time of his/her election but has to become a member of the House within six months from the date of his/her election.
- 3. If he/she intends to resign, the letter of his/her resignation has to be addressed to the Deputy Speaker of the House.

#### Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1, 2 and 3
- (d) None of the above

#### **EXPLANATION:-**

Speaker can be removed by the Lok Sabha by a resolution passed by an effective majority (>50% of total strength excluding vacancies) of the house as per Articles 94 and 96. The Speaker is also removed on being disqualified for being Lok Sabha member under sections 7 and 8 of Representation of the People Act, 1951. **So statement 1 is not correct.** 



Speaker is selected from among the member of the house. So statement 2 is not correct.

If he/she intends to resign, the letter of his/her resignation has to be addressed to the Deputy Speaker.**So option (b) is correct.** 

#### ADDITIONAL INFORMATION:

#### Speaker of the Lok Sabha

- The Lok Sabha, which is the highest legislative body in the country, chooses its Speaker who presides over the day to day functioning of the House.
- Electing the Speaker of the House is one of the first acts of newly constituted House.
- The office of the Speaker is a Constitutional Office. The Speaker is guided by the constitutional provisions and the Rules of Procedure and Conduct of Business in Lok Sabha.
- The Speaker is placed very high in the Warrant of Precedence in the country i.e. at rank 6.
- Adequate Powers are vested in the office of the Speaker to help her/him in the smooth conduct of parliamentary proceedings.
- The constitution provides that the Speaker's salary and allowances are not to be voted by the Parliament and are to be charged on the Consolidated Fund of India.
- In the Lok Sabha chamber, the Speaker's chair is distinctively placed to enable a commanding view of the entire House.
- The Speaker is assisted by the Secretary-General of the Lok Sabha and senior officers of the Secretariat on parliamentary activities, practice and procedure.
- In the absence of the Speaker, the Deputy Speaker discharges the functions. A member from the Panel of Chairmen presides over the House in the absence of both the Speaker and the Deputy Speaker

#### **SOURCE:**-

Indian Polity - Laxmikanth

# 68. The Kaleshwaram Lift Irrigation Project, sometimes seen in the news recently, is a multipurpose irrigation project on the

- (a) Krishna river
- (b) Godavari river
- (c) Mahadayi river
- (d) Narmada river

#### **EXPLANATION:-**

The Kaleshwaram Lift Irrigation Scheme of Telangana is a multi-purpose irrigation project on the Godavari River in Kaleshwaram, Bhupalpally, Telangana.

The project starts at the confluence point of Pranahita River and Godavari River.

Originally called Pranahita-Chevella project in erstwhile Andhra Pradesh, it was redesigned,



extended and renamed as Kaleshwaram project in Telangana in 2014.

So option (b) is correct.

#### ADDITIONAL INFORMATION:

#### Godavari River

- The Godavari is India's second longest river after the Ganga.
- SOURCE: Trimbakeshwar, Maharashtra.
- Areas drained: It flows east for 1,465 kilometres, draining the states of Maharashtra, Telangana, Andhra Pradesh, Chhattisgarh, Odisha, and Karnataka, ultimately emptying into the Bay of Bengal through its extensive network of tributaries.
- Tributaries: The major tributaries of the river are classified as the left bank tributaries which include the Purna, Pranhita, Indravati and Sabari river and the right bank tributaries are Pravara, Manjira, Manair.
- Kumbh Mela is held at Nasik (on the Godavari), Prayagraj (at the confluence of Ganga, Yamuna, and the mythical Saraswati), Haridwar (on the Ganges), Ujjain (on the Shipra) every four years by rotation.
- Sadarmatt Anicut across river Godavari is one among the two irrigation projects in the International Commission on Irrigation and Drainage (ICID) Register of Heritage Irrigation Structures.

#### Pranahita River

- Pranahita river is the largest tributary of the Godavari river covering about 34% of its drainage basin.
- It is a confluence of various other smaller tributaries like Wardha, Penganga and Wainganga Rivers.

# **SOURCE:**-

https://www.indiatoday.in/education-today/gk-current-affairs/story/kaleshwaram-lift-irrigation-project-facts-worlds-largest-multipurpose-lift-irrigation-project-1553474-2019-06-21

# 69. The introduction and promotion of High Yield Variety Seeds (HYVS) in to the Indian Agricultural production is primarily seen in the context of

- (a) Labour augmenting development process
- (b) Capital augmenting development process
- (c) Technology augmenting development process
- (d) Environmental augmenting development process

# **EXPLANATION:**

Agriculture in India was faced with several problems. The productivity of grains was very low. And India was still monsoon dependent because of lack of irrigation and other infrastructure. There was also an absence of modern technology. The introduction of technology and machinery like tractors, harvesters, drills etc. This helped immensely to



promote commercial farming in the country.

Hence, The introduction and promotion of High Yield Variety Seeds (HYVS) in to the Indian Agricultural production is primarily seen in the context of technology augmenting development process. **So, option (c) is correct.** 

#### 70. In the Indian context, which one of the following statements is correct?

- (a) The President can appoint a Commission to report on the administration of the Scheduled Areas and the welfare of the Scheduled Tribes in the states
- (b) The President has to compulsorily appoint a Commission to report on the administration of the Scheduled Areas and the welfare of the Scheduled Tribes in the state after 15 years from the commencement of the Constitution of India
- (c) The First Scheduled Area and Scheduled Tribe Commission appointed by the President were headed by Dileep Singh Bhuria
- (d) A Scheduled Area and Scheduled Tribe Commission has been appointed by the President of India after every ten years since the commencement of the Constitution of India

#### **EXPLANATION:**

Article 339 in The Constitution Of India 1949

- 339. Control of the Union over the administration of Scheduled Areas and the welfare of Scheduled Tribes
- (1) The President may at any time and shall, at the expiration of ten years from the commencement of this Constitution by order appoint a Commission to report on the administration of the Scheduled Areas and the welfare of this Scheduled Tribes in the States The order may define the composition, powers and procedure of the Commission and may contain such incidental or ancillary provisions as the President may consider necessary or desirable. **So option (a) is correct.**
- (2) The executive power of the Union shall extend to the giving of directions to a State as to the drawing up and execution of schemes specified in the direction to be essential for the welfare of the Scheduled Tribes in the State

#### 71. With reference to the Volcanism, consider the following statements:

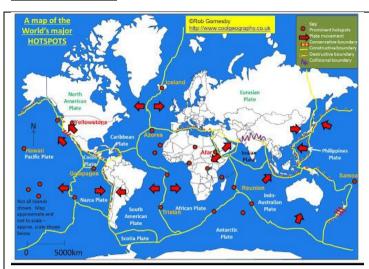
- 1. Hotspots are found in all continents of the World.
- 2. Basic lava has a higher flow rate compared to the acidic lava.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2



#### **EXPLANATION:-**



The continent of Antarctica and Australia does not have a hotspot.

#### So statement 1 is not correct.

Lava is molten rock (magma) that has been expelled from the interior of some planets (including Earth) and some of their moons. Basic lava has a higher flow rate compared to acidic lava. An example of a low viscosity (fast flowing) lava is basaltic lava. This flows quickly out of a volcano at a temperature of about 950 degrees Celsius. This flows out for great distances creating shield volcanoes or flood basalt fields. An example of high viscosity lava is felsic lava, like rhyolite or dacite.

So statement 2 is correct.

# **ADDITIONAL INFORMATION:**

A volcanic "hotspot" is an area in the mantle from which heat rises as a thermal plume from deep in the Earth. High heat and lower pressure at the base of the lithosphere (tectonic plate) facilitates melting of the rock. This melt, called magma, rises through cracks and erupts to form volcanoes.

#### **SOURCE:-**

**NCERT** 

#### 72. "Project CHEETAH", sometimes seen in the news, is related to the

# (a) upgradation of armed forces drones for conducting offensive operations

- (b) reintroduction of Cheetah species into the Indian forests
- (c) indigenous project of India to develop a Teraflop supercomputer
- (d) India's first submarine optical fiber cable project for Andaman and Nicobar



#### **EXPLANATION:**

The Indian Armed Forces have decided to revive "Project Cheetah" amidst tensions with China. The project was pending for a long time and the tri-services have now decided to revive the project under Rs 3,500 crores. Under the project, around 90 Heron drones of the services are to be upgraded with laser-guided bombs, air launched anti-tank guided missiles and air to ground anti-tank guided missiles. The project is being launched to upgrade the drones that are carrying out offensive operations against the enemies especially in the borders. They will also be used to counter terrorism in the future. **So, option (a) is correct.** 

#### ADDITIONAL INFORMATION:

- The proposal of reviving "Project Cheetah" has been sent to a newly formed highlevel defence ministry committee under Ajay Kumar. Ajay Kumar is the defence secretary. He is in charge of all capital procurements of Indian Army, Navy and Air Force.
- Under the project, around 90 Heron drones of the services are to be upgraded with laser-guided bombs, air launched anti-tank guided missiles and air to ground anti-tank guided missiles. The project was pending over a long period of time.
- The Indian fleet of drones mainly includes Israeli equipment including Herons. They were deployed in both Indian Air Force and Army. They are currently deployed in Ladakh and China borders. The project is being launched to upgrade the drones that are carrying out offensive operations against the enemies especially in the borders. They will also be used to counter terrorism in the future.
- Currently, drones are used to verify disengagement by Chinese as well as to learn about their troop build up.
- 73. Which of the following reports is/are published by the "United Nations Conference on Trade and Development" (UNCTAD)?
  - 1. World Investment Report
  - 2. Information and Economy Report
  - 3. World Development Report

Select the correct answer using the code given below.

- (a) 2 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

#### **EXPLANATION:-**

World Investment Report- United Nations Conference on Trade and Development (UNCTAD)

Information and Economy Report- United Nations Conference on Trade and Development (UNCTAD)

World development report - world bank



#### ADDITIONAL INFORMATION:

- The report has warned of a learning crisis in global education particularly in low and middle-income countries like India.
- It seemed to have made a rights based approach to education as evident in subsections titled Education as freedom, Education improves individual freedoms, Education benefits all of society.
- It has stressed that schooling without learning was a wasted development opportunity and a great injustice to children worldwide.
- India ranks second after Malawi in a list of 12 countries wherein a grade two student could not read a single word of a short text.
- India also tops the list of seven countries in which a grade two student could not perform two-digit subtraction.
- In rural India in 2016, only half of grade 5 students could fluently read text at the level of the grade 2 curriculum.

#### **SOURCE:-**

https://www.iasparliament.com/current-affairs/world-development-report-education

# 74. According to the recently released World Banks's new Purchasing Power Parities (PPPs) for the reference year 2017, which one of the following country is the largest economy in the world?

- (a) India
- (b) China
- (c) United States of America
- (d) Japan

#### **EXPLANATION:-**

_						
	1	China	25,278.770	27,308.860	19.3	2,030.090
	2	United States	20,580.250	21,439.450	15.1	859.200
	3	India	10,485.230	11,325.670	7.98	840.440
	4	Japan	5,596.960	5,747.500	4.05	150.540
	5	Germany	4,342.910	4,444.370	3.13	101.460
	6	Russia	4,227.430	4,349.420	3.07	121.990
	7	Indonesia	3,495.940	3,737.480	2.63	241.540
	8	Brazil	3,366.380	3,456.360	2.44	89.980
	9	United Kingdom	3,038.830	3,131.200	2.21	92.370



10 France	2,970.430	3,061.140 2.10	90.710
So option (b) is correct.			

# ADDITIONAL INFORMATION:

# International Comparison Program

- It is the largest worldwide data-collection initiative, under the guidance of the United Nations Statistical Commission (UNSC).
- The main objectives of the ICP are to:
- Produce PPPs and comparable Price Level Indices (PLIs) for participating economies.
- Convert volume and per capita measures of Gross Domestic Product (GDP) and its expenditure components into a common currency using PPPs.

## Purchasing Power Parities

- It is the rate at which the currency of one country would have to be converted into that of another country to buy the same amount of goods and services in each country.
- The PPP exchange rates are constructed to ensure that the same quantity of goods and services are priced equivalently across countries.
- PPP exchange rates are used to convert the national poverty lines from some of the poorest countries in the world to determine the Global Poverty Line.
- For poverty estimation in India, the Tendulkar committee computed poverty lines for 2004-05 at a level that was equivalent, in PPP terms, to Rs 33 per day.
- Poverty Line: The conventional approach to measuring poverty is to specify a minimum expenditure (or income) required to purchase a basket of goods and services necessary to satisfy basic human needs and this minimum expenditure is called the poverty line.

# **SOURCE:-**

 $https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj2pu\\yb5ZLrAhVfxTgGHcPOD2oQFjAAegQIBBAB&url=https%3A%2F%2Fwww.worldbank.org%2Fen%2Fprograms%2Ficp&usg=AOvVaw2ZE9RK2yxxuyiV-LzLkPEF$ 

- 75. Consider the following statements about the Intergovernmental Panel on Climate Change (IPCC) report on 'Land Use and Climate Change' which was sometimes seen in the news recently:
  - 1. It states that the increased atmospheric carbon dioxide levels can increase the nutritional quality of crops.
  - 2. It projected that the future climate change could decrease the livestock production.



# Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### **EXPLANATION:**

The report does not states that increased atmospheric carbon dioxide levels can increase the nutritional quality of crops. **So, statement 1 is not correct.** 

It projected that the future climate change could decrease the livestock production. **So, statement 2 is correct.** 

## ADDITIONAL INFORMATION:

Some key points from the report

- The global food production system could account for 16 to 27 per cent of GHG emissions up to 37 per cent, if factors such as transportation and food processing are included.
- The global rise in temperature has been much faster over land than over the entire planet.
- This additional warming over land could have led to increased frequency, intensity and duration of heat-related events such as heat waves.
- Measures such as reduction in food wastage, sustainable agriculture practices and shifting of dietary preferences.to include more plant-based food could reduce emissions without jeopardising food security.

## **SOURCE:**

https://indianexpress.com/article/world/world-food-supply-risk-climate-change-unreport-ipcc-5890160/

# 76. For which one of the following Parliamentary Committees, the Presiding Officer of the House will not be its head?

- (a) Business Advisory Committee
- (b) Committee on Private Member's Bills
- (c) Rules Committee
- (d) General Purpose Committee

## **EXPLANATION:**

Committee on Private Members' Bills and Resolutionsclassifies bills and allocates time for the discussion on billsand resolutions introduced by private members (other than ministers). This is a special committee of the Lok Sabha and consists of 15 members including the Deputy Speaker as its chairman. The Rajya Sabha does not have any suchcommittee. The same function in the Rajya Sabha is performed by the Business Advisory Committee of that House. **So, option (b) is correct.** 



# ADDITIONAL INFORMATION:

## **Business Advisory Committee**

• This committee regulates the programme and time table of the House. It allocates time for the transaction of legislative and other business brought before the House by the government. The Lok Sabha committee consists of 15 members including the Speaker as its chairman. In the Rajya Sabha, it has 11 members including the Chairman as its ex-officio chairman.

## **Rules Committee**

• This committee considers the matters of procedure and conduct of business in the House and recommends necessary amendments or additions to the rules of the House. The Lok Sabha committee consists of 15 members including the Speaker as its ex-officio chairman. In the Rajya Sabha, it consists of 16members including the Chairman as its ex-officio chairman.

# **General Purposes Committee**

• This committee considers and advises on matters concerning affairs of the House, which do not fall within the jurisdiction of any other parliamentary committee. In each House, this committee consists of the presiding officer (Speaker / Chairman) as its ex-officio chairman, Deputy Speaker (Deputy Chairman in the case of Rajya Sabha), members of panel of chairpersons (panel of vice-chairpersons in the case of Rajya Sabha), chairpersons of all the departmental standing committees of the House, leaders of recognised parties and groups in the House and such other members as nominated by the presiding officer.

## SOURCE:

Indian Polity by M Lakmikanth

- 77. Consider the following statements about the Department of Biotechnology's recent initiative "Project MANAV":
  - 1. It is a human cell atlas project which involves public and private participation.
  - 2. It creates a unified database about the cellular and molecular activities of the various body cells.

## Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# **EXPLANATION:**

A human atlas initiative named Manav has been launched by the Department of Biotechnology (DBT) and Persistent Systems, a biotechnology company. In this publicprivate venture, DBT and Persistent Systems will invest Rs 13 crore and Rs 7 crore



respectively. So, statement 1 is correct.

The aim is to create a unified database of molecular network of all the tissues in the human body and to derive a holistic picture of working of the human body. **So, statement 2 is correct.** 

# **ADDITIONAL INFORMATION:**

Manay: human atlas initiative

- Manav is an initiative by the Department of Biotechnology to launch a human atlas designed to improve knowledge of human physiology.
- It is a project funded by DBT and Persistent Systems a biotechnology company.
- This project aims to create a database network of all tissues within the human body from the resources available.
- It involves scientific skill development, science outreach and others.
- It aims at getting better insights about human physiology through mapping, develop disease models, and analyse drugs and other things.
- Students from different fields like those linked to sciences will participate in this.
- This will be an important platform as it will explore the avenue where there less exploration and will impact positively on the academics of the students, researches for study and drug development.
- It will enable understanding human physiology in two conditions, namely, normal and disease conditions.
- The project will be executed by the Indian Institute of Science Education and Research (IISER) an autonomous organization under MHRD and the National Center for Cell Sciences (NCCS) autonomous organization under DBT, Ministry of S&T.

# SOURCE:

http://dbtindia.gov.in/slider/manav-human-atlas-initiative

# 78. Consider the following statements about the "marine plastic pollution":

- 1. Converging surface currents in oceanic gyres are responsible for the global distribution of plastics on the ocean surface.
- 2. Sea surface plastic accumulations account for about 90 percent of the estimated global marine plastic budget.

## Which of the statements given above is/are correct?

- (a) **1 only**
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2



#### **EXPLANATION:**

Converging surface currents in oceanic gyres are responsible for the global distribution of plastics on the ocean surface. **So, statement 1 is correct.** 

Sea surface accumulations only account for ~1% of the estimated global marine plastic budget. Most of the remaining 99% of plastic ends up in the deep sea. **So, statement 2** is **not correct.** 

## ADDITIONAL INFORMATION:

## Marine plastics

- Over 300 million tons of plastic are produced every year for use in a wide variety of applications.
- At least 8 million tons of plastic end up in our oceans every year, and make up 80% of all marine debris from surface waters to deep-sea sediments.
- Marine species ingest or are entangled by plastic debris, which causes severe injuries and deaths.
- Plastic pollution threatens food safety and quality, human health, coastal tourism, and contributes to climate change.
- There is an urgent need to explore the use of existing legally binding international agreements to address marine plastic pollution.
- Recycling and reuse of plastic products, and support for research and innovation to develop new products to replace single-use plastics are also necessary to prevent and reduce plastic pollution.

# 79. Atlantic Charter, signed in 1941, was

- (a) the formal inclusion of India into World War II
- (b) the charter signed by Communists around the world to show their solidarity towards USSR
- (c) signed by Allied countries accepts the right of self-determination for all the people around the World
- (d) the formal beginning of the North Atlantic Treaty Organization

## **EXPLANATION:**

The Atlantic Charter was a statement issued on 14 August 1941 that set out American and British goals for the world after the end of World War II. The joint statement, later dubbed the Atlantic Charter, outlined the aims of United States and the United Kingdom for the postwar world as follows: no territorial aggrandizement, no territorial changes made against the wishes of the people (self-determination), **restoration of self-government to those deprived of it,** reduction of trade restrictions, global cooperation to secure better economic and social conditions for all, freedom from fear and want, freedom of the seas, and abandonment of the use of force, and disarmament of aggressor nations. So, option (c) is correct.



- 80. Consider the following statements about the "Global Partnership on Artificial Intelligence" (GPAI):
  - 1. The secretariat of the GPAI is hosted by the International Telecommunication Union of the United Nations.
  - 2. India is a founding member of the GPAI. Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

# **EXPLANATION:**-

GPAI will be supported by a Secretariat, to be hosted by Organization for Economic Cooperation and Development (OECD) in Paris, as well as by two Centers of Expertise- one each in Montreal (Canada) and Paris (France). So statement 1 is not correct.

Founding Members: Australia, Canada, the European Union, France, Germany, India, Italy, Japan, the Republic of Korea, Mexico, New Zealand, Singapore, Slovenia, the United Kingdom and the United States. **So statement 2 is correct.** 

# **ADDITIONAL INFORMATION:**

• Objective: GPAI is an international and multi-stakeholder initiative to guide the responsible development and use of AI, based on human rights, inclusion, diversity, innovation, and economic growth.

## Functions:

- Bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities.
- An example would be looking at how AI could help societies respond to and recover from the Covid-19 crisis.
- Bring together leading experts from industry, civil society, governments, and academia to conduct research and pilot projects on AI.
- It will initially comprise four working groups focused on responsible AI, data governance, the future of work, and innovation and commercialisation.
- Founding Members: Australia, Canada, the European Union, France, Germany, India, Italy, Japan, the Republic of Korea, Mexico, New Zealand, Singapore, Slovenia, the United Kingdom and the United States.
- Organisation:
- GPAI will be supported by a Secretariat, to be hosted by Organization for Economic Cooperation and Development (OECD) in Paris, as well as by two Centers of Expertise- one each in Montreal (Canada) and Paris (France).



- GPAI will be able to take advantage of the OECD's expertise on AI policy and its leadership in setting out the first international standard for trustworthy AI – the OECD Principles on Artificial Intelligence.
- The OECD will also be a Permanent Observer to the GPAI's governing bodies.
- Background: Born out of the Canadian and French G7 Presidencies in 2018 and 2019, GPAI was officially proposed by France and Canada at the Biarritz Summit in August 2019.

# SOURCE:-

https://www.gouvernement.fr/en/launch-of-the-global-partnership-on-artificial-intelligence#:~:text=The%20Global%20Partnership%20on%20AI,the%20United%20States%20of%20America.

- 81. Consider the following statements about the "Sahakar Mitra scheme" which sometimes seen in the news recently:
  - 1. It is an initiative by the National Cooperative Development Corporation.
  - 2. It aims to provide a learning experience to young professionals about the cooperative sector and bring out innovative solutions.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# **EXPLANATION:**-

The Sahakar Mitra scheme will help cooperative institutions access new and innovative ideas of young professionals while the interns will gain experience of working in the field to be self-reliant. It is an initiative by the National Cooperative Development Corporation. **So statement 1 is correct.** 

It will provide the young professionals an opportunity of practical exposure and learning from the working of NCDC and cooperatives as a paid intern. **So statement 2 is correct.** 

# **ADDITIONAL INFORMATION:**

## Objectives:

- The Sahakar Mitra scheme will help cooperative institutions access new and innovative ideas of young professionals while the interns will gain experience of working in the field to be self-reliant.
- It will provide the young professionals an opportunity of practical exposure and learning from the working of NCDC and cooperatives as a paid intern.



- It would also provide an opportunity to professionals from academic institutions to develop leadership and entrepreneurial roles through cooperatives as Farmers Producers Organizations (FPO).
- In line with the AtmaNirbhar Bharat (Self Reliant India), it focuses on the importance of Vocal for Local.

## Eligibility:

- Professional graduates in disciplines such as Agriculture and allied areas, IT, etc.
- Professionals who are pursuing or have completed their MBA degrees in Agribusiness, Cooperation, Finance, International Trade, Forestry, Rural Development, Project Management, etc.

## Financial Support:

NCDC has designated funds for the paid internship program under which each intern will get financial support over a 4 months internship period.

# 82. The "Money Laundering and the Illegal Wildlife Trade" report, sometimes seen in the news recently, is released by

- (a) Convention on International Trade in Endangered Species
- (b) Wildlife Crime Control Bureau
- (c) Financial Action Task Force
- (d) International Union for Conservation of Nature

### **EXPLANATION:**

the Financial Action Task Force (FATF) has released the first global report on the Illegal Wildlife Trade (IWT) namely, "Money Laundering and the Illegal Wildlife Trade". The report comes amid increasing international concern that the crime could lead to more zoonotic diseases in the future. The report has also described IWT as a "global threat", which also has links with other organised crimes like modern slavery, drug trafficking and arms trade. **So, option (c) is correct.** 

## **ADDITIONAL INFORMATION:**

Highlights of the Report

- FATF has described illegal wildlife trade as a "global threat", which also has links with other organised crimes like modern slavery, drug trafficking and arms trade.
- The illegal trade is estimated to generate revenues of up to \$23 billion a year.
- The report flagged a lack of focus on the financial aspects of wildlife crime.

Economy of illicit wildlife trade

- It said that criminals are frequently misusing the legitimate wildlife trade, as well as other import-export type businesses.
- The FATF found that jurisdictions often did not have the required knowledge, legislative basis and resources to assess and combat the threat posed by the funds generated through the illegal trade.



 The study has highlighted the growing role of online marketplaces and mobile and social media-based payments to facilitate the movement of proceeds warranting a coordinated response from government bodies, the private sector and the civil society.

Money laundering is prominent

- According to the report, criminal syndicates are misusing the formal financial sector to launder the proceeds.
- Funds are laundered through cash deposits, under the guise of loans or payments, e-banking platforms, licensed money value transfer systems, and third-party wire transfers via banks.
- Accounts of innocent victims are also used and high-value payments avoided evading detection.

Misuse of front companies

- Another common trend is the misuse of front companies with links to the legal wildlife trade, said the report.
- Front companies, often linked to import-export industries, and shell firms are used for the movement of goods and trans-border money transfers.

## SOURCE:

https://www.thehindu.com/sci-tech/energy-and-environment/illegal-wildlife-trade-a-global-threat-fatf-report/article31918041.ece

# 83. Why the eye of a tropical cyclone does not experience rainfall?

- (a) It experiences maximum velocity in the centre which disperses clouds
- (b) Frequent lightning easily dissipates cloud activity
- (c) Adiabatic compression in the centre hinders cloud formation
- (d) The cyclonic walls enter stratosphere where clouds are absent

# **EXPLANATION:**-

Air usually contains water vapour - its humidity. Water vapour means that the water molecules are in a gaseous state. As the parcel of air cools as it gains altitude it eventually reaches a temperature known as the dew point at which it returns to liquid state. Those tiny droplets of water that form are so small that they remain suspended in the air and form clouds. Due to Adiabatic compression, The pressure of the air is more than the volume as the temperature increases during compression . due to increase in temperature dew point is not reached so tiny water droplets are not formed. So cloud is not formed. So option (c) is correct.



# ADDITIONAL INFORMATION:

Adiabatic compression of the air is defined as the compression in which no heat is added or subtracted from the air and the internal energy of the air is increased which is equal to the external work done on the air. The pressure of the air is more than the volume as the temperature increases during compression

- 84. Consider the following statements about the "Union Public Service Commission" (UPSC) of India:
  - 1. It is mandatory for the Central government to consult UPSC on matters of personnel management.
  - 2. The recommendation given by the UPSC is binding on the Central government. Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

# **EXPLANATION:**

It is not mandatory for the central government to consult UPSC on matters of personnel management. **So, statement 1 is not correct.** 

The recommendation given by UPSC is not binding on the Central Government. So, statement 2 is not correct.

# **ADDITIONAL INFORMATION:**

- The Supreme Court has held that if the government fails to consult UPSCin the matters (mentioned above), the aggrieved public servant has no remedy in a court. In other words, the court held that any irregularity in consultation with the UPSC or acting without consultation does not invalidate the decision of the government. Thus, the provision is directory and not mandatory.
- Similarly, the court held that a selection by the UPSC does not confer any right to the post upon the candidate. However, the government is to act fairly and without arbitrariness or malafides.
- The additional functions relating to the services of the Union can be conferred on UPSC by the Parliament. It can also place the personnel system of any authority, corporate body or public institution within the jurisdiction of the UPSC. Hence the jurisdiction of UPSC can be extended by an act madeby the Parliament.
- The UPSC presents, annually, to the president a report on its performance. The President places this report before both the Houses of Parliament, along with a memorandum explaining the cases where the advice of the Commission was not accepted and the reasons for such non-acceptance.



All such cases of non-acceptance must be approved by the Appointments Committee
of the Union cabinet. An individual ministry or department has nopower to reject the
advice of the UPSC.

## SOURCE:

Indian polity by M Laxmikanth

- 85. Two of the greatest painters "Nainsukh" and "Manaku" belonged to which one of the following school of paintings in India?
  - (a) Pahari school of painting
  - (b) kishangar school of painting
  - (c) Bundi school of painting
  - (d) Mewar school of painting

#### **EXPLANATION:-**

Nainsukh (literally "Joy of the Eyes"; c. 1710 – 1778) was an Indian painter. He was the younger son of the painter Pandit Seu and, like his older brother Manaku of Guler, was an important practitioner of Pahari painting, and has been called "one of the most original and brilliant of Indian painters". **So option (a) is correct.** 

## ADDITIONAL INFORMATION:

Pahari painting is an umbrella term used for a form of Indian painting, done mostly in miniature forms, originating from Himalayan hill kingdoms of North India. It is quite similar to Rajput paintings in terms of style and colours. These paintings established and developed during the period of 17th to 19th century, have been done mostly in miniature paintingforms. Here we are giving some keen details about Pahari paintings styles.

#### Styles

Pahari paintings of India can be categorized into two groups based on their geographical variety.

- Basohli and Kulu Style is influenced by Chaurpanchasika style
- Guler and Kangra Style based on calm colors and modification

## **SOURCE:-**

Nitin sinhaniya art and culture

- 86. Consider the following statements about the "Lucknow session" of the Indian National Congress (1916):
  - 1. It was presided over by Ambika Charan Majumdar.
  - 2. The Lucknow Pact was signed between the Moderates and the Extremists of the Indian National Congress.
  - 3. The joint demands of Congress and the Muslim League included that half of the members of the Viceroy's Executive Councils should be Indians.



# Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

#### **EXPLANATION:**

Ambika Charan Majumdar was the president of the Indian National Congress for the Lucknow session 1916. **So, statement 1 is correct.** 

The Lucknow Pact is an agreement between the Indian National Congress (INC) and the All India Muslim League reached at a joint session of both the parties held at Lucknow in 1916. **So, statement 2 is not correct.** 

The joint demands of Congress and the Muslim League included that half of the members of the Viceroy's Executive Councils should be Indians. **So, statement 3 is correct.** 

## ADDITIONAL INFORMATION:

Congress and Muslim League negotiated an agreement (Lucknow Pact) whose main clauses are as follows:

- There shall be self-government in India.
- Muslims should be given one-third representation in the central government.
- There should be separate electorates for all the communities until a community demanded joint electorates.
- A system of weightage to minority political representation(giving minorities more representation in the government then is proportional to their share of the population) should be adopted.
- The number of the members of Central Legislative Council should be increased to 150.
- At the provincial level, four-fifth of the members of the Legislative Councils should be elected and one-fifth should be nominated.
- The size of provincial legislatures should not be less than 125 in the major provinces and from 50 to 75 in the minor provinces.
- All members, except those nominated, should be elected directly on the basis of adult franchise.
- No bill concerning a community should be passed if the bill is opposed by three-fourth of the members of that community in the Legislative Council.
- The term of the Legislative Council should be five years.
- Members of Legislative Council should themselves elect their president.
- Half of the members of Imperial Legislative Council should be Indians.
- The salaries of the Secretary of State for Indian Affairs should be paid by the British government and not from Indian funds.
- Of the two Under Secretaries, one should be Indian.
- The Executive should be separated from the Judiciary.



# SOURCE:

A Brief History of India by Spectrum

- 87. Which of the following trends in the working of the Indian political system reflect its federal spirit?
  - 1. Regional Parties ascending to power in the states.
  - 2. Territorial disputes between Maharashtra and Karnataka over Belgaum.
  - ${\bf 3.} \ \ {\bf Creation} \ \ {\bf of} \ \ {\bf the} \ \ {\bf state} \ \ {\bf of} \ \ {\bf Jharkhand} \ \ {\bf to} \ \ {\bf fulfil} \ \ {\bf regional} \ \ {\bf aspirations}.$

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

## **EXPLANATION:-**

India follows Quasi-federalism. So, centre government can create new states for administrative convience or for development of backward region. **So, Statement 3 is correct.** 

Indian states can compete in terms of attracting investments or development. But competing for boundary or rivers is against the spirit of federalism.

So option (b) is correct.

# **ADDITIONAL INFORMATION:**

The main federal features of the Indian Constitution are as follows:

- Written Constitution:
- Supremacy of the Constitution:
- Rigid Constitution:
- Division of Powers:
- Independent Judiciary:
- Bicameral Legislature:
- Dual **Government** Polity:

## SOURCE:-

Indian Polity - Laxmikanth

- 88. Which of the following river(s) originate in the state of Maharashtra?
  - 1. Krishna
  - 2. Tungabhadra
  - 3. Mandovi



Select the correct answer using the code given below.

- (a) 1 only
- (b) 3 only
- (c) 1 and 2 only
- (d) 1 and 3 only

# **EXPLANATION:**-

Krishna river originates in mahabaleshwar Maharashtra. So statement 1 is correct.

The two rivers originate in Mudigere Taluk of Chikmagalur District of Karnataka along with the Nethravathi (west-flowing river, joining the Arabian Sea near Mangalore), the Tunga and the Bhadra rise at Gangamoola, in Varaha Parvatha in the Western Ghats. **So statement 2** is not correct.

mandovi originates from a cluster of 30 springs at Bhimgad in the Western Ghats in the Belagavi district of Karnataka. **So statement 3 is not correct.** 

#### **SOURCE:-**

**NCERT** 

- 89. Consider the following statements about the "MAAREECH" that was recently inducted into service by the Indian Navy:
  - 1. It's an indigenous anti-torpedo decoy system.
  - 2. Exclusively it gets operated with the Indian submarines.
  - 3. It attacks the incoming torpedoes by performing head to head interception.

Which of the statements given above is/are not correct?

- (a) 3 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) None of the Above

# **EXPLANATION:**

'Maareech' has been designed and developed indigenously by the Defence Research and Development Organization (DRDO) and it is capable of detecting, locating and neutralizing incoming torpedoes. **So, statement 1 is correct.** 

Maareech is capable of being fired from all frontline warships, not only in subnarines. **So, statement 2 is not correct.** 

Maareech detects and locate the incoming torpedo and applies countermeasures to protect the naval platform against attack. It first detects and then confuses and divert the



torpedo attacks on ships from under the water. By diverting the torpedoes' original course, it forces it to lose its energy thus preventing it from being effective on target. Hence, It does not attack the incoming torpedoes by performing head to head interception. **So, statement 3 is not correct.** 

# **ADDITIONAL INFORMATION:**

- Anti Submarine Warfare capability of the Indian Navy has received a major boost today with the conclusion of a contract for Advanced Torpedo Decoy System Maareech capable of being fired from all frontline warships.
- Design & Development of this anti-torpedo decoy system has been undertaken indigenously DRDO labs (NSTL and NPOL).
- Bharat Electronics Limited, a Defence PSU, would undertake the production of this decoy system.
- The prototype of this system installed onboard a nominated naval platform had successfully completed all user evaluation trials and demonstrated the features as per the Naval Staff Qualification Requirements.
- This induction not only stands testimony to the joint resolve of the Indian Navy and DRDO towards indigenous development of Defence technology, but has also given a major fillip to the Government's 'Make in India' initiative and the country's resolve to become 'Atmanirbhar' in niche technology.

## SOURCE:

 $https://pib.gov.in/PressReleasePage.aspx?PRID=1634460\#: \sim: text=Navy\%20 Inducts\%20 Ind$ 

# 90. In 1920, which one of the following changed its name to "Swarajya Sabha"?

## (a) All India Home Rule League

- (b) Hindu Mahasabha
- (c) South Indian Liberal Federation
- (d) The Servants of India Society

# **EXPLANATION:**

In the year 1920, All India Home Rule League changed its name and it was known as SwarajyaSabha later on. The SwarajyaSabha ran under the able leadership of freedom fighters like Annie Besant and BalGangadharTilak, whose participation was limited to the western states of India. **So, option (a) is correct.** 

# SOURCE:

A Brief History of India by Spectrum



- 91. Consider the following statements about the "Article 13" of the Indian Constitution:
  - 1. Temporary laws inconsistent with Fundamental Rights shall be void.
  - 2. A Constitutional Amendment Act is not a law under this article.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### **EXPLANATION:**

Article 13 declares that all laws that are inconsistent with or in derogation of any of the fundamental rights shall be void. **So, statement 1 is correct.** 

Article 13 declares that a constitutional amendment is not a law and hence cannot be challenged.

However, the Supreme Court held in the Kesavananda Bharati case2 (1973) that a Constitutional amendment can be challenged on the ground that it violates a fundamental right that forms a part of the 'basic structure' of the Constitution and hence, can be declared as void.

So, statement 2 is not correct.

## **ADDITIONAL INFORMATION:**

The term 'law' in Article 13 has been given a wide connotation so as toinclude the following:

- Permanent laws enacted by the Parliament or the state legislatures;
- Temporary laws like ordinances issued by the president or the stategovernors;
- Statutory instruments in the nature of delegated legislation (executive legislation) like order, bye-law, rule, regulation or notification; and
- Non-legislative sources of law, that is, custom or usage having the forceof law.

# SOURCE:

Indian polity by M Laxmikanth

- 92. Consider the following statements about the draft "Environmental Impact Assessment (EIA) Notification 2020":
  - 1. It shortens the time period for the public to furnish responses on the proposed project.
  - 2. It has a clause dedicated to definitions to several terms related to EIA.
  - 3. It disables the ex-post-facto clearance route which was granted by the earlier notifications.

Which of the statements given above are correct?

(a) 1 and 2 only



- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

## **EXPLANATION:**

The draft notification also shortens the time for the public to furnish responses on the project. **So, statement 1 is correct.** 

It has a clause dedicated to definitions to several terms related to EIA. So, statement 2 is correct.

The most devastating blow to the EIA regime is the creation of an ex-post-facto clearance route. Under this, the project proponent can enter an assessment procedure, with some minor fines for the violations. **So, statement 3 is not correct.** 

#### ADDITIONAL INFORMATION:

## Draft Environmental Impact Assessment (EIA) Notification 2020

- The stated reason is to streamline the EIA process and bring it in line with recent judgments.
- If put into force, the EIA Notification, 2020 will replace the EIA Notification, 2006 for all future projects.
- But the Draft EIA Notification dilutes the effectiveness of the process, and shrinks its scope.
- The most devastating blow to the EIA regime is the creation of an ex-post-facto clearance route.
- Under this, the project proponent can enter an assessment procedure, with some minor fines for the violations.
- In other words, it offers a route when an EIA clearance is not sought or granted, and the construction of the project had taken place.
- Where such ex-post-facto clearances were being granted previously, the courts cracked down on them as illegal.
- Therefore, what could not be ratified will now find itself notified.
- The legality of sidestepping the courts is questionable and will have to be tested.
- In essence, the EIA would become a business decision as to whether the law needs to be followed or the violation can be "managed".
- The argument that this route will be an "exception" is difficult, given the long history of expanding the exception into the rule.
- The draft notification also shortens the time for the public to furnish responses on the project.



- The project-affected people are frequently forest dwellers.
- For these and others who do not have access to information and technology, this will make it harder to put forth representations.
- Monitoring requirements have also been relaxed.
- The draft EIA notification halves the frequency of reporting requirements from every 6 months to once a year.
- It also extends the validity period for approvals in critical sectors such as mining.
- The scope of the EIA regime is also set to shrink.
- Industries that previously fell under the categories that required a full assessment have been downgraded.
- The construction industry will be one such beneficiary, where only the largest projects will be scrutinised fully.
- Defence and national security installations were always understandably exempt.
- But, a vague new category of projects "involving other strategic considerations" will also now be free from public consultation requirements

# SOURCE:

https://indianexpress.com/article/explained/draft-environment-impact-assessment-norms-explained-6482324/

# 93. Consider the following statements about the "Indian Gas Exchange":

- 1. It is a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market.
- 2. Both imported and domestically produced natural gas can be sold on this exchange.

Which of the statements given above is/are correct?

- (a) **1 only**
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

## **EXPLANATION:**-

The IGX is a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market for imported natural gas across three hubs —Dahej and Hazira in Gujarat, and Kakinada in Andhra Pradesh. **So statement 1 is correct.** 

Domestically produced natural gas will not be sold on the exchange. **So statement 2 is not correct.** 



## ADDITIONAL INFORMATION:

## IGX:

- The IGX is a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market for imported natural gas across three hubs —Dahej and Hazira in Gujarat, and Kakinada in Andhra Pradesh.
- The spot market is a public financial market in which financial instruments or commodities are traded for immediate delivery.
- A forward market is an over-the-counter marketplace that sets the price of a financial instrument or asset for future delivery.
- However, domestically produced natural gas will not be sold on the exchange.
- The price of domestically produced natural gas is decided by the government

## **SOURCE:-**

https://indianexpress.com/article/explained/indian-gas-exchange-igx-what-it-is-and-how-it-will-work-

6460379/#:~:text=India%27s%20first%20gas%20exchange%20%E2%80%94%20the,gas%20in%20India%27s%20energy%20basket.

# 94. Consider the following statements about the "Blue carbon initiative":

- 1. It is an initiative under the United Nations Framework Convention on Climate Change.
- 2. It aims to protect and restore coastal ecosystems for their role in reducing impacts of global climate change.

# Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

## **EXPLANATION:**

The Initiative is coordinated by Conservation International (CI), the International Union for Conservation of Nature (IUCN), and the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (IOC-UNESCO). **So, statement 1 is not correct.** 

It aims to protect and restore coastal ecosystems for their role in reducing impacts of global climate change. **So, statement 2 is correct.** 



# ADDITIONAL INFORMATION:

## The Blue Carbon Initiative

- The Blue Carbon Initiative is a global program working to mitigate climate change through the restoration and sustainable use of coastal and marine ecosystems.
- The Initiative is coordinated by Conservation International (CI), the International Union for Conservation of Nature (IUCN), and the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (IOC-UNESCO).
- Blue carbon is the carbon stored in coastal and marine ecosystems.
- The Blue Carbon Initiative currently focuses on carbon in coastal ecosystems mangroves, tidal marshes and seagrasses, which are found on every continent except Antarctica.

## SOURCE:

https://www.thebluecarboninitiative.org/about-the-blue-carbon-initiative

## 95. Consider the following statements about the clinical trial protocol in India:

- 1. Central Drug Standard Control Organization regulates clinical trial of drugs and medical devices in India.
- 2. If the drug is approved and marketed in another country, there is no need to have clinical trials in India.

# Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

## **EXPLANATION:**

Central drug standard control organization is responsible for approval of Drugs, Conduct of Clinical Trials, laying down the standards for Drugs, control over the quality of imported Drugs in the country and coordination of the activities of State Drug Control Organizations by providing expert advice with a view of bring about the uniformity in the enforcement of the Drugs and Cosmetics Act. **So, statement 1 is correct.** 

If the drug is already approved/marketed in other countries, phase III data should generally be obtained on at least 100 patients distributed over 3-4 centres. **So, statement 2 is not correct.** 

# ADDITIONAL INFORMATION:

# Central Drugs Standard Control Organization (CDSCO)

• The Central Drugs Standard Control Organization (CDSCO) is the Central Drug Authority for discharging functions assigned to the Central Government under the Drugs and Cosmetics Act.



• CDSCO under the Ministry of Health and Family Welfare regulates the safety, efficacy and quality of notified medical devices under the provisions of Drugs and Cosmetics Act, 1940 and Rules made thereunder.

# Functions of CDSCO

- Regulatory control over the import of drugs, approval of new drugs and clinical trials, meetings of Drugs Consultative Committee (DCC) and Drugs Technical Advisory Board (DTAB), approval of certain licenses as Central License Approving Authority is exercised by the CDSCO headquarters.
- Under the Drugs and Cosmetics Act, CDSCO is responsible for approval of New Drugs, Conduct of Clinical Trials, laying down the standards for Drugs, control over the quality of imported Drugs in the country and coordination of the activities of State Drug Control Organizations by providing expert advice with a view of bring about uniformity in the enforcement of the Drugs and Cosmetics Act.
- Further CDSCO along with state regulators, is jointly responsible for grant of licenses of certain specialized categories of critical Drugs such as blood and blood products, I. V. Fluids, Vaccine and Sera.

#### SOURCE:

https://cdsco.gov.in/opencms/opencms/en/About-us/Introduction/

- 96. Consider the following statements about the "Metropolitan Planning Committee" in India:
  - 1. The State Legislature makes provisions with respect to the manner of election of its members.
  - 2. Two-thirds of its members are elected by the chairpersons of Municipalities and Panchayats.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

## **EXPLANATION:-**

The State Legislature makes provisions with respect to

- the manner of election of members.
- composition of the committee
- representation of in such committees of the central government, state government and others
- function of such a committee in planning and coordination of the metropolitan area
- the manner of election of chairpersons of such committees.

## so statement 1 is correct.



Two-thirds of the members are elected from the chairpersons of the panchayat and from the members of Municipalities. **So statement 2 is not correct.** 

## ADDITIONAL INFORMATION:

India is on the way to have 69 metropolitan cities by 2025.

By 2030, the Mumbai Metropolitan Region will be more populous than Australia and, with its GDP at about \$230 billion in 2030, its economy will be bigger than that of Thailand or Hong Kong today

Constitutional Provision related to MPC:

Article 243 ZE: Establishment of the Metropolitan Planning Committee (MPC) to prepare a draft development plan focusing on shared resources, investments, infrastructure and environmental conservation for the region as a whole for approval by the state government

## **SOURCE:-**

Indian Polity - Laxmikanth

- 97. The most effective contribution made by Dadabhai Naoroji to the cause of Indian National Movement was that he
  - 1. exposed the economic exploitation of India by the British.
  - 2. interpreted the ancient Indian texts and restored the self-confidence of Indians.
  - 3. stressed the need for eradication of all the social evils before anything else.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

# **EXPLANATION:**

In his book, poverty and unbritish rule in India, Dadabhai Naoroji exposes the economic exploitation of India under British rule. He present, drain of wealth theory, which refers to unilateral transfer of wealth from India to Britain resulting in widespread poverty and severe famines. Thus, he exposed the economic exploitation of India by the British. **So, statement 1 is correct.** 

He did not interpret the ancient Indian texts and restored the self-confidence of Indians. **So, statement 2 is not correct.** 

He did not stress the need for eradication of all the social evils before anything else. **So, statement 3 is not correct.** 



## ADDITIONAL INFORMATION:

- Dadabhai Naoroji (1825-1917) is known as the Grand Old Man of India.
- Born in Bombay (now Mumbai) in a poor Parsi family, he began his career as a teacher of mathematics and natural philosophy at Elphinstone Institute (later Elphinstone College). He was the first Indian to become a full professor.
- In 1867, he founded the East Indian Association. It was a political advocacy group for India having both British and Indians on its membership roll.
- Rahnumae Mazdayasne Sabha: He founded the Rahnumae Mazdayasne Sabha (Guides on the Mazdayasne Path) in 1851 to restore the Zoroastrian religion to its original purity.
- Rast Goftar (Truth Teller): In 1851, he founded Rast Goftar(Truth Teller), a Gujarati fortnightly to clarify Zoroastrian concepts and promote Parsi social reforms.
- He travelled to London in 1855 to become a partner in Cama & Co, opening a Liverpool location for the first Indian company to be established in Britain. Within three years, he had resigned on ethical grounds.
- He formulated the famous drain-of-wealth theory. Through his work with economics, he proved that Britannia was draining money out of India. In his book "Poverty and Un-British Rule in India (1901)", he estimated a 200–300 million pounds loss of India's revenue to Britain that is not returned.
- Association with Indian national congress: Naoroji is also credited with the founding of the Indian National Congress, along with A.O. Hume and Dinshaw Edulji Wacha. He thrice served as the President of Indian National Congress.
- In 1874, he became Prime Minister of Baroda.

## SOURCE:

A Brief History of India by Spectrum

# 98. Consider the following statements:

- 1. In the last four years, India's renewable energy capacity is more than doubled.
- 2. Decreasing the share of non-fossil fuels in the total energy mix is one of India's commitments under the Paris Climate Pact.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

# **EXPLANATION:**

India doubled its renewable power capacity in the last 4 years. The cumulative renewable power capacity in 2013–2014 reached 35,500 MW and rose to 70,000 MW in 2017–2018. So, statement 1 is correct.

Decreasing the share of non-fossil fuels in the energy mix is one of India's commitments under the Paris Climate Pact. **So, statement 2 is correct.** 



#### SOURCE:

https://www.hindustantimes.com/opinion/how-pm-modi-s-450-gw-power-plan-can-change-indian-economy-opinion/story-T97IMsxsI40MwBX335WPQK.html

# 99. With reference to the India's culture and tradition, which one of the following best describes the term 'Tala-maddale'?

- (a) It is an ancient style bronze and brass work still found in southern part of Coromandel coast
- (b) It is an ancient martial art and a living tradition in some areas of North-eastern part of India
- (c) It is an ancient form of performance dialogue or debate performance in Southern part of India
- (d) It is an ancient Bhakti cult of Shaivism still prevalent in some areas of Southern part of India

# **EXPLANATION:-**

In the conventional 'talamaddale,' the artists sit across in a place without any costumes and engage in testing their oratory skills based on the episode chosen. The traditional art of 'talamaddale', a variant of Yakshagana theatre. So It is an ancient form of performance dialogue or debate performance in Southern India. **So option (c) is correct.** 

# ADDITIONAL INFORMATION:

- Tala-Maddale is an ancient form of performance dialogue or debate performance in Southern India in the Karavali and Malnad regions of Karnataka and Kerala.
- The plot and content of the conversation is drawn from popular mythology but the performance mainly consists of an impromptu debate between characters involving sarcasm, puns, philosophy positions and humour.
- The main plot is sung from the same oral texts used for the Yakshgana form of dance- drama.
- Performers claim that this was a more intellectual rendition of the dance during the monsoon season.

# **SOURCE:-**

https://www.youtube.com/watch?v=MoAWX506iXg

https://yakshagana.com/talamaddale/

# 100. Which among the following tribal assemblies of Rig Vedic period is oldest?

- (a) Sabha
- (b) Samiti
- (c) Vidhata
- (d) Gana