



PRESTORMING™ 2020

MOCK TEST III - EXPLANATION

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PRESTORMING™ 2020

MOCK TEST III - EXPLANATION

1. The Reserve Bank of India reduced the repo rate to a record low of 4.0%. The Government of India revised the state government's borrowing limit from 3 to 5%. In this scenario, which one of the following may be the possible consequences in the market economy?

- (a) The deposit rates decreases and the lending rates increases
- (b) The deposit rates increases and the lending rates decreases
- (c) Both deposit and lending rates increases
- (d) Both deposit and lending rates decreases**

EXPLANATION:

The decrease in repo rates is to aim at bringing in growth and improving economic development in the country. Consumers will borrow more from banks thus stabilizing the inflation.

A decline in the repo rate can lead to the banks bringing down their lending rate. And Also if Repo rate is reduced Banks will be inclined to take loans from RBI rather than relying on Fixed deposits of the respective banks, so banks will reduce rates on FD Deposits.

Borrowing of Government can lead to crowding out effect which may rise interest rates in the market. But it is only a long-term effect. Also, repo rate will have greater impact on the macroeconomics. So, by reducing repo rates, we can expect more money will be pumped into the Indian economy and the interest rates may decrease as the supply of money increases. **So, Option (d) is correct.**

2. Which one of the following pairs of ports in India has the shortest distance of travel by sea?

- (a) Kandla and Mumbai
- (b) Mormugao and Tuticorin
- (c) Chennai and Port Blair
- (d) Haldia and Paradip**

EXPLANATION:

Kandla and Mumbai- 453 nm
Marmugao and Tuticorin- 580 nm
Chennai and Port Blair- 794 nm
Haldia and Paradwip- 156 nm



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ADDITIONAL INFORMATION:



3. The aim of the Green Revolution and research in the field of Biotechnology is to modernize agriculture and animal husbandry. Which one of the following provisions of the Indian Constitution encouraged the Government of India to carry out these researches?

- (a) Article 39
- (b) Article 43
- (c) Article 45
- (d) **Article 48**

EXPLANATION:

Article 39 - The State shall, in particular, direct its policy towards securing

- (a) that the citizens, men and women equally, have the right to an adequate means to livelihood;
- (b) that the ownership and control of the material resources of the community are so distributed as

best to subserve the common good;

(c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment;

(d) that there is equal pay for equal work for both men and women;

(e) that the health and strength of workers, men and women, and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength;

(f) that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment. **So, Option (a) is not correct.**

Article 43 - The State shall endeavour to secure, by suitable legislation or economic organisation or in any other way, to all workers, agricultural, industrial or otherwise, work, a living wage, conditions of work ensuring a decent standard of life and full enjoyment of leisure and social and cultural opportunities and, in particular, the State shall endeavour to promote cottage industries on an individual or co operative basis in rural areas. **So, Option (b) is not correct.**

Article 45 - The State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years. **So, Option (c) is not correct.**

Article 48 - The State shall endeavour to organise agriculture and animal husbandry on modern and scientific lines and shall, in particular, take steps for preserving and improving the breeds, and prohibiting the slaughter, of cows and calves and other milch and draught cattle. **So, Option (d) is correct.**

SOURCE:

Indian polity by M Laxmikanth

4. With reference to the space technology, which of the following is/are the possible consequences of “Satellite Mega-Constellations”?

- 1. Provide low-latency broadband internet services.**
- 2. Enhance the accuracy of Global Navigation Systems.**
- 3. Affect ground-based telescope’s ability to see into deep space.**
- 4. Triggering Kessler syndrome.**

Which of the statements given above are correct?

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

EXPLANATION:

By increasing the number of satellites, overall service performance can be improved. For example, if more number of satellites present, we can get better accuracy in navigational system. Same logic applies to internet services.

But as the number of satellite increases in space, it is difficult for telescope on ground (not for space telescope) to look into deep space as satellite blocks the view. Also, if more satellites present at a close distance, if one collision occurs, then all satellites will suffer the damage. **So, Option (d) is correct.**

5. Kyoto Protocol sets binding emission reduction targets for 37 industrialized countries and the European community in its first commitment period. Apart from emission reduction commitments it also has flexible mechanisms like Joint Mechanism and Clean Development Mechanism. In light of the above statement, clean development program under the Kyoto protocol is an example of

- (a) Carbon sequestration
- (b) Carbon taxation
- (c) **Carbon offset**
- (d) Carbon trading

EXPLANATION:

Carbon sequestration or carbon dioxide removal (CDR) is the long-term removal, capture or sequestration of carbon dioxide from the atmosphere to slow or reverse atmospheric CO₂ pollution and to mitigate or reverse global warming. **So, Option (a) is not correct.**

A carbon tax is a tax levied on the carbon content of fuels (transport and energy sector) and, like carbon emissions trading, is a form of carbon pricing. The term carbon tax is also used to refer to a carbon dioxide equivalent tax, the latter of which is quite similar but can be placed on any type of greenhouse gas or combination of greenhouse gases, emitted by any economic sector. **So, Option (b) is not correct.**

A carbon offset is a reduction in emissions of carbon dioxide or other greenhouse gases made in order to compensate for emissions made elsewhere. Offsets are measured in tonnes of carbon dioxide-equivalent (CO₂e). One tonne of carbon offset represents the reduction of one tonne of carbon dioxide or its equivalent in other greenhouse gases.

The Kyoto Protocol has sanctioned offsets as a way for governments and private companies to earn carbon credits that can be traded on a marketplace. The protocol established the Clean Development Mechanism (CDM), which validates and measures projects to ensure they produce authentic benefits and are genuinely "additional" activities that would not otherwise have been undertaken. Organizations that are unable to meet their emissions quota can offset their emissions by buying CDM-approved Certified Emissions Reductions. **So, Option (c) is correct.**

Carbon trading is the process of buying and selling permits and credits to emit carbon dioxide. It

has been a central pillar of the EU's efforts to slow climate change. The world's biggest carbon trading system is the European Union Emissions Trading System (EU ETS). **So, Option (d) is not correct.**

6. With reference to the ancient sculptures, consider the following passage:

1. “A statue of Buddha is found in which Buddha is in sitting posture with Abhaya posture in his right hand. Buddha’s image is grand and solid; the masculine beauty was discernible and the body was firm. The eroticism is discernible in the image which was given beautiful expression through physical features. The image also shows a religious influence. Spirituality is expressed in the image.”

The above mentioned Buddha’s statue belongs to which one of the following school of art?

- (a) Gandhara Art
- (b) Mathura Art**
- (c) Amaravati Art
- (d) Kaushambi Art

EXPLANATION:

Both sitting and standing posture of Buddha are carved out in Mathura art (But in Gandhara style, Buddha mostly will in standing posture). In Mathura style, both physique and spiritualism is given importance. **So, Option (d) is correct.**

ADDITIONAL INFORMATION:

DIFFERENCE BETWEEN GANDHARA AND MATHURA SCHOOL OF ARTS

Areas of differences	Gandhara School of art	Mathura School of Art
Reign	Kushana Dynasty	Kushana Dynasty
Area	Northwest Frontier	Mathura
Outside influences	Greek influence	<ul style="list-style-type: none"> • Purely indigenous • No foreign influence
Religious influence	Buddhism Hellenistic realism	<ul style="list-style-type: none"> • Hinduism • Buddhism

		<ul style="list-style-type: none"> • Jainism • Secularism
Material Used	Bluish- Grey sandstone Grey sandstone	Spotted red sandstone
Features of Buddha sculptures	<p>Spiritual Buddha Sad Buddha Bearded Buddha Less ornamentation Great detailing Buddha in Yogi postures Greek factors like wavy hair, large forehead, long ears</p>	<p>Delighted Buddha Less spiritual Shaven head and face Muscularity Energetic Graceful posture of Buddha Seated in Padmasana Buddha surrounded by two monks: Padmapani (holding Lotus) and Vajrapani(Holding Vajra) Halo around the head of Buddha decorated with geometrical motifs The Standing Buddhas of the Sravasti, Sarnath, and Kausambhi Sarvatobhadrika image of 4 Jain Jinas</p>
Various Mudras of Buddha in Gandhara Art	<p>Abhayamudra- Don't fear Bhumisparshamudra - Touching the earth Dhyana mudra- Meditation Dharmachakramudra- A preaching mudra</p>	—

7. Which one of the following statements best defines the term “Adjusted Gross Revenue” (AGR) , been in the news recently, in India?

- (a) Revenue of the Government of India after the payment of dues owed
- (b) Money available with the residents of India after the payments of taxes

(c) Usage and license fee charged by the Government of India on telecom operators

(d) License fee paid by the aviation sector to the Government of India for the usage of the country's airspace

EXPLANATION:

The telecom sector was liberalised under the National Telecom Policy, 1994 after which licenses were issued to companies in return for a fixed license fee. To provide relief from the steep fixed license fee, the government in 1999 gave an option to the licensees to migrate to the revenue sharing fee model.

Under this, mobile telephone operators were required to share a percentage of their AGR with the government as annual license fee (LF) and spectrum usage charges (SUC). License agreements between the Department of Telecommunications (DoT) and the telecom companies define the gross revenues of the latter. AGR is then computed after allowing for certain deductions spelt out in these license agreements. The LF and SUC were set at 8 per cent and between 3-5 per cent of AGR respectively, based on the agreement.

SOURCE:

<https://www.thehindubusinessline.com/opinion/columns/slate/all-you-wanted-to-know-about-agr/article30008124.ece>

8. Consider the following statements about the “Members of Parliament Local Area Development Scheme” (MPLADS):

- 1. This scheme is applicable only for the elected members of the Lok Sabha and Rajya Sabha.**
- 2. Under this scheme, Member of Parliament has the choice to suggest to the District Collector for works to be taken up in his/her constituency.**
- 3. It envisages that works under this scheme should be limited to asset creation and not the improvement of existing assets.**

Which of the statements given above are correct?

- 1 and 2 only
- 2 and 3 only**
- 1 and 3 only
- 1, 2 and 3

EXPLANATION:

It is applicable to both elected and nominated members. So, Statement 1 is not correct.
Member of Parliament has to suggest to the District Collector the works that need to be taken up in his/her constituency. Only suggestion can be made. Only Collector of that district will make final decision. So, Statement 2 is correct.
Under this scheme, every MP is entitled to spend Rs 5 crore annually for asset creation purpose. So, Statement 3 is correct.

ADDITIONAL INFORMATION:

- The MPLAD scheme was formulated in 1993 to enable Members of Parliament (MPs) to recommend development works in their constituencies with emphasis on the creation of durable community assets based on the locally felt need.
- Durable assets of national priorities and community needs viz. drinking water, primary education, public health, sanitation and roads, etc.
- Initially, the Scheme was under the control of the Ministry of Rural Development and Planning. In October, 1994, the scheme was transferred to the Ministry of Statistics & Programme Implementation.
- Under this scheme, every MP is entitled to spend Rs 5 crore annually.
- Similar to MPLADS, several states have enacted schemes called Member of Legislative Assembly Local Area Development Scheme (MLALADS) where funds are given to MLAs.
- According to the 'Guidelines on Members of Parliament Local Area Development Scheme (MPLADS)' published by the Ministry of Statistics and Programme Implementation in June 2016, the MPLAD funds can also be used for implementation of the schemes such as Swachh Bharat Abhiyan, Accessible India Campaign (Suganya Bharat Abhiyan), conservation of water through rain water harvesting and SansadAadarsh Gram Yojana, etc.

SOURCE:

<https://www.mplads.gov.in/mplads/Default.aspx>

9. Consider the following features:

- 1. It is located near the tri-point of Rajasthan, Madhya Pradesh and Uttar Pradesh.**
- 2. It is the conservation zone for the red-crowned Roof Turtle and the Ganges River Dolphin.**
- 3. It is part of the Kathiawar-Gir dry deciduous forests.**

Which one of the following protected areas is described by the features mentioned above?

- (a) Vikramshila Gangetic Dolphin Sanctuary
- (b) National Chambal Gharial Wildlife Sanctuary**
- (c) Gir National Park and Wildlife Sanctuary
- (d) Hazaribagh Wildlife Sanctuary

EXPLANATION:

National Chambal Sanctuary, also called the National Chambal Gharial Wildlife Sanctuary, is a tri-state protected area in northern India for the protection of the Critically Endangered gharial, the red-crowned roof turtle and the Endangered Ganges river dolphin.

Located on the Chambal River near the tripoint of Rajasthan, Madhya Pradesh and Uttar Pradesh, it was first declared in Madhya Pradesh in 1978, and now constitutes a long narrow eco-reserve

co-administered by the three states. Within the sanctuary, the pristine Chambal River cuts through mazes of ravines and hills with many sandy beaches. It is part of the Kathiawar-Gir dry deciduous forests. **So, Option (b) is correct.**

ADDITIONAL INFORMATION:

Vikramshila Gangetic Dolphin Sanctuary

- Vikramshila Gangetic Dolphin Sanctuary is located in Bhagalpur District of Bihar, India.
- The sanctuary is a 60 km stretch of the Ganges River from Sultanganj to Kahalgaon in Bhagalpur District. Designated in 1991, it is protected area for the endangered Gangetic dolphins in Asia. Once found in abundance, only a few hundred remain, of which half are found here.
- The Gangetic dolphins have been declared as the national aquatic animal of India.

Gir National Park and Wildlife Sanctuary

- Gir National Park and Wildlife Sanctuary, also known as SasanGir, is a forest and wildlife sanctuary near TalalaGir in Gujarat, India. It is part of the Kathiawar-Gir dry deciduous forests ecoregion.
- The 14th Asiatic Lion Census 2015 was conducted in May 2015. In 2015, the population was 523 (27% up compared to previous census in 2010). The population was 411 in 2010 and 359 in 2005. The lion population in Junagadh District was 268 individuals, 44 in Gir Somnath District, 174 in Amreli District, and 37 in Bhavangar District. There are 109 males, 201 females and 213 cubs.
- Gir National Park is closed from 16 June to 15 October every year. The best time to visit it is between December and March. Although it is very hot in April and May, these are the best months for wildlife viewing and photography.

Hazaribagh Wildlife Sanctuary

- Hazaribagh Wildlife Sanctuary (earlier called Hazaribagh National Park) is a wildlife sanctuary in Jharkhand, India, about 55 miles (89 km) north of Ranchi. It was established in 1955.
- Nestling in low hilly terrain, at an average altitude of 615 metres (2,018 ft), it has an area of 184 km² (71 sq mi) and is home to sambar, nilgai, chital, peafowl, sloth bears, black bears, hyenas and pigeons.
- Earlier it was home to tigers, leopards, and many more animals but now rarely animals other than nilgai and hyena are seen. It is known that many foreigners also used to visit the then-called National Park, but due to lack of care by government, it has become mere a forest. Very few tourists can be seen now. Hazaribagh, which was known as a tourist destination, is now losing its title.

10. Consider the following statements about the Participatory Guarantee System (PGS) for India:

- 1. PGS is a process of certifying organic products, which ensures that their production takes place in accordance with laid-down quality standards.**
- 2. PGS offers individual certificates to every farmer and the farmer is free to market his/her produce.**
- 3. PGS-India covers standards for crop production, food processing, handling and storage.**

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:

PGS is a process of certifying organic products, which ensures that their production takes place in accordance with laid-down quality standards. PGSs are “locally focused quality assurance systems” that “certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange”. Hence, it is a decentralised Organic Farming Certification System. **So, Statement 1 is correct.**

PGS offer individual certificates to farmers. **So, Statement 2 is correct.**

It is applicable only to farm activities such as crop production, processing, and livestock rearing, and off-farm processing “by PGS farmers of their direct products”. **So, Statement 3 is correct.**

ADDITIONAL INFORMATION:

Participatory Guarantee Scheme

- PGS is a process of certifying organic products, which ensures that their production takes place in accordance with laid-down quality standards.
- The certification is in the form of a documented logo or a statement.
- PGS is an internationally applicable organic quality assurance initiative that emphasize the participation of stakeholders, including producers and consumers, and operate outside the framework of third-party certification.
- PGSs are “locally focused quality assurance systems” that “certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange”.
- PGS, according to the definition, is “a process in which people in similar situations (in this case small holder producers) assess, inspect and verify the production practices of each other and take decisions on organic certification”.

Advantages of PGS

- Among the advantages of PGS over third-party certification, identified by the government document, are:
- Procedures are simple, documents are basic, and farmers understand the local language used.
- All members live close to each other and are known to each other. As practising organic farmers themselves, they understand the processes well.
- Because peer appraisers live in the same village, they have better access to surveillance; peer appraisal instead of third-party inspections also reduces costs
- Mutual recognition and support between regional PGS groups ensures better networking for processing and marketing.
- Unlike the grower group certification system, PGS offers every farmer individual certificates, and the farmer is free to market his own produce independent of the group.

Limitations

- PGS certification is only for farmers or communities that can organise and perform as a group within a village or a cluster of continuous villages.
- It is applicable only to farm activities such as crop production, processing, and livestock rearing, and off-farm processing “by PGS farmers of their direct products”.
- Individual farmers or group of farmers smaller than five members are not covered under PGS.
- They either have to opt for third party certification or join the existing PGS local group.
- PGS ensures traceability until the product is in the custody of the PGS group, which makes PGS ideal for local direct sales and direct trade between producers and consumers.

11. Which one of the following statements is correct about the Sixth Schedule of the Indian Constitution?

- (a) It provides for the creation of Autonomous Districts and Autonomous Regions by the President of India
- (b) If a particular area of the state is declared as Scheduled Area, then the Governor of that state may make regulations for the peace and good government
- (c) The President of India may increase the area of any Scheduled Area in a State after consultation with the Governor of that State
- (d) It provides for constitution of District Councils and Regional Councils**

EXPLANATION:

Sixth Schedule of the Indian Constitution provides for the creation of Autonomous Districts and Autonomous Regions by the governor, not the president. **So, Option (a) is not correct.**

The governor is empowered to direct that any particular act of Parliament or the state legislature does not apply to a scheduled area or apply with specified modifications and exceptions. He can also

make regulations for the peace and good government of a scheduled area after consulting the tribes advisory council. This is one of the various features of administration contained in the Fifth Schedule of the Indian Constitution. **So, Option (b) is not correct.**

The president is empowered to declare an area to be a scheduled area. He can also increase or decrease its area, alter its boundary lines, rescind such designation or make fresh orders for such redesignation on an area in consultation with the governor of the state concerned. This is one of the various features of administration contained in the Fifth Schedule of the Indian Constitution. **So, Option (c) is not correct.**

The governor is empowered to organise and re-organise the autonomous districts. Thus, he can increase or decrease their areas or change their names or define their boundaries and so on. Each autonomous district has a district council consisting of 30 members, of whom four are nominated by the governor and the remaining 26 are elected on the basis of adult franchise. The elected members hold office for a term of five years (unless the council is dissolved earlier) and nominated members hold office during the pleasure of the governor. Each autonomous region also has a separate regional council. **So, Option (d) is correct.**

ADDITIONAL INFORMATION:

The various features of administration contained in the Sixth Schedule areas follows:

- The tribal areas in the four states of Assam, Meghalaya, Tripura and Mizoram have been constituted as autonomous districts. But, they do not fall outside the executive authority of the state concerned.
- The governor is empowered to organise and re-organise the autonomous districts. Thus, he can increase or decrease their areas or change their names or define their boundaries and so on.
- If there are different tribes in an autonomous district, the governor can divide the district into several autonomous regions.
- Each autonomous district has a district council consisting of 30 members, of whom four are nominated by the governor and the remaining 26 are elected on the basis of adult franchise. The elected members hold office for a term of five years (unless the council is dissolved earlier) and nominated members hold office during the pleasure of the governor. Each autonomous region also has a separate regional council.
- The district and regional councils administer the areas under their jurisdiction. They can make laws on certain specified matters like land, forests, canal water, shifting cultivation, village administration, inheritance of property, marriage and divorce, social customs and so on. But all such laws require the assent of the governor.
- The district and regional councils within their territorial jurisdictions can constitute village councils or courts for trial of suits and cases between the tribes. They hear appeals from them. The jurisdiction of high court over these suits and cases is specified by the governor.

- The district council can establish, construct or manage primary schools, dispensaries, markets, ferries, fisheries, roads and so on in the district. It can also make regulations for the control of money lending and trading by non-tribals. But, such regulations require the assent of the governor.
- The district and regional councils are empowered to assess and collect land revenue and to impose certain specified taxes.
- The acts of Parliament or the state legislature do not apply to autonomous districts and autonomous regions or apply with specified modifications and exceptions.
- The governor can appoint a commission to examine and report on any matter relating to the administration of the autonomous districts or regions. He may dissolve a district or regional council on the recommendation of the commission.

SOURCE:

Indian polity by M Laxmikanth

12. Consider the following statements about the evolution of Civil Services in India:

- 1. Though Lord Warren Hastings introduced the office of District Collectors, Lord Cornwallis reformed that office based on the powers of Collectors in England.**
- 2. The Charter Act of 1853 opened the civil services to the Indians for the first time but exams were conducted only in England till 1921.**
- 3. Till independence of India, the Presidencies and provinces of British India did not have Provincial Civil Service.**

Which of the statements given above is/are correct?

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

EXPLANATION:-

Office of collectorship was introduced by Lord Warren Hastings and later reformed by Lord Cornwallis. But at that time, there are no collectors in England. It is also true for police system introduced in India. India had these systems well before it was introduced in England. **So, Statement 1 is not correct.**

Charter act of 1853 removed the right of patronage to appointments in civil service held by the Court of Directors. Appointment was to be done only by open competition based on merit and was open to all. **So, Statement 2 is correct.**

The Government of India Act, 1935 provided for the establishment of a Public Service Commission for each Province. **So, Statement 3 is not correct.**

ADDITIONAL INFORMATION:

- Lord Cornwallis is known as the Father of Civil Services in India. He introduced Covenant Civil Services (Higher Civil Services) which were different from the Un-covenanted Civil Services (Lower Civil Services).
- The Former was created by the Law of the Company, while later was not created by the law of the company”.
- In order to consolidate the British rule in India, the civil services were reformed, modernised and rationalised by him.
- The basic principle was the separation of revenue administration from the judicial administration.
- The Collector was deprived of judicial and magisterial powers, he became only the head of revenue administration. The posts of district judges were created to look after judicial administration.
- He reserved all the covenanted services for Britishers and excluded Indians from superior posts. Due to doubtfulness about the integrity and ability of Indians, he introduced this policy.
- After the revolt of 1857, there were many reforms in India which transferred all powers to crown.
- There were reforms in civil services appointments as well, which were done to increase support for British government in India among elites and educated population.
- Charter Act of 1853 abolished the patronage system and introduced the system of open Competition as the basis of selection of Civil Services.
- Indian Civil Services Act of 1861 provided the reservation of certain principal posts for the members of the covenanted services.
- According to the act, “any Indian or European may be appointed to any of the office, provided that he had resided in India for last 7 years”.

SOURCE:-

Spectrum

13. A weather balloon is launched from the island of Barbados. It ascends vertically and reaches high altitude. It is then taken up by the Jet stream. Which one of the following city’s sky will the balloon reach first?

- (a) México city
- (b) Mecca**
- (c) Hanoi
- (d) Manila

EXPLANATION:-

Barbados is located in 13.1939° N, 59.5432° W so it will come under the influence of westerly jet

stream (moves from west towards east.). so the balloon will move towards east.

Mexico city- 19.4326° N, 99.1332° W

Mecca- 21.3891° N, 39.8579° E. **So, Option (b) is correct.**

Hanoi- 21.0278° N, 105.8342° E

Manila- 14.5995° N, 120.9842° E

Note:-

To arrive at the answer we should select the city which is to the east of Barbados and we have to add the longitudinal coordinates of Barbados and the selected city. Then we have to select the city which has minimum value.

14. With reference to the Vedic age, the term “Sangrahitri” refers to

(a) Treasurer

(b) Mediator on disputes

(c) Chief Priest

(d) Messenger

EXPLANATION:-

Sangrahitri (treasurer), **So, Option (a) is correct**

ADDITINOAL INFORMATION:

- *Samiti* was the larger General Assembly of the people and it was different than *Sabha* in terms of function and composition. The *Sabha* was a smaller selected body, which functioned as the lower court.
- Due to increase in complexity of the society and political structure, some new officials were appointed by the state namely –
 - *Suta* (charioteer),
 - *Sangrahitri* (treasurer),
 - *Bhagadugha* (collector of taxes),
 - *Gramini* (head of a village),
 - *Sthapati* (chief judge),
 - *Takshan* (carpenter),
 - *Kshatri* (chamberlain), etc.

- The administrative machinery was highly organized and became an efficient instrument for ruling over a large kingdom.
- Legal institutions became more focused. The king administered justice and wielded the rod of punishment.
- Petty offences were left to "village judges."
- The punishments for the crime were rather severe.
- For evidence, the eye-witness was more important than informer.
- The law was also very clear on the question of inheritance of property, ownership of land, etc.
- The father's property was inherited by sons alone.
- The daughters could inherit it only if she was the only child or there were no male issues.

15. Which one of the following Tiger Reserves sometimes seen in the news in the context of Tiger Reintroduction Programme?

- (a) Bor Tiger Reserve
- (b) Bandipur Tiger Reserve
- (c) Palamau Tiger Reserve
- (d) Satkosia Tiger Reserve**

EXPLANATION:

The National Tiger Conservation Authority will reintroduce tigers in three tiger reserves, where the number of the big cats has dwindled to the minimum. Tiger restocking will happen at the Satkosia forest in Odisha, the western part of Rajaji National Park in Uttarakhand and Buxa in West Bengal. For Satkosia reintroduction, the Madhya Pradesh government has given in-principle approval to take out three pairs of breeding tigers from Panna. **So, Option (d) is correct.**

ADDITIONAL INFORMATION:

Bor Tiger Reserve

- Bor Tiger Reserve is a wildlife sanctuary which was declared as a tiger reserve in July 2014. It is located near Hingani in Wardha District in the Indian state of Maharashtra. It is a home to a variety of wild animals. The reserve covers an area of 138.12 km² (53.33 sq mi) which includes the drainage basin of the Bor Dam.
- It is notable that Bor Tiger Reserve and some adjacent protected areas will be merged with Pench Tiger Reserve (Maharashtra) as a 'Satellite core area', to more than double the area of that well established tiger reserve.

- Bor Tiger Reserve is centrally located among several other Bengal tiger habitats including: Pench Tiger Reserve, Maharashtra, 90 km² (35 sq mi) to the northeast; Nagzira Navegaon Tiger Reserve, 125 km² (48 sq mi) to the east northeast; Umred Karhandla Wildlife Sanctuary, 75 km² (29 sq mi) to the east southeast; Tadoba - Andhari Tiger Reserve, 85 km² (33 sq mi) to the southeast; Melghat Tiger Reserve, 140 km² (54 sq mi) to the west northwest and Satpura National Park and Tiger Reserve, 160 km² (62 sq mi) to the northwest.

Palamu Tiger Reserve

- The **Palamu Tiger Reserve** is one of the nine original tiger reserves in India and the only one in the state of Jharkhand, India. It forms part of Betla National Park and Palamu Wildlife Sanctuary.

Satkosia Tiger Reserve

- Satkosia Tiger Reserve is a tiger reserve located in the Angul district of Odisha, India covering an area of 988.30 km².
- Satkosia Gorge Wildlife Sanctuary was created in 1976, with an area of 796 km². Satkosia Tiger Reserve was designated in 2007, and comprises the Satkosia Gorge Wildlife Sanctuary and the adjacent Baisipalli Wildlife Sanctuary.
- It is located where the Mahanadi River passes through a 22 km long gorge in the Eastern Ghats mountains.
- The tiger reserve is located in the Eastern Highlands moist deciduous forests ecoregion.
- The major plant communities are mixed deciduous forests including Sal (*Shorea robusta*), and riverine forest. Mammals found include the tiger.

Bandipur National Park

- Bandipur National Park established in 1974 as a tiger reserve under Project Tiger, is a national park located in the Indian state of Karnataka, which is the state with the second highest tiger population in India. Along with adjacent Nagarhole National Park it is one of the premier Tiger Reserves in the country. It was once a private hunting reserve for the Maharaja of the Kingdom of Mysore but has now been upgraded to Bandipur Tiger Reserve. Bandipur is known for its wildlife and has many types of biomes, but dry deciduous forest is dominant.
- The park spans an area of 874 square kilometers (337 sq mi), protecting several species of India's endangered wildlife. Together with the adjoining Nagarhole National Park (643 km² (248 sq mi)), Mudumalai National Park (320 km² (120 sq mi)) and Wayanad Wildlife Sanctuary (344 km² (133 sq mi)), it is part of the Nilgiri Biosphere Reserve totaling 2,183 km² (843 sq mi) making it the largest protected area in southern India and largest habitat of wild elephants in south Asia.
- Bandipur is located in Gundlupet taluq of Chamarajanagar district. It is about 80 kilometers (50 mi) from the city of Mysore on the route to a major tourist destination of Ooty. As a result, Bandipur sees many tourists and there are many wildlife fatalities caused by speeding

vehicles that are reported each year. There is a ban on traffic from 9 pm to 6 am of dusk to dawn to help bring down the death rate of wildlife

SOURCE:

<https://www.thehindu.com/news/national/other-states/tiger-reintroduction-in-odishas-satkosia-put-on-hold-following-tiger-death/article25505559.ece>

16. Consider the following statements about the Preventive detention in India:

- 1. Even in the interest of maintaining ‘public order’, a person can be detained under preventive detention laws.**
- 2. There is no right to legal assistance for the detenues.**
- 3. There is no judicial oversight where detention beyond three months is not sought.**

Which of the statements given above is/are correct?

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

EXPLANATION:

The National Security Act of 1980 permits arrest and detention of persons when it is in the interest of maintaining “public order”, which can occur even without any allegations of the person breaking any existing laws. **So, Statement 1 is not correct.**

Throughout this process, there is no right to legal assistance for detenues. The only opportunity for many lies in pursuing a writ of habeas corpus before the High Court, which again can only test preventive detention orders on limited grounds. **So, Statement 2 is correct.**

While all arrests and detentions under preventive detention laws do undergo some subsequent checks, this scrutiny remains almost exclusively executive-based. There is no judicial oversight where detention beyond three months is not sought. **So, Statement 3 is correct.**

SOURCE:

<https://www.thehindu.com/opinion/op-ed/not-fair-just-or-reasonable/article30905962.ece>

17. Which one of the following paintings is similar to the pre-historic cave paintings in its execution and painted on an austere mud base using white colour with occasional dots in red and yellow?

- (a) Pichwai painting
- (b) Pahari painting

- (c) **Warli painting**
(d) Madhubani painting

EXPLANATION:-

Pichwai or 'pichvai' is one of the most spectacular and ancient forms of art with its origin being the land of culture ie India. Pichwai paintings have their roots in Nathdwara Rajasthan. The stunning art form is a 400-year-old art one which was created depicting the beautiful life of Lord Krishna. The wall art is created by depicting the story of Shrinathji, another form of Lord Krishna holding the hill Govardhan. The story contains a beautiful history which represents the power of one of the most significant incarnations of Lord Vishnu. When Lord Indra, showcased his control over the inhabitants of Vrindavan, with steady rains and thunderstorms; Lord Krishna lifted the hill named Govardhan on his little finger and the people of Vrindavan took refuge under the mountain. With this Indira realized failure to disturb the people and his ego was broken. Since then people are worshipping Govardhan hill.

So, Option (a) is not correct.

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 painting forms. **So, Option (b) is not correct.**

Warli folk art has its origins in Maharashtra. It is widely practised in the Northern Sahyadri region by the Adivasis (tribes). Warli tribe is one of the largest tribes of India which has rejected contemporary culture. Elements of nature are the focal points of Warli folk paintings. A mixture of rice paste, gum and water is used as paint by the warlis. A bamboo stick is used as the brush. **So, Option (c) is correct.**

Also called Mithila painting is practised in the Northern and Eastern Bihar region in India and in Nepal. Twigs, nibs, matchsticks and fingers are used for painting. Natural dyes and pigments are used as paints. It is characterized by geometrical patterns such as line drawing filled with bright colours. The painting is done on freshly plastered or mud walls. Godna, Kohbar, Tantrik, Bharani and Katchni are the distinctive styles of Madhubani painting. **So, Option (d) is not correct.**

SOURCE:-

nitin singhania- art and culture

18. Consider the following statements about a country 'X':

- 1. It follows a standard time which is ahead of the Greenwich Mean Time.**
- 2. It experiences the highest average temperature in May.**
- 3. The direction of permanent winds in this country is easterly.**

Based on the above statements, the country 'X' is:

- (a) Cuba
- (b) New Zealand
- (c) Mongolia
- (d) Oman**

19. Consider the following statements about the GRIHA (Green Rating for Integrated Habitat Assessment):

- 1. GRIHA Council is a technical and certification body under the Bureau of Energy Efficiency.**
- 2. GRIHA certified green buildings can get the interest subsidy for its housing loan.**
- 3. GRIHA certification is not mandatory for thermal power stations.**

Select the not correct answer using the code given below.

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

EXPLANATION:

There is no provision for GRIHA certified green buildings can get the interest subsidy for its housing loan. **So, Statement 2 is not correct.**

GRIHA certification is not for old power plants. It is given while construction of new houses. **So, Statement 3 is not correct.**

ADDITIONAL INFORMATION:

The basic features of GRIHA

- The system has been developed to help 'design and evaluate' new buildings (buildings that are still at the inception stages). A building is assessed based on its predicted performance over its entire life cycle – inception through operation. The stages of the life cycle that have been identified for evaluation are:
 - Pre-construction stage: (intra- and inter-site issues like proximity to public transport, type of soil, kind of land, where the property is located, the flora and fauna on the land before construction activity starts, the natural landscape and land features).

- Building planning and construction stages: (issues of resource conservation and reduction in resource demand, resource utilization efficiency, resource recovery and reuse, and provisions for occupant health and well-being). The prime resources that are considered in this section are land, water, energy, air, and green cover.
- Building operation and maintenance stage: (issues of operation and maintenance of building systems and processes, monitoring and recording of energy consumption, and occupant health and well-being, and also issues that affect the global and local environment).

The benefits

- On a broader scale, this system, along with the activities and processes that lead up to it, will benefit the community at large with the improvement in the environment by reducing GHG (greenhouse gas) emissions, reducing energy consumption and the stress on natural resources.
- Some of the benefits of a green design to a building owner, user, and the society as a whole are as follows:
 - Reduced energy consumption without sacrificing the comfort levels
 - Reduced destruction of natural areas, habitats, and biodiversity, and reduced soil loss from erosion etc.
 - Reduced air and water pollution (with direct health benefits)
 - Reduced water consumption
 - Limited waste generation due to recycling and reuse
 - Reduced pollution loads
 - Increased user productivity
 - Enhanced image and marketability

SOURCE:

<https://www.grihaindia.org/about-griha>

20. Which one of the following text deals with the various techniques used in the shipbuilding during ancient times of India?

- (a) Sarangdhara Samhita
- (b) Sulvasutra
- (c) YuktiKalpaTaru**
- (d) Uttarantra

EXPLANATION:-

There was an attempt to develop specialised treatises on different diseases. Pulse and urine examinations were conducted for diagnostic purposes. The Sarangdhara Samhita recommends use of opium for medicines. The rasachikitsa system, dealt principally with a host of mineral medicines including metallic preparations. The Tuhfat-ul-Muminin was a Persian treatise written by

Muhammad Munin in seventeenth century which discusses the opinions of physicians. **So, Option (a) is not correct.**

The Shulba Sutras or Sulvasutras are sutra texts belonging to the Śrauta ritual and containing geometry related to fire-altar construction. The Shulba Sutras are part of the larger corpus of texts called the Shrauta Sutras, considered to be appendices to the Vedas. They are the only sources of knowledge of Indian mathematics from the Vedic period. The four major Shulba Sutras, which are mathematically the most significant, are those attributed to Baudhayana, Manava, Apastamba and Katyayana.

Their language is late Vedic Sanskrit, pointing to a composition roughly during the 1st millennium BCE.

The oldest is the sutra attributed to Baudhayana, possibly compiled around 800 BCE to 600 BCE while the youngest content may date to about 200 CE. **So, Option (b) is not correct.**

The maritime history of Indian shipbuilding begins right from the time of civilisation in Harappa and Mohenjo-Daro. The Rig-Veda – one of the four Vedas (Hindu holy writings) – documents about the variously termed parts of a vessel in the oldest existing Indian language: the Sanskrit.

Also, other detailing about the ancient marine industry is documented in the Arthashastra and various other writings of the ancient Indian folk-lore. In the context of these documentations, it needs to be noted that the ancient maritime India was also majorly influenced by the then-prevailing system of societal superiority.

Since the boats of that era were built of wood, there were stringent specifications and protocols laid down for the materials to be used. There were also numerous other superstitious beliefs that were documented in a book known as the Yuktikalpataru, regarded to be published around the 6th century AD. **So, Option (c) is correct.**

The Sushruta Samhita is an ancient Sanskrit text on medicine and surgery, and one of the most important such treatises on this subject to survive from the ancient world. The Sushruta Samhita was composed in 1st millennium BCE by "elder Sushruta" consisting of five books and 120 chapters, which was redacted and expanded with Uttara-tantra as the last layer of text in 1st millennium CE, bringing the text size to six books and 184 chapters. **So, Option (d) is not correct.**

SOURCE:-

themes

21. Arrange the following Indian States in the increasing order of fruit production:

- 1. Uttar Pradesh**
- 2. Andhra Pradesh**
- 3. Tamil Nadu**
- 4. Chhattisgarh**

Select the correct answer using the code given below.

(a) 3-4-2-1

(b) 4-3-1-2

(c) 3-4-1-2

(d) 4-3-2-1

EXPLANATION:-

Rank	States	Production (in '000 MT)
1	Andhra Pradesh	13939.1
2	Maharashtra	9785
3	Gujarat	8413.2
4	Tamil Nadu	6699.9
5	Karnataka	6619.6
6	Madhya Pradesh	5450
7	Uttar Pradesh	5176.1
8	Bihar	4249.2
9	West Bengal	3172.5
10	Kerala	2583.9

So, Option (b) is correct.

22. Consider the following statements about the State Election Commissions in India:

- They are vested with the powers to conduct elections to Corporations, Municipalities and other Local Bodies.**
- They function independently from the Election Commission of 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:

The State Election Commissions are constitutional bodies vested with the powers of conduct of elections to Panchayats, Corporations, Municipalities and other Local Bodies as per Articles 243K, 243ZA. **So, Statement 1 is correct.**

The State Election Commissions are independent of the Election Commission of India. They are created for superintendence, direction and control of the preparation of electoral rolls and the conduct of all elections to the panchayats, Corporations, Municipalities and other Local Bodies. It

consists of a state election commissioner to be appointed by the governor. His conditions of service and tenure of office shall also be determined by the governor. He shall not be removed from the office except in the manner and on the grounds prescribed for the removal of a judge of the state high court. His conditions of service shall not be varied to his disadvantage after his appointment. **So, Statement 2 is correct.**

SOURCE:

Indian polity by M Laxmikanth

23. Consider the following passage:

2. “It is the world’s largest dedicated fund helping developing countries reduce their greenhouse gas emissions and enhance their ability to respond to climate change. It was set up by the United Nations Framework Convention on Climate Change (UNFCCC) in 2010. It launched its initial resource mobilisation in 2014. These funds come mainly from developed countries, but also some developing countries, regions, and one city. Its activities are aligned with the priorities of developing countries through the principle of country ownership, and the Fund has established a direct access modality so that national and sub-national organisations can receive funding directly, rather than only via international intermediaries.”

3. Which one of the following financial mechanism is mentioned in the above passage?

- (a) Global Environmental Facility
- (b) Adaptation Fund
- (c) **Green Climate Fund**
- (d) REDD-plus Fund

EXPLANATION:

The Green Climate Fund (GCF) is the world’s largest dedicated fund helping developing countries reduce their greenhouse gas emissions and enhance their ability to respond to climate change. It was set up by the United Nations Framework Convention on Climate Change (UNFCCC) in 2010. GCF has a crucial role in serving the Paris Agreement, supporting the goal of keeping average global temperature rise well below 2 degrees C. It does this by channelling climate finance to developing countries, which have joined other nations in committing to climate action.

GCF launched its initial resource mobilisation in 2014, and rapidly gathered pledges worth USD 10.3 billion. These funds come mainly from developed countries, but also from some developing countries, regions, and one city.

GCF’s activities are aligned with the priorities of developing countries through the principle of country ownership, and the Fund has established a direct access modality so that national and sub-national organisations can receive funding directly, rather than only via international intermediaries. **So, Option (c) is correct.**

ADDITIONAL INFORMATION:

Green Climate Fund (GCF)

- Responding to the climate challenge requires collective action from all countries, including by both public and private sectors. Among these concerted efforts, advanced economies have agreed to jointly mobilize significant financial resources. Coming from a variety of sources, these resources address the pressing mitigation and adaptation needs of developing countries.
- The Fund pays particular attention to the needs of societies that are highly vulnerable to the effects of climate change, in particular Least Developed Countries (LDCs), Small Island Developing States (SIDS), and African States.
- GCF aims to catalyse a flow of climate finance to invest in low-emission and climate-resilient development, driving a paradigm shift in the global response to climate change.
- Our innovation is to use public investment to stimulate private finance, unlocking the power of climate-friendly investment for low emission, climate resilient development. To achieve maximum impact, GCF seeks to catalyse funds, multiplying the effect of its initial financing by opening markets to new investments.
- GCF invests in adaptation and mitigation activities in developing countries, managing a project portfolio that is implemented by its partner organisations, known as Accredited Entities.

SOURCE:

<https://www.greenclimate.fund/about>

24. The Tishreen Revolution, also known as the October revolution, recently seen in the news in the context of

- (a) Syria
- (b) Iraq**
- (c) Iran
- (d) Yemen

EXPLANATION:

The 2019 Iraqi protests have been named Tishreen Revolution or October Revolution or Iraqi Intifada. It was started in October 2019 in social media by civil activists. IT then spread to the northern and southern provinces of the country. The protests were against the 16 years of corruption in the country. It also aimed to stop Iranian intervention in Iraq.**So. Option (b) is correct.**

ADDITIONAL INFORMATION:

- The protests do not appear to be coordinated by a particular political group.
- The inadequacy of state services and the lack of jobs are the principal reasons for public anger.
- A series of political moves by the government has contributed, especially the demotion of a popular wartime military officer for reasons that have not been fully explained.
- Some at the demonstrations were protesting over the commander's removal.

SOURCE:

<https://www.thehindu.com/news/international/iraqi-cleric-asks-followers-to-stop-stir-clear-the-roads/article30721682.ece>

25. Which of the following reason(s) facilitate the dominance of canal irrigation in the Northern plains of India?

- 1. Minimal change in relief**
- 2. Hard rock structure**
- 3. The dominance of Perennial rivers**

Select the correct answer using the code given below.

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

EXPLANATION:-

Minimal change in relief makes it easier for canal construction. So, Statement 1 is correct.
Hard rock structure is best suitable for tank construction. So, Statement 2 is not correct.
Dominance of Perennial rivers is very important for regular supply for water through canals. So, Statement 3 is correct.

ADDITIONAL INFORMATION:

Canal irrigation is the most important form of irrigation in India. It is cheaper. About half of 165.97 lakh hectare land was irrigated by canals during 2008-09 from which half of irrigated land concentrated in the Northern plain. If we calculate it statewise, then 91.72 % of irrigated area in Jammu & Kashmir, 66.24 % in Chhattisgarh, 64.7 % in Odisha, 44.28% in Haryana and 34.63 % in Andhra Pradesh is irrigated by canals. The maximum part of the total irrigated area of the country by canals is in Uttar Pradesh. Other major states where irrigation is done by canals are Madhya

Pradesh, Andhra Pradesh, Haryana, Punjab and Bihar. There are two types of Canal which is discussed below:

Inundation Canals: They are taken out from the rivers and do not have any kind of weir at their head to regulate the flow of water from the river. These types of Canals are found on the Sutlej-Ganga plains and Brahmaputra valley.

Perennial Canals: These canals maintain its flow of water throughout the year even during winter season and draw their water either from rivers or from reservoir of the river projects. A weir is built below the intake of the canal, the intake itself being regulated by sluice gates.

SOURCE:-

Geography NCERT

26. If you want to see the nesting sites of Olive Ridley Turtles naturally, then you may visit which of the following places in India?

- 1. Gahirmatha Marine Sanctuary, Odisha**
- 2. Rushikulya river Mouth, Odisha**
- 3. Kolleru Lake, Andhra Pradesh**
- 4. Velas Beach of Ratnagiri, Maharashtra**

Select the correct answer using the code given below.

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

EXPLANATION:

Olive ridley sea turtle is a big species of sea turtle found in the world, primarily in the Indian Oceans. These turtles are best known for their unique mass nesting in Indian beaches, along the coast of Odisha near Gahirmatha beach. The following are 5 Nesting Grounds of Olive Ridley Sea Turtles in India

- Gahirmatha Beach, Odisha
- Rushikulya River Mouth, Odisha
- Devi River Mouth, Odisha
- Marina Beach, Chennai
- Velas Beach, Ratnagiri

So, Option (c) is correct.

ADDITIONAL INFORMATION:

Gahirmatha Beach, Odisha

- Gahirmatha beach of Odisha is largest mass nesting site for the olive ridley turtles in India. The beach is now now a part of the Bhitarkanika Wildlife Sanctuary surrounded by mangroves forest and best place in India to spot Olive Ridley Sea Turtles.
- Gahirmatha Marine Wildlife Sanctuary is very popular tourist attraction of Odisha, located in Bhitarkanika Mangroves and home to Olive ridley turtles, Indian python, King cobra, saltwater crocodile and water monitor.

Rushikulya River Mouth, Odisha

- The river flows from the Daringbadi hill station and meets the Bay of Bengal at Puruna Bandha in Ganjam, create Rushikulya river beach estuary. The mouth of the Rushikulya river is another best sites of olive ridley sea turtles in India and beach in Odisha.

Devi River Mouth, Odisha

- Devi river is a distributaries of Mahanadi that joins Bay of Bengal and the river mouth serves as a nesting ground for olive ridley sea turtles in Odisha during their breeding season. Rambha is another notified area in Odisha known to be a nesting site.

Marina Beach, Chennai

- Marina beach of Chennai is the longest natural urban beach in India, Also one of the most crowded beaches of South India. The beach and its rich ecosystem is a protected site for olive ridley turtle nests especially along the Neelankarai section of the beach.

Velas Beach, Ratnagiri

- Versova beach of Ratnagiri is not only home to turtles but the mangroves surrounded by coconut trees and a famous ecotourism place in Maharashtra where you can see endangered Olive Ridley sea turtles.
- After 20 years Versova beach of Mumbai is now a new home to Ridley Sea Turtle in India, The beach was clearn by an environmentalist and team of Afroz Shah.

27. Which one of the following Bodhisattva depicted as a person wielding a flaming sword in his right hand?

- (a) Manjusri
- (b) Ksitigarbha
- (c) Samantabhadra
- (d) Vajrapani

EXPLANATION:-

Manjusri is described as a male Bodhisattva wielding a flaming sword in his right hand. He is known as Wenshu in China and Jampelyang in Tibet. **So, Option (a) is correct.**

ADDITIONAL INFORMATION:

In Buddhism, a bodhisattva is an enlightened being (Bodhi). The Sattva part of the word means the quality (Tva) of truth or goodness (Sat) implying equanimity. Traditionally, a bodhisattva is anyone who, motivated by great compassion, has generated Bodhicitta, which is a spontaneous wish to attain Buddhahood for the benefit of all sentient beings.

Bodhisattva is defined as someone who has essence of enlightenment. Bodhisattva refers to all who are destined to become Buddhas in this life or another life.

There are 8 important Bodhisattvas who are as following:

Avalokitesvara

He is described as holding a lotus flower. He is known as Guanshiyin Pusa in China.

Manjusri

He is described as a male Bodhisattva wielding a flaming sword in his right hand. He is known as Wenshu in China and Jampelyang in Tibet.

Samantabhadra

It means Universal Worthy and he is associated with meditation. He is manifested through action and he is a major figure in Flower Garland Sutra.

Ksitigarbha

He is described as a Buddhist monk in the Orient/ East Asia. It means Earth Womb. He is revered as the guardian of children and patron deity of deceased children. He carries a staff.

Maitreya

He is also known as Ajita Bodhisattva. It is believed that he will arrive when oceans will decrease in size. He keeps a Kumbha or phalial in his hand and is destined to rule Varanasi (Pure Land).

Vajrapani

He is described as one of the 3 protective deities around Buddha, other are Manjusri and Avlokiteshwara. Vajrapani manifests Buddha's power while Buddha's wisdom is manifested Buddha's wisdom and Avlokiteshwara manifests Buddha's compassion.

Sadaparibhuta

He is a Bodhisattva which manifests never disparaging spirit.

Akasagarbha

He is boundless as space. He was the twin brother of Ksitigarbha. He manifests wisdom.

SOURCE:-

nitin singhania- art and culture

28. Which of the following best explains the term “Long Term Repo Operation” (LTRO) which was recently introduced by Reserve Bank of India (RBI)?

- (a) Under LTRO, banks can get long-term funds from the RBI with government security as collateral**
- (b) Under LTRO, the repo rate will be set by the Union Ministry of Finance and not by the Monetary Policy Committee during the fiscal crisis
- (c) Under LTRO, banks can borrow from the RBI at repo rate without any collateral
- (d) Under LTRO, the Government of India can get long-term funds from the RBI to finance the fiscal deficit

EXPLANATION:

Long Term Reverse Repo Operation (LTRO) is a mechanism to facilitate the transmission of monetary policy actions and the flow of credit to the economy. This helps in injecting liquidity in the banking system.

Under LTRO, RBI will conduct term repos of one-year and three-year tenors of appropriate sizes for up to a total amount of Rs 1 lakh crore at the policy repo rate. **So, Option (a) is correct.**

ADDITIONAL INFORMATION:

- RBI introduced LTRO with a view to assuring banks about the availability of durable liquidity at reasonable cost relative to prevailing market conditions, and to further encourage banks to undertake maturity transformation smoothly and seamlessly so as to augment credit flows to productive sectors.
- LTRO is a measure that market participants expect will bring down short-term rates and also boost investment in corporate bonds. These new measures coupled with RBI's earlier introduced 'Operation Twist' are an attempt by the central bank to manage bond yields and push transmission of earlier rate cuts.

SOURCE:

<https://www.thehindu.com/business/Economy/rbi-gets-48856-cr-in-bids-for-ltros/article31026008.ece>

29. Consider the following statements about the Chief of Defence Staff (CDS) in India:

- 1. The CDS will lead the Department of Military Affairs under the Union Ministry of Defence and function as its Secretary.**
- 2. The CDS will function as the Military Advisor to the Nuclear Command Authority.**
- 3. The CDS cannot recommend Union Defence Ministry about the defence procurement from foreign countries.**
- 4. The CDS would be a four-star general belonging to any of the three sectors of the Indian armed forces.**

Select the correct answer using the code given below.

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

EXPLANATION:

The CDS would head a newly-created Department of Military Affairs (DMA), under the Ministry of Defence, as its secretary. **So, Statement 1 is correct.**

The CDS will function as the Military Advisor to the Nuclear Command Authority. **So, Statement 2 is correct.**

The CDS cannot recommend about bigticket defence procurements. **So, Statement 3 is correct.**

The CDS would be a four-star general belonging to any of the three sectors of the Indian armed forces. **So, Statement 4 is correct.**

ADDITIONAL INFORMATION:

- Chief of Defence Staff (CDS) is the professional service chief, head of the Indian Armed Forces, the senior-most uniformed military advisor to the Government of India, and ex-officio Secretary to the Government of India and the head of Department of Military Affairs under the Ministry of Defence.
- The position was first officially suggested in 1999 following the Kargil War through the recommendations of the Kargil Review Committee. On 24 December 2019, the Cabinet Committee on Security (CCS) formally announced the creation of the position, a four-star general, a tri-service chief, that shall lead the defence forces.

- It is considered that the Chief of Defence Staff is a critical position in today's era of hybrid warfare, and will help increase coordination, tri-service effectiveness and integrate overall combat capabilities of Indian armed forces.
- The Defence Secretary remains as the main defence advisor, whilst the CDS has been sanctioned the role of being the main military advisor, acting as the single-point military advisor to the government and Prime Minister.
- India was the only large democracy which did not have a single point military advisor; with all P5 countries having one.
- The CDS is a four-star officer selected from among the serving officers of the Indian Armed Forces. While being "first among equals" among the service chiefs, the CDS would be a single-point military advisor the CDS will not hold any military command.
- The holder of the post would also be the head of all tri-service command structures, assisted by a deputy, the Vice Chief of the Defence Staff to replace the post of Chief of Integrated Defence Staff.
- The CDS would head a newly-created Department of Military Affairs (DMA), under the Ministry of Defence, as its secretary.
- Apart from heading the DMA, the CDS will also be the Permanent Chairman of the Chiefs of Staff Committee (PC-CoSC). He will also be the Principal Military Adviser to the Minister of Defence.
- As the Permanent Chairman of Chiefs of Staff Committee, CDS will perform the following functions:
 - The Chief of Defence Staff is described by officials as the "first among equals" among service chiefs.
 - The CDS will be tasked with trimming weapons procurement procedures and integrating operations of the Indian armed forces- Army, Air Force and Navy.
 - Apart from being the military advisor for the government, the CDS will also head the Department of Military Affairs.
 - The CDS will have the authority to direct the service chiefs of Army, Navy and Air Force and will also have the authority to create theatre commands as and when needed.
 - Command tri-service agencies, organisations, and commands including those related to cyber and space.
 - CDS will be member of Defence Acquisition Council chaired by the Minister of Defence and Defence Planning Committee chaired by the National Security Advisor.
 - Function as the Military Advisor to the Nuclear Command Authority.
 - Bring about jointness and ensure optimal utilisation of infrastructure in the three Services.
 - Implement Five-Year Defence Capital Acquisition Plan (DCAP), and Two-Year roll-on Annual Acquisition Plans (AAP), as a follow up of Integrated Capability Development Plan (ICDP).

- Bring about reforms in the functioning of three Services aimed at augmenting combat capabilities of the Armed Forces by reducing wasteful expenditure.
- Assign inter-Services prioritisation to capital acquisition proposals.
- The CDS's salary and perquisites will be same as the service chiefs. The CDS will come under the Right to Information Act.

SOURCE:

<https://economictimes.indiatimes.com/news/defence/government-creates-department-of-military-affairs-to-be-headed-by-cds/articleshow/73044897.cms?from=mdr>

30. With reference to the Higher courts in India, consider the following statements:

- 1. The strength of Supreme Court Judges can be increased by the Parliament of India.**
- 2. The strength of High Court Judges will be determined by the order of the president of India.**
- 3. By Article 142 of the Indian Constitution, the Supreme Court can conduct its proceedings through video conference.**
- 4. President of India, by issuing an order, can direct High Courts to conduct its proceedings through video conference.**

Which of the statements given above are correct?

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

EXPLANATION:

The strength of Supreme Court Judges can be increased through Simple Majority of the Parliament. Lok Sabha has passed Supreme Court (Number of Judges) Amendment Bill, 2019 to increase the number of Supreme Court judges from the present 30 to 33 (excluding Chief Justice of India). **So, Statement 1 is correct.**

Every high court (whether exclusive or common) consists of a chief justice and such other judges as the president may from time to time deem necessary to appoint. Thus, the Constitution does not specify the strength of a high court and leaves it to the discretion of the president. Accordingly, the President determines the strength of a high court from time to time depending upon its workload. **So, Statement 2 is correct.**

The Supreme Court of India invoked its power under Article 142 to validate all proceedings through video-conferencing — not only those which were to take place in future but also those which had already been conducted. Supreme court can extend this High Court also. **So, Statement 3 is correct and Statement 4 is not correct.**

SOURCE:

<https://economictimes.indiatimes.com/news/politics-and-nation/presidents-nod-to-increase-number-of-supreme-court-judges/articleshow/70621415.cms?from=mdr>

31. Which of the following species are recently declared as the Endangered Migratory Species under the Convention on the Conservation of migratory species (CMS)?

- 1. Great Indian Bustard**
- 2. Asian Elephant**
- 3. Bengal Florican**
- 4. Royal Bengal Tiger**

Select the correct answer using the code given below.

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

EXPLANATION:

Ten endangered species of migratory animals/birds from across the globe, including three from India (**Great Indian Bustard, Asian Elephant and Bengal Florican**), will be included in a special global list for protection under the 'Convention on Conservation of Migratory Species' (CMS) — an international treaty to protect such species throughout their range countries.

Other 7 from around the world are Jaguar (proposed by Costa Rica, Argentina, Bolivia, Paraguay), Whitetip shark (Brazil), Little Bustard (EU Nations), Urial (Tajikistan, Iran, Uzbekistan), Antipodean Albatross (New Zealand, Australia, Chile), Smooth Hammerhead Shark (Brazil), and Tope Shark (EU Nations). **So, Option (c) is correct.**

ADDITIONAL INFORMATION:

- The Convention on the Conservation of Migratory Species of Wild Animals, also known as the Convention on Migratory Species (CMS) or the Bonn Convention, is an international agreement that aims to conserve migratory species within their migratory ranges.
- The Agreement was signed under the auspices of the United Nations Environment Programme and is concerned with conservation of wildlife and habitats on a global scale.
- Signed in 1979 in Bonn, Germany, the Convention entered into force in 1983. As of September 2019, there were 129 Member States to the Convention. The depositary is the government of the Federal Republic of Germany.

- The CMS is the only global, and United Nations-based, intergovernmental organization established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species.
- The CMS, and its daughter Agreements, determine policy and provide further guidance on specific issues through their Strategic Plans, Action Plans, resolutions, decisions and guidelines.
- The CMS Family covers a great diversity of migratory species. The Appendices of CMS include many mammals, including land mammals, marine mammals and bats; birds; fish; reptiles and one insect. Among the instruments, AEWA covers 254 species of birds that are ecologically dependent on wetlands for at least part of their annual cycle. EUROBATS covers 52 species of bat, the Memorandum of Understanding on the Conservation of Migratory Sharks seven species of shark, the IOSEA Marine Turtle MOU six species of marine turtle and the Raptors MoU 76 species of birds of prey.
- Appendix I – Threatened Migratory Species
 - Migratory species threatened with extinction are listed on Appendix I of the Convention. Parties that are Range States to Appendix I species are obliged to afford them strict protection. CMS Parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them. Besides establishing obligations for each State joining the Convention, CMS promotes concerted action among the Range States of many of these species.
- Appendix II – Migratory Species requiring international cooperation
 - Migratory species that need or would significantly benefit from international cooperation are listed in Appendix II of the Convention. These species, either individually or by taxonomic group, are the basis for establishing instruments – regional or global – under CMS. For this reason, the Convention encourages the Range States to conclude global or regional Agreements.

SOURCE:

<https://timesofindia.indiatimes.com/home/environment/flora-fauna/modi-to-open-global-meet-on-conservation-of-endangered-migratory-species-in-gandhinagar-on-feb-17/articleshow/74048697.cms>

32. Consider the following facts about a historical personality in India:

- 1. He was one of the founders of the Jamia Milia Islamia University.**
- 2. His birth anniversary is observed as Unani Day as he was an expert in Unani Medicine.**
- 3. He was the acting President in the Ahmadabad Session of the Indian National Congress in 1921 on the behalf of CR Das.**

Which one of the following personalities is described by the facts mentioned above?

- (a) Badruddin Tyabji
- (b) Abul Kalam Azad
- (c) Hakim Ajmal Khan**
- (d) Mukhtar Ahmed Ansari

EXPLANATION:

Mohammad Ajmal Khan (11 February 1868 – 29 December 1927), better known as Hakim Ajmal Khan, was a physician in Delhi, India, and one of the founders of the Jamia Millia Islamia University. He also founded another institution, Ayurvedic and Unani Tibbia College, better known as Tibbia College, situated in Karol Bagh, Delhi.

World Unani Day has observed every year on 11th February. This day is celebrated every year to mark the birth anniversary of great Unani scholar and social reformer Hakim Ajmal Khan.

In 1921, he was elected President of the Indian National Congress in place of the previously elected President, C. R. Das, who was arrested well before the session started. **So, Option (c) is correct.**

ADDITIONAL INFORMATION:

Badruddin Tyabji

- Badruddin Tyabji (10 October 1844 – 19 August 1906) was an Indian lawyer, activist and politician during British Raj.
- Tyabji was the first Indian to practice as a barrister of the High Court of Bombay who served as the third President of the Indian National Congress.
- He was one of the founding member and first Muslim president of Indian National Congress.
- Tyabji was nominated to the Bombay Municipal Corporation in 1873.
- He was a member of the University of Bombay senate between 1875–1905 and appointed to the Bombay Legislative Council in 1882, resigning in 1886 owing to ill health.
- Along with Pherozeshah Mehta and Kashinath TrimbakTelang, he was largely responsible for forming the Bombay Presidency Association in 1885, a body which championed Indian interests and hosted the first meeting of the Indian National Congress in Bombay at the end of 1885

Abul Kalam Azad

- Abul Kalam Azad was an Indian scholar, Islamic theologian, independence activist, and a senior leader of the Indian National Congress during the Indian independence movement.
- Following India's independence, he became the First Minister of Education in the Indian government Minister of Human Resource Development (until 25 September 1958, Ministry of Education).

- He is commonly remembered as Maulana Azad; the word Maulana is an honorific meaning 'Our Master' and he had adopted Azad (Free) as his pen name. His contribution to establishing the education foundation in India is recognised by celebrating his birthday as National Education Day across India.
- As a young man, Azad composed poetry in Urdu, as well as treatises on religion and philosophy. He rose to prominence through his work as a journalist, publishing works critical of the British Raj and espousing the causes of Indian nationalism.
- Azad became the leader of the Khilafat Movement, during which he came into close contact with the Indian leader Mahatma Gandhi. Azad became an enthusiastic supporter of Gandhi's ideas of non-violent civil disobedience, and worked to organise the non-co-operation movement in protest of the 1919 Rowlatt Acts. Azad committed himself to Gandhi's ideals, including promoting Swadeshi (indigenous) products and the cause of Swaraj (Self-rule) for India. In 1923, at an age of 35, he became the youngest person to serve as the President of the Indian National Congress.
- In October 1920, Maulana Abul Kalam Azad was elected as a member of foundation committee to establish Jamia Millia Islamia at Aligarh in U. P. without taking help from British colonial government.
- Azad was one of the main organizers of the Dharasana Satyagraha in 1931, and emerged as one of the most important national leaders of the time, prominently leading the causes of Hindu-Muslim unity as well as espousing secularism and socialism. He served as Congress president from 1940 to 1945, during which the Quit India rebellion was launched. Azad was imprisoned, together with the entire Congress leadership. He also worked for Hindu-Muslim unity through the Al-Hilal newspaper.

Mukhtar Ahmed Ansari

- Mukhtar Ahmad Ansari was an Indian physician and nationalist who was a member of the Foundation Committee of Jamia Millia Islamia, a prominent Islamic university established in 1920 in Delhi. The institution's formation, in which Ansari was heavily involved, was based on nationalist rejection of British colonial rule.
- Ansari studied medicine at Madras Medical College before receiving a scholarship to study in England. While in that country, Ansari supposedly met several members of the Indian National Congress, a major political force in the movement for Indian independence from Great Britain. Following his return to India in 1910, he set up a medical practice in Delhi. Drawn to the national movement, he joined the Congress and the Muslim League. He later served as president for both (Muslim League, 1918–1920; Indian National Congress, 1927).
- Ansari was increasingly conscious of the need for quality educational institutions in India. In 1928 he became chancellor of Jamia Millia Islamia, a title he held until his death.

SOURCE:

<http://www.newsonair.com/News?title=Today-is-World-Unani-Day&id=381161>

33. Which one of the following countries has the largest percentage of their exports composed of Oil and Natural Gas?

- (a) Nigeria**
- (b) Russia
- (c) Ecuador
- (d) Jordan

EXPLANATION:

The oil and gas sector accounts for about 10 per cent of gross domestic product, and petroleum exports revenue represents around 86 per cent of total exports revenue. **So option (a) is correct.**

ADDITIONAL INFORMATION:

- The most populous country within OPEC, Nigeria has around 203 million inhabitants. Located on the Gulf of Guinea on Africa's western coast, Nigeria covers an area of around 924 thousand square kilometres. Abuja, the capital since 1991, has a population of more than one million. English is Nigeria's official language, although many local languages such as Hausa, Yoruba, Igbo and Ijaw are also spoken.
- Apart from petroleum, Nigeria's other natural resources include natural gas, tin, iron ore, coal, limestone, niobium, lead, zinc and arable land. The oil and gas sector accounts for about 10 per cent of gross domestic product, and petroleum exports revenue represents around 86 per cent of total exports revenue. Its currency is the naira.
- Nigeria's Head of State and Commander-in-Chief of the Armed Forces is HE Muhammadu Buhari. The country joined OPEC in 1971.
- Conservationists say that Nigeria's unique rainforest region is amongst the richest in Africa. The country is also home to numerous important game reserves, such as the Yankari and Kainji national parks.
- Oil was first discovered in Oloibiri, in Nigeria's Bayelsa State, in 1956.

SOURCE:

https://www.opec.org/opec_web/en/about_us/167.htm

34. In the third century, a language served as a lingua franca of major parts of India. Later, Sanskrit acquired the same position. Based on the above statement, that language is

- (a) Pali
- (b) Apabhramsa
- (c) Magadhi
- (d) **Prakrit**

EXPLANATION:

The Prakrits are a group of vernacular Middle Indo-Aryan languages used in India from around the 3rd century BCE to the 8th century CE. The term Prakrit is usually applied to the middle period of Middle Indo-Aryan languages, excluding earlier inscriptions and the later Pali. The Prakrits were used contemporaneously with the prestigious Classical Sanskrit of higher social classes.

In the third century BC, Prakrit language served as a lingua franca of major parts of India. Ashoka's inscriptions were inscribed in Prakrit language mainly in Brahmi script. **So, Option (d) is correct.**

SOURCE:

India's Ancient Past By R.S. Sharma

35. Which of the following is/are the consequence(s) of drying of soils due to climate change?

- 1. Plants can absorb more carbon dioxide.**
- 2. Microorganisms in the soil become more productive.**
- 3. The decrease in soil pH level.**

Select the correct answer using the code given below.

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

EXPLANATION:

Climate change can increase the absorption of carbon dioxide in plants. When soils dry, it will be counterproductive where plants' growth is restricted that reduces the absorption of carbon dioxide.

So, Statement 1 is not correct.

The increased microbial and root activity in the soil would entail higher CO₂ partial pressure in soil air and CO₂ activity in soil water, hence increased rates of plant nutrient release (e.g., K, Mg, micronutrients) from weathering of soil minerals. **So, Statement 2 is correct.**

Most soils would not be subject to rapid pH changes resulting from climate change. Exceptions might be found in potential acid sulphate soils, extensive in some coastal plains and estuaries, if they become subject to increasingly long dry seasons. Even though most of such soils are clays with moderate or high cation exchange capacity, the amounts of acid liberated in such soils upon

oxidation generally exceed this rapid buffering capacity. Therefore, pH values may temporarily reach 2.5 to 3.5 and a small part of the clay fraction may be decomposed as indicated under Processes in soils, above. This then buffers the pH generally between 3.5 and 4 in the long run. **So, Statement 3 is correct.**

ADDITIONAL INFORMATION:

- A gradual, continuing rise in atmospheric CO₂ concentration entailing increased photosynthetic rates and water-use efficiencies of vegetation and crops, hence increases in organic matter supplies to soils.
- Minor increases in soil temperatures in the tropics and subtropics; moderate increases and extended periods in which soils are warm enough for microbial activity (warmer than about 5°C) in temperate and cold climates, parallel to the changes in air temperatures and vegetation zones.
- Minor increases in evapotranspiration in the tropics to major increases in high latitudes caused both by temperature increase and by extension of the growing period.
- Increases in amount and in variability of rainfall in the tropics; possible decrease in rainfall in a band in the subtropics poleward of the present deserts; minor increases in amount and variability in temperate and cold regions. Peak rainfall intensities could increase in several regions.
- A gradual sea-level rise causing deeper and longer inundation in river and estuary basins and on levee backslopes, and brackish-water inundation leading to encroachment of vegetation that accumulates pyrite in soils near the coast.

36. Consider the following statements about Plasma Therapy:

- 1. It seeks to make use of the antibodies developed in the recovered patient against the same disease.**
- 2. In India, the plasma therapy had been used to treat diseases such as mumps, measles, polio and flu.**

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 therapy, like blood transfusion, harvests the antibody from a recovered patient and ingest into a sick person. Helped by the antibody, the immune system mounts robust combat on the virus. **So, Statement 1 is correct.**

The method has been used in the past to treat diseases such as polio, measles, and mumps, in the 1918 flu epidemic. So, in India, the plasma therapy had been used to treat diseases such as mumps, measles, polio and flu. **So, Statement 2 is correct.**

ADDITIONAL INFORMATION:

Convalescent-plasma therapy

- When a pathogen like novel coronavirus infects, our immune systems produce antibodies.
- The antibodies span out to identify and mark the invading virus. White blood cells attach the identified intruders, and the body gets rid of the infection.
- The therapy, like blood transfusion, harvests the antibody from a recovered patient and ingest into a sick person. Helped by the antibody, the immune system mounts robust combat on the virus.
- This therapy is akin to passive immunization. When a vaccine is administered, the immune system produces the antibodies. Thus, in a later date, when the vaccinated person is infected by that pathogen, the immune system releases the antibodies and neutralise the infection.
- Vaccination provides lifelong immunity. In the case of passive antibody therapy, the effect lasts only up to the time the antibodies injected remain the bloodstream. The protection given is temporary.

SOURCE:

<https://www.thehindu.com/sci-tech/health/study-shows-good-results-with-plasma-treatment-for-covid-19/article31194437.ece>

37. Which one of the following State/Union Territory has the oldest rock structure in the Indian subcontinent?

- (a) Karnataka**
- (b) Uttar Pradesh
- (c) Jammu and Kashmir
- (d) Gujarat

EXPLANATION:-

Karnataka has archaean rock system, which is the oldest rock system in india. **So, Option (a) is correct.**

ADDITIONAL INFORMATION:

These rocks have been termed as a result of the hot-molten earth becoming cold. These are the oldest and primary rocks.

Their original form has been destroyed because of too much metamorphosis.

There are no fossils found in them.

Gneiss is formed because of the metamorphosis of the igneous rocks. The Bundelkhand gneiss is the oldest one.

The rocks of the Archaean system are found mainly in Karnataka, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Orissa, Chotanagpur plateau in Jharkhand and the southern-eastern part of Rajasthan.

SOURCE:-

Indian physical geography NCERT.

38. With reference to the banking regulations in India, consider the following statements about the Capital Adequacy Ratio (CAR):

- 1. It is a measurement of a bank's available capital expressed as a percentage of a bank's risk-weighted credit exposures.**
- 2. It applies to Scheduled Commercial Banks, Regional Rural Banks and Small Finance Banks.**

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:

Capital-to-risk weighted assets ratio or capital adequacy ratio measures a bank's financial stability by measuring its available capital as a percentage of its risk-weighted credit exposure. **So, Statement 1 is correct.**

Capital adequacy ratio is decided by central banks and bank regulators to prevent commercial banks from taking excess leverage and becoming insolvent in the process. In India, it is applicable to Scheduled Commercial Banks, Regional Rural Banks (RRBs) and Small Finance Banks. **So, Statement 2 is correct.**

ADDITIONAL INFORMATION:

- Capital adequacy ratio measures how much capital does a bank has with it as a percentage of its total credit exposure.

- Bank regulators enforce this ratio to ensure credit discipline in order to protect depositors and promote stability and efficiency in the financial system.
- The formula used to measure Capital Adequacy Ratio is = (Tier I + Tier II + Tier III (Capital funds)) / Risk weighted assets)
- Here Tier I capital is a bank's core capital consisting of shareholders' equity and retained earnings; while Tier II capital includes revaluation reserves, hybrid capital instruments, and subordinated term debt. Tier III capital consists of Tier II capital plus short-term subordinated loans.
- The risk-weighted assets take into account credit risk, market risk and operational risk. As of 2019, under Basel III, a bank's tier 1 and tier 2 capital must be at least 8 per cent of its risk-weighted assets.
- The minimum capital adequacy ratio (including the capital conservation buffer) is 10.5 per cent. The capital conservation buffer recommendation is designed to build up banks' capital, which they could use in periods of stress.

SOURCE:

<https://economictimes.indiatimes.com/markets/stocks/news/what-is-capital-adequacy-ratio-for-banks/articleshow/72979397.cms>

39. Consider the following statements about the Law Commission of India:

- 1. One of the important tasks of this commission is to recommend qualified judges to the 'Collegium of Supreme Court Judges' for appointments to Higher courts in India.**
- 2. It is an autonomous and independent body function directly under the President of India.**
- 3. The first Law Commission was established during the Colonial era in 1834 by the Charter Act of 1833.**

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

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

EXPLANATION:

The Collegium is comprised of the Chief Justice of India along with four other senior judges. This system is in practice since October 28, 1998. Collegium system is used for appointments and transfers of judges in High courts and Supreme Courts. Law Commission of India has no role to recommend the qualified Judges to the Collegium for Higher courts. **So, Statement 1 is not correct.**

Law Commission of India is an executive body established by an order of the Government of India.

Its major function is to work for legal reform. Its membership primarily comprises legal experts, who are entrusted a mandate by the Government. The Commission is established for a fixed tenure and works as an advisory body to the Ministry of Law and Justice. **So, Statement 2 is not correct.**

The first Law Commission was established during the British Raj era in 1834 by the Charter Act of 1833. **So, Statement 3 is correct.**

ADDITIONAL INFORMATION:

- Law Commission of India is an executive body established by an order of the Government of India. Its major function is to work for legal reform. Its membership primarily comprises legal experts, who are entrusted a mandate by the Government. The Commission is established for a fixed tenure and works as an advisory body to the Ministry of Law and Justice
- The first Law Commission was established during the British Raj era in 1834 by the Charter Act of 1833. It was presided by Lord Macaulay After that, three more Commissions were established in pre-independent India.
- The first Law Commission of independent India was established in 1955 for a three-year term. Since then, twenty one more Commissions have been established. The 20th Law Commission was established in 2013 under the Chairmanship of Supreme Court Judge, D.K Jain. Its tenure was fixed till 2015.
- The 21st Law Commission under Justice B.S. Chauhan(retd.) was established in 2015, and had tenure to August 31, 2018.
- The terms of reference of the Law Commission include the review and repeal of obsolete laws, the examination of existing laws & the revision of central Acts of general importance.
- Justice Balbir Singh Chauhan, a former judge of the Supreme Court was appointed Chairman of the 21st Law Commission on 10 March. One of the key issues pending before the Law Commission is a call on amending the Indian Penal Code (IPC) amid allegations of abuse and arbitrary use of the law.

40. Consider the following statements about the Sufi Movement in India:

- 1. Amir Khusrow was a famous disciple of Niyammad-ulla-Qadiri.**
- 2. Nasqabhandi order was popularized in India by Babur.**
- 3. Unlike the Suharwardis, the Chishti saints did not believe in leading a life of poverty.**

Which of the statements given above is/are correct?

(a) 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

EXPLANATION:-

Amir Khusrow was a famous disciple of Nizamuddin Auliya. So, Statement 1 is not correct.
Nasqabhandi This order was founded by Bahibillah and the followers were very orthodox compared to all other orders. This order was popularized in India by Babur who was deeply devoted to Naqshbandiyya leader Khwaja Ubaidullah Ahrar. So, Statement 2 is correct.
Unlike the Chishtis, the suhrawardi saints did not believe in leading a life of Poverty. They accepted the service of the state and held important posts mainly under Delhi Sultanate ruler Iltutmish. So, Statement 3 is not correct.

ADDITIONAL INFORMATION:

What is Sufi Movement?

- The 10th century A.D marks the important changes in the realm of ideas and beliefs in the Islamic religion - the rise of the Sufi mystic orders.
- The core concept of Sufi Movement is Darikh-i-Duniya / Wahad-ul-wahjud, meaning “Universal Brotherhood”. It outwardly rejected the religion and emphasized love and devotion to God and compassion towards all fellow human beings.
- Mystics, who are called Sufis, were persons of deep devotion who were disgusted by the display of wealth and degeneration of morals following the establishment of the Islamic empire.
- The Sufis were organized in 12 orders or Silsilahs. A Silsilah was generally led by a prominent mystic who lived in a Khanqah or hospice along with his disciples.
- The Sufi orders are broadly divided into two: Ba-shara – Those who followed the Islamic Law and Be-shara – Those who were not bound by the Islamic Law.
- The Sufi saints made themselves popular by adopting musical recitations called “Sama”, to create a mood of nearness to God.
- Qawwali is the form of sufi devotional music popular in South Asia and ghazal is a form of Qawwali.

What are the major Silsilahs followed in India?

- The four main Sufi orders – Chisti, Qadiriyya, Suhrawardiyya and Naqshbandi order were practiced in India.

Chisti Order

- The Saints of Chisti Order were lived in poverty and lead a hermit life. They did not accept State service. This order is primarily followed in Afghanistan and Indian Subcontinent.
- The Chisti order in India was established in India by Khwaja Muinuddin Chisti in 1192, shortly after the death of Prithvi Raj Chauhan.

- He died in 1236 and his tomb in Ajmer was constructed by Ghiasuddin Khalji of Malwa. Mohammed Bin Tuqlaq visited the tomb and later it came under State Management during Mughal Ruler Akbar's reign.
- One of the other notable Sufi saints was Khwaja Qutbuddin Bakhtiyar Kaki who organized work in Delhi and the contemporary Delhi Sultanate Ruler was Iltutmish who was deeply devoted to Chisti Order.
- Another famous Sufi saint was Nizamuddin Auliya and he adopted yogic breathing exercises, so much so that the yogis called him sidh or 'perfect.'
- Auliya's famous disciple was Amir Khusrow who is called as "father of Qawwali" and "Parrot of India" and introduced the Ghazal Style to India.
- After the death of Nasruddin Chiragh-i-Delhi in the 14th century, the chishtis order declined.

Suharwardi Order

- It entered India at the same time as the Chishtis and its activities were confined to the Punjab and Multan.
- This order was established in India by Bahauddin Zakanya.
- The Most well-known saints were Shaikh shihabuddin Suharwadi and Hamid-ud-din Nagori.
- Another Saint Shaikh Fakhruddin Ibrahim Iraqi composed a treatise called Hamat which is a commentary on the Unity of Being (Wahdat-al-Wujud) and he was highly respected by the Delhi Sultans from Alauddin Khilji to Muhammad Bin Tughluq.
- Unlike the Chishtis, the suharwardi saints did not believe in leading a life of Poverty. They accepted the service of the state and held important posts mainly under Delhi Sultanate ruler Iltutmish.

Qadri Order

- This order was established in India by Niyammad-ulla-Qadiri and was introduced in India over Babur period.
- A great follower of Qadri Order was Dara Shiko, who was the eldest son of the Mughal emperor Shah jahan.
- During Aurangazeb's reign, the Qadri order lost its patronage.

Nasqabhandi Order

- This order was founded by Bahibillah and the followers were very orthodox compared to all other orders.
- This order was popularized in India by Babur who was deeply devoted to Naqshbandiyya leader Khwaja Ubaidullah Ahrar.
- One of the disciples of Khwaja was Shaikh Ahmad Sirhindi who opposed all those practices and beliefs of Akbar and demanded re-imposition of Jizyah.
- Later he was imprisoned by Jahangir for claiming a status beyond that of the Prophet.

SOURCE:-

<https://www.iasparliament.com/current-affairs/the-sufi-movement>

41. In the context of Ecology, consider the following statements about the Peatland:

- 1. It is a terrestrial wetland ecosystem in which the production of organic matter exceeds its decomposition and net accumulation of peat results.**
- 2. It occurs only in the tropical climatic regions.**
- 3. They are the largest natural terrestrial carbon store and damaged peatlands are a major source of greenhouse gas emissions.**

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:

Peatland is a terrestrial wetland ecosystem in which the production of organic matter exceeds its decomposition and a net accumulation of peat results. So, Statement 1 is correct.
Peatlands are found in at least 175 countries and cover around 4 million km ² or 3% of the world's land area. The largest peat deposits are located in northern Europe, North America, and Southeast Asia. So, Statement 2 is not correct.
Peatlands are the largest natural terrestrial carbon store; the area covered by near natural peatland worldwide (>3 million km ²) sequesters 0.37 gigatonnes of carbon. Damaged peatlands are a major source of greenhouse gas emissions. So, Statement 3 is correct.

ADDITIONAL INFORMATION:

- **Peatlands are a type of wetlands which are among the most valuable ecosystems on Earth:** they are critical for preserving global biodiversity, provide safe drinking water, minimise flood risk and help address climate change.
- **Peatlands are the largest natural terrestrial carbon store;** the area covered by near natural peatland worldwide (>3 million km²) sequesters 0.37 gigatonnes of carbon dioxide (CO₂) a year – storing more carbon than all other vegetation types in the world combined.
- **Damaged peatlands are a major source of greenhouse gas emissions,** annually releasing almost 6% of global anthropogenic CO₂ emissions. Peatland restoration can therefore bring significant emissions reductions.

- **Countries are encouraged to include peatland restoration in their commitments to global international agreements**, including the Paris Agreement on climate change.

SOURCE:

<https://www.iucn.org/resources/issues-briefs/peatlands-and-climate-change>

42. Consider the following statements about the Lokpal in India:

1. **It has the authority to transfer or suspend public servants connected with the allegation of corruption.**
2. **It can directly inquire into any corruption charge against the Prime Minister of India independently.**

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**

43. Consider the following statements about the “State of India’s Birds 2020” report:

1. **This is the first comprehensive national-level assessment of the distribution range, trends in abundance, and conservation status for most of the bird species that regularly occur in India.**
2. **Migratory bird species show steeper declines than the resident bird species.**
3. **All four species of bustards in India have suffered a continuous population decline.**

Which of the statements given above is/are correct?

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

44. Consider the following statements about the “Custodian Banking” in India:

1. **All public sector banks must perform custodian banking function to Regional Rural Banks.**
2. **Public Sector Banks can perform custodian banking function to Scheduled private banks for the bailout.**

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:

Custodian Banks are specialised financial institutions mainly responsible for safeguarding a firm's or individual's financial assets and are typically not engaged in conventional retail lending. So they are not related to Inter-Bank relations. **So, Statement 1 and 2 is not correct.**

45. In India, Governor of a state can reserve the bill for the Indian President's consideration under which of the following circumstances?

1. **Provisions mentioned in the bill passed by that state legislature oppose Directive Principles of State Policy guaranteed under Part IV of the Indian Constitution.**
2. **Provisions mentioned in the bill passed by that state legislature mention the acquisition of property that is dealt with Article 31A in the Constitution of India.**
3. **Provisions mentioned in the bill passed by that state legislature hinder the larger interests of that state.**

Select the correct answer using the code given below.

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

EXPLANATION:

Reserve the bill for the consideration of the president is obligatory, that is, where the bill passed by the state legislature endangers the position of the state high court. In addition, the governor can also reserve the bill if it is of the following nature:

- (i) Ultra-vires, that is, against the provisions of the Constitution.
- (ii) Opposed to the Directive Principles of State Policy. **(statement 1)**
- (iii) Against the larger interest of the country.
- (iv) Of grave national importance.
- (v) Dealing with compulsory acquisition of property under Article 31A of the Constitution. **(statement 2)**

So, Option (a) is correct.

SOURCE:

Indian polity by M Laxmikanth

46. According to the recent studies, the increase in renewable energy connections to the electricity grid is considered as the main reason for the increase in emissions of which one of the following Greenhouse Gases?

- (a) Methane
- (b) Nitrous Oxide
- (c) Hydrofluorocarbon
- (d) Sulphur hexafluoride**

EXPLANATION:

Sulphur hexafluoride is the most powerful greenhouse gas known to humanity, and emissions have risen rapidly in recent years. Sulphur hexafluoride, or SF₆, is widely used in the electrical industry to prevent short circuits and accidents. Levels are rising as an unintended consequence of the green energy boom.

Cheap and non-flammable, SF₆ is a colourless, odourless, synthetic gas. It makes a hugely effective insulating material for medium and high-voltage electrical installations. It is widely used across the industry, from large power stations to wind turbines to electrical sub-stations in towns and cities. It prevents electrical accidents and fires.

However, the significant downside to using the gas is that it has the highest global warming potential of any known substance. It is 23,500 times more warming than carbon dioxide (CO₂). It also persists in the atmosphere for a long time, warming the Earth for at least 1,000 years. **So, Option (d) is correct.**

SOURCE:

<https://www.bbc.com/news/science-environment-49567197>

47. Which one of the following statements is not correct about the events that took place during the Non-cooperation Movement in the early 20th century?

- (a) Mahatma Gandhi had promised Swaraj within a year if the programme was fully implemented
- (b) Many groups of revolutionary terrorists, especially in Bengal, pledged support to this movement
- (c) Indian National Congress has withdrawn the membership fee to enable the people from rural areas to become its members**
- (d) By the second half of 1921, students had started drifting back to schools and colleges, lawyers and litigants to law courts

EXPLANATION:-

During Nagpur session Gandhiji had promised Swaraj within a year, if the programme was fully implemented.
Many groups of revolutionary terrorists, especially in Bengal, also pledged support to the movement
Congress never withdrew the membership fee to enable the poor to become members. A 4 anna membership was launched so that more and more poor people could join the Congress. So, Option (c) is not correct.
By the second half of 1921, Students had started drifting back to schools and colleges, lawyers and litigants to law courts

ADDITIONAL INFORMATION:

The growing indignation against the British rule led to the launching of the Khilafat and Non-Cooperation movement. Turkey had fought against Britain in the First World War. Turkey, which was one of the defeated countries, suffered injustices at the hands of Britain. In 1919, a movement was organised under the leadership of Mohammad Ali and Shaukat Ali (popularly known as Ali brothers), Abul Kalam Azad, Hasrat Mohani and others to force the Britain government to undo these injustices. The Khilafat committee which was set up to conduct this movement was joined by Gandhi. The sultan of Turkey was also considered the Caliph or Khalifa, the religious head of the Muslims. Therefore the movement over the question of the injustice done to Turkey was called the khilafat movement. It gave a call for non-cooperation. The movement on the Khilafat question soon merged with the movement against the repression in Punjab and for swaraj. In 1920, the congress, first at a special session held at Calcutta and later at the regular session held at Nagpur under Gandhiji's leadership, adopted a new programme of struggle against the government. At the Nagpur session which was attended by about 15,000 delegates, the congress constitution was amended and "the attainment of Swarajya by the people of India by all legitimate and peaceful means" became the first article of the constitution of the congress

The movement was aimed at undoing the injustices done to Punjab and Turkey, and the attainment of Swaraj. It is called the non-cooperation movement because of the methods adopted in this movement. It began with the renunciation of honorary titles like 'Sir' that Indians had received from the British government. Subramania Iyer and Rabindranath Tagore had already done so. Gandhiji returned his Kaiser-I-Hind medal in August 1920. Many others followed. Indians no longer thought it honourable to receive titles from the British government and thus to be associated with it. This was followed by the boycott of legislatures.

Most people have refused to cast their votes when elections to the legislatures were held. Thousands of students and teachers left schools and colleges. New educational institutions like the Jamia Millia at Aligarh (later shifted to Delhi) and Kashi Vidyapeeth at Benaras were started by nationalists. Government servants resigned their jobs. Lawyers boycotted law courts. Foreign cloth was burnt in

bonfires. There were strikes and hartals all over the country. The movement was a great success and the firings and arrests could not stop it.

Before the year 1921 was out, 30,000 people were in jail. They included most of the prominent leaders. Gandhiji however, was still free. A rebellion had broken out in some parts of Kerala. The rebels were mostly Moplah peasants; hence it is called the Moplah rebellion. The rebellion was suppressed by terrible brutalities. More than 2000 Moplah were killed and about 45,000 arrested. An example of the brutalities was suffocation to death of 67 Moplah prisoners in a railway wagon when they were being shifted from one place to another

The 1921 session of the congress was held at Ahmadabad. It was presided over by Hakim Ajmal Khan. The session decided to continue the movement and to launch the final stage of the non-cooperation movement. This was to be done by giving a call to the people to refuse to pay taxes. It was started by Gandhiji in Bardoli in Gujarat. It was a very important stage because when people openly declare that they would not pay taxes to the government, they mean that they no longer recognise that the government is legitimate. Gandhiji had always emphasized that the entire movement should be peaceful. However, people were not always able to contain themselves. At Chauri Chaura in U.P., on 5th February 1922, the police, without any provocation, fired at the people who were taking part in a demonstration. The people, in their anger, attacked the police station and set it on fire. 22 policemen were killed inside the police station. Gandhiji had made it a condition that the movement should remain completely peaceful. Gandhiji, hearing the news of the incident, called off the movement.

On 10th March 1922, he was arrested and sentenced to six years imprisonment. With the calling off of the movement, one more phase of the nationalist movement was over. In this movement large mass of people participated all over the country. It spread to the villages also. People came out in open defiance of the government to demand Swaraj. The movement also strengthened the unity between the Hindus and the Muslims. One of the most popular slogans during the movement was “Hindu Musalman Ki Jai”.

SOURCE:-

spectrum

48. Which one of the following country has the lowest contribution of nuclear energy in their energy mix?

- (a) France
- (b) Hungary
- (c) Pakistan
- (d) Brazil**

49. Which of the following species is/are found only in the Western Ghats of India?

- 1. Long-tailed Macaque**
- 2. Nilgiri Tahr**
- 3. Purple Frog**

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:

The following species are endemic to Western Ghats of India

Lion-tailed macaque, Nilgiri tahr, Nilgiri langur, Nilgiri marten, Malabar large-spotted civet, Malabar grey hornbill, Malabar gliding frog, purple frog, Nilgiri wood pigeon, Nilgiri flycatcher, Grey-headed Bulbul, White-bellied blue robin, Rufous babbler, White-bellied treepie, Nilgiri laughingthrush, Nilgiri pipit, White-bellied blue flycatcher etc,

The crab-eating macaque also known as the long-tailed macaque, is a cercopithecine primate native to Southeast Asia. It is referred to as the cynomolgus monkey in laboratories. It has a long history alongside humans; it has been alternately seen as an agricultural pest, sacred animal in some temples, and more recently, the subject of medical experiments. **So, Option (c) is correct.**

50. Which of the following are the major objectives of the Special Economic Zones Act, 2005?

- 1. Promotion of exports of goods and services from India.**
- 2. Development of infrastructure facilities in India.**
- 3. Providing skill development training to youths of the nation.**
- 4. Promotion of investment from domestic and foreign sources.**

Select the correct answer using the code given below.

- (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 Special Economic Zones Act, 2005, provides the legal framework for the establishment of Special Economic Zones and also for units operating in such zones.

The Special Economic Zones Act, 2005 has been enacted with the major objective of generation of additional economic activity, promotion of export of goods and services, investment from domestic and foreign sources and creation of employment opportunities. Providing Skill Development Training to youths is not a major objective of the Special Economic Zone Act 2005. **So, Option (b) is**

correct.

ADDITIONAL INFORMATION:

- A SEZ is a designated duty free enclave to be treated as foreign territory for the purpose of trade operations and duties and tariffs.
- A SEZ does not require a license for imports.
- The units must become net foreign exchange earners within 3 years
- SEZ are allowed manufacturing, trading and service activities.
- Full freedom for subcontracting.
- The domestic sales from the SEZ are subject to full custom duties and import policy is in force, when they sell their produce to domestic markets.
- There was no routine examination by the custom authorities.
- The corporation in SEZs will not have to pay any income tax on their profits for the first five years and only 50% of the tax for 2 more years thereafter.
- If half of the profit is reinvested in the corporation, the concession of 50% tax is extendable for next 3 years.
- For SEZ developers , the raw material from cement to steel to electrical parts are subject to zero tax and duty.
- For the SEZ, the Government acquires vast land tracts and gives to the developers. The basic condition involves that 25% of the area of the SEZ must be used only for export related activities. Rest 75% area can be used for economical and social infrastructure. However, all SEZ benefits are applicable over the entire SEZ area.
- There were provisions for sector specific SEZs and Multiproduct SEZs. The Sector specific SEZ may have 7500 houses, hotels with 100 rooms, 25 bed hospital , schools and other institutions, a multiplex in 50000 sq. meters. Multiproduct SEZ are allowed to build 25000 houses. 250 room hotel and 100 bed hospital along with a multiplex with 2 lakh sq. meters.

SOURCE:

<http://sezindia.nic.in/cms/sez-act.php>

51. One of the earliest evidence of the practice of sati found in which one of the following inscriptions?

- (a) Barbara cave Inscription
- (b) **Eran Inscription**
- (c) Maski Inscription
- (d) Rummindei Pillar Inscription

52. With reference to the renewable energy sector in India, consider the following statements:

- 1. In the last 5 years, the capacity addition of wind energy is more than solar energy.**
- 2. Gujarat leads in the solar power capacity 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**

53. In India, which of the following schemes are implemented for the welfare of the workers from the Unorganized Sector?

- 1. Indira Gandhi National Old Age Pension Scheme**
- 2. Aam Admi Bima Yojana**
- 3. Atal Pension Yojana**
- 4. Rashtriya Swasthya Bima Yojana**

Select the correct answer using the code given below.

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

EXPLANATION:

The Indira Gandhi National Old Age Pension Scheme (IGNOAPS) is a non-contributory old age pension scheme that covers Indians who are 60 years and above and live below the poverty line. All individuals above the age of 60 who live below the poverty line are eligible to apply for IGNOAPS.

AamAdmiBima Yojana is a Social Security Scheme for rural landless household. It was launched on 2nd October, 2007 . Under this scheme the head of the family or one earning member in the family of such a household is covered. The premium of Rs.200/- per person per annum is shared equally by the Central Government and the State Government, so the insured person has to pay no premium. The member to be covered should be aged between 18 and 59 years.

Atal Pension Yojana (or APY, previously known as Swavalamban Yojana) is a government-backed pension scheme in India, primarily targeted at the unorganised sector. It was mentioned in the 2015 Budget speech by the then Finance Minister Arun Jaitley.

RashtriyaSwasthyaBima Yojana (RSBY, literally "National Health Insurance Programme") is a government-run health insurance programme for the Indian poor. The scheme aims to provide health insurance coverage to the unrecognised sector workers belonging to the BPL category and their family members shall be beneficiaries under this scheme. It provides for cashless insurance for hospitalisation in public as well as private hospitals. **So, Option (d) is correct.**

54. Folk dances such as Cheraw, Solakia, Khuallam belongs to which one of the following states of India?

- (a) Tamilnadu
- (b) Odisha
- (c) Mizoram**
- (d) Nagaland

EXPLANATION:

Khuallam literary means 'Dance of the Guests'. It is a dance usually performed in the ceremony called 'Khuangchawi'. In order to claim a distinguished place in the society and to have a place in paradise or Pialral one has to attain the coveted title of 'Thangchhuah'.

Cheraw is a very old traditional dance of the Mizos. It is believed that the dance had already existed way back in the 1st Century A.D., while the Mizos were still somewhere in the Yunan Province of China, before their migration into the Chin Hills in the 13th Century A.D., and eventually to the present Mizoram. Some of the tribes living in South East Asia have similar dances in one form or the other with different names.

Sarlamkai/Solakiais an impressive dance originating from the Pawi and Mara communities in the southern part of Mizoram. This dance is known as 'Sarlamkai' whereas the Lushais referred to it as 'Rallu Lam'. In older days when the different tribes were constantly at war with each other, a ceremony to deride the vanquished beheaded skull of the enemy was usually held by the victor. This ceremony is performed to ensure that the vanquished soul remains a slave to the victor even when the latter also dies.

These folk dances are performed in the state of Mizoram. **So, Option (c) is correct.**

SOURCE:

<http://mizoram.nic.in/about/dances.htm>

55. The word 'Socialism' was added to the Preamble of the Constitution of India by the 42nd amendment. It denotes that India aims to

- (a) nationalise all means of production and the abolition of private property altogether
- (b) eliminate inequality of income and status and improve standards of life**
- (c) provide Special protection to the minority communities for the conservation of their culture and traditions
- (d) non-discriminate its citizens on the basis of socio-economic factors

EXPLANATION:

Indian brand of socialism is a 'democratic socialism'. Democratic socialism, on the other hand, holds faith in a 'mixed economy' where both public and private sectors co-exist side by side. As the Supreme Court says, 'Democratic socialism aims to end poverty, ignorance, disease and inequality of opportunity. Indian socialism is a blend of Marxism and Gandhism, leaning heavily towards Gandhian socialism'. Here, it best represents the elimination of inequality of income and status and standards of life.

SOURCE:

Indian polity by M Laxmikanth

56. Consider the following events and initiatives:

- 1. Organizing Earth Hour**
- 2. Publishing the Living Planet Report**
- 3. Living Himalayas Initiative**

Which one of the following organization is responsible for the events and initiatives gave above?

- (a) TRAFFIC, the Wildlife Trade Monitoring Network
(b) **World Wide Fund for Nature (WWF)**
(c) International Union for the Conservation of Nature
(d) UN Environment Programme - World Conservation Monitoring Centre

EXPLANATION:

The **Living Planet Report** has been published every two years by WWF since 1998; it is based on a Living Planet Index and ecological footprint calculation. In addition, WWF has launched several notable worldwide campaigns including **Earth Hour** and Debt-for-Nature Swap, and its current work is organized around these six areas: food, climate, freshwater, wildlife, forests, and oceans. Since 2008, through its Global Programme Framework (GPF), WWF has said it is concentrating its efforts on 13 global initiatives:

- Amazon
- Arctic
- China for a Global Shift
- Climate and Energy
- Coastal East Africa
- People's Climate March 2017
- Coral Triangle
- Forest and Climate

- Green Heart of Africa
- Heart of Borneo
- **Living Himalayas**
- Market Transformation
- Smart Fishing
- Tigers

So, Option (b) is correct.

ADDITIONAL INFORMATION:

- The World Wide Fund for Nature (WWF) is an international non-governmental organization founded in 1961, working in the field of wilderness preservation, and the reduction of human impact on the environment.
- It was formerly named the World Wildlife Fund, which remains its official name in Canada and the United States.
- WWF is the world's largest conservation organization with over five million supporters worldwide, working in more than 100 countries, supporting around 3000 conservation and environmental projects.
- They have invested over \$1 billion in more than 12,000 conservation initiatives since 1995.
- WWF is a foundation with 55% of funding from individuals and bequests, 19% from government sources (such as the World Bank, DFID, USAID) and 8% from corporations in 2014
- Campaigns
 - Debt-for-Nature Swap
 - Earth Hour
 - Healthy Grown
 - Marine Stewardship Council

57. With reference to the religious history of India, the term “Nandavarta” is associated with

- (a) Buddhism
- (b) Jainism**
- (c) Shaivism
- (d) Vaishnavism

EXPLANATION:-

In the svetambara tradition (jainism), the eight symbols are:

1. Swastika
2. Srivatsa
3. Nandavarta

4. Vardhmanaka (food vessel)
5. Bhadrasana (seat)
6. Kalasha (pot)
7. Darpan (mirror)
8. Pair of fish

So, Option (b) is correct.

ADDITINOAL INFORMATION:

Origin of Jainism

- Jainism is a very ancient religion. As per some traditions, it is as old as the Vedic religion.
- The Jain tradition has a succession of great teachers or Tirthankaras.
- There were 24 Tirthankaras the last of which was Vardhaman Mahavira.
- The first Tirthankara is believed to be Rishabhanath or Rishabhadev.
- The 23rd Tirthankara was Parshvanatha who was born in Varanasi. He may have lived in the 8th or 7th century BC.
- All the Tirthankaras were Kshatriyas by birth.

Teachings of Jainism:-

- Mahavira rejected Vedic principles.
- He did not believe in God's existence. According to him, the universe is a product of the natural phenomenon of cause and effect.
- He believed in Karma and transmigration of the soul. The body dies but the soul does not.
- One will be punished or rewarded as per one's karma.
- Advocated a life of austerity and non-violence.
- Stressed on equality but did not reject the caste system, unlike Buddhism. But he also said that man may be 'good' or 'bad' as per his actions and not birth.
- Asceticism was taken to a great length. Starvation, nudity and self-mortification were expounded.
- Two elements of the world: Jiva (conscious) and Atma (unconscious).
- Triratnas of Jainism:
 1. Right faith
 2. Right knowledge
 3. Right conduct (observance of five vows)
 1. Ahimsa (non-violence)
 2. Satya (truth)
 3. Asteya (no stealing)
 4. Parigraha (no acquiring property)
 5. Brahmacharya (abstinence)

SOURCE:-

Nitin singhania- art and culture

58. Which of the following report(s) is/are published by the United Nations Environment Programme (UNEP)?

- 1. Global Resources Outlook**
- 2. Adaptation Gap Report**
- 3. Inclusive Wealth Report**

Select the correct answer using the code given below.

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

EXPLANATION:

Global Resources Outlook 2019, prepared by the International Resource Panel of UNEP, examines the trends in natural resources and their corresponding consumption patterns since the 1970s to support policymakers in strategic decision-making and transitioning to a sustainable economy.

UN Environment Adaptation Gap Reports - The Adaptation Gap Report series complements the Emissions Gap Report series – exploring global progress on adaptation and options for enhancing the global adaptation efforts.

The Inclusive Wealth Report (IWR) is a biennial effort led by the UN Environment to evaluate the capacities and performance of the nations around the world to measure the sustainability of economy and wellbeing of their people. **So, Option (d) is correct.**

ADDITIONAL INFORMATION:

- United Nation Environment Program (UNEP) has recently released the 6th edition of the Global Environment Outlook Report (GEO). It outlines the current state of the environment illustrates possible future environmental trends and analyses the effectiveness of policies.
- The United Nations Environment Programme (UNEP or UN Environment) is responsible for coordinating the UN's environmental activities and assisting developing countries in implementing environmentally sound policies and practices.
- UNEP was founded in 1972 by Canadian businessman and philanthropist Maurice Strong, its first director, following the United Nations Conference on the Human Environment (Stockholm Conference).
- Its mandate covers a wide range of areas, including the atmosphere, marine and terrestrial ecosystems, environmental governance, and green economic development. UNEP's activities include developing international environmental conventions; promoting environmental science and information; working with public and private stakeholders on developing and

implementing policy; funding and implementing environmental development projects, such as reforestation and wetlands restoration; and formulating guidelines on issues such as the international trade in potentially harmful chemicals, transboundary air pollution, and contamination of international waterways. It also maintains a repository of scientific and environmental research.

- As a member of the United Nations Development Group, UNEP aims to help the world meet the 17 Sustainable Development Goals.
- Over the last thirty years, it has increasingly focused on climate change, helping create or implement environmental treaties and institutions, such as the UN Framework Convention on Climate Change.
- In 1988, it joined the World Meteorological Organization to establish the Intergovernmental Panel on Climate Change (IPCC), a leading authority on the science of climate change and options for adaptation and mitigation.
- UNEP is also one of several "Implementing Agencies" for the Global Environment Facility (GEF), the Multilateral Fund for the Implementation of the Montreal Protocol, and the International Cyanide Management Code.
- As a programme of the United Nations, UN Environment is funded solely by voluntary contributions.

SOURCE:

<https://www.unenvironment.org/about-un-environment>

59. As a fight against the Neglected Tropical Disease (NTD), the Indian Government came up with disease-specific guidelines and elimination targets for priority diseases. In light of the above statement, consider the following diseases:

- 1. Lymphatic Filariasis**
- 2. Leishmaniasis**
- 3. Dengue fever**
- 4. Rabies**
- 5. Tuberculosis**

Which of the diseases mentioned above are categorised as NTD under World Health Organization?

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

EXPLANATION:

Neglected tropical diseases (NTDs)– a diverse group of communicable diseases that prevail in tropical and subtropical conditions in 149 countries – affect more than one billion people and cost developing economies billions of dollars every year. Populations living in poverty, without adequate sanitation and in close contact with infectious vectors and domestic animals and livestock are those worst affected. The following are NTD under WHO

- Chagas disease
- **Dengue and Chikungunya**
- Dracunculiasis (guinea-worm disease)
- Echinococcosis
- Foodborne trematodiasis
- Human African trypanosomiasis (sleeping sickness)
- **Leishmaniasis**
- Leprosy (Hansen's disease)
- **Lymphatic filariasis**
- Mycetoma, chromoblastomycosis and other deep mycoses
- Onchocerciasis (river blindness)
- **Rabies**
- Scabies and other ectoparasites
- Schistosomiasis
- Soil-transmitted helminthiasis
- Snakebite envenoming
- Taeniasis/Cysticercosis
- Trachoma
- Yaws (Endemic treponematoses)

So, option (d) is correct.

SOURCE:

https://www.who.int/neglected_diseases/diseases/en/

60. Consider the following statements about the “Epiphytes”:

- 1. They are non-parasitic woody stem climbers which mostly derives its moisture and nutrient from the soil.**
- 2. They are also found on the surface of submerged aquatic plants.**

3. Epiphytic vegetation is very rich in moist and cold regions but poor in dry and cold areas.

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:-

An epiphyte is a plant growing on other plants. Epiphytes are known as “air plants” because they are not anchored in the soil. Epiphytes derive nutrients from rainwater, air and from other sources. There are many adaptations present in the epiphytes to get nutrients and survive. **So, Statement 1 is not correct.**

They are also present in aquatic plants. **So, Statement 2 is correct.**

They are distributed mostly in warm and wet and cold and humid regions. **So, Statement 3 is correct**

ADDITINOAL INFORMATION:

An epiphyte is a plant growing on other plants. Epiphytes are known as “air plants” because they are not anchored in the soil. Epiphytes derive nutrients from rainwater, air and from other sources. There are many adaptations present in the epiphytes to get nutrients and survive.

Epiphytes are found on branches, leaves, trunk and other surfaces of plants. Epiphytes anchor themselves to a tree but do not obtain water or other nutrients directly from it. Epiphytes are commonly found in rainforests.

Epiphytes mostly grow on other plants for physical support and prepare their own food. They obtain adequate light by living on the tree. They get water from the rainwater dripping down from branches and nutrients, that is washed out of leaves during rainfall. Epiphytes derive nutrients from the dead and decaying plant parts present around the surface.

This type of biological interaction is known as commensalism. In Commensalism, one of the species gets benefited and the other species is neither benefited nor harmed. They usually don't harm their host. But some epiphytes compete with their host for light and nutrients and harm them.

Epiphytes Adaptations and Characteristics

Epiphytes are well adapted to suit their requirements. There is a shortage of water and nutrients at the canopy of the forest, to overcome these, epiphytes are well adapted to capture the

nutrients and water present in the air, from the debris of trees and rain. Adaptations of epiphytes help them grow in the area where the ground is populated by many plants.

- Epiphytes generally grow in the densely populated rainforests, where there is too much competition to get light, water, nutrients, etc. Their epiphytic habit helps them to get light and get benefited from the air rich in moisture
- Epiphytes are found in both tropical and temperate regions
- Ball moss is present in the coastal desert of Mexico. It gets moisture from fog
- Epiphytes have aerial roots to anchor the plant to the surface they grow
- In some of the epiphytic plants, roots are specialised to perform other functions too, e.g. some of the Orchids have photosynthetic roots and in some plants, roots absorb moisture too
- In a parasitic epiphyte, mistletoe, roots are modified to penetrate the host plant and absorb water
- In Strangler fig, an epiphyte, roots become too long and reach the ground anchoring the plant in the soil. They eventually kill the host tree by growing around it and crushing its secondary phloem. They compete with the host tree for light and other resources.
- Orchids can conserve water in their thick stems
- Certain epiphytes have leaves modified as furrow or pitcher to collect rainwater
- Seeds of epiphytes have wings, parachute or gliding apparatus and sticky coats for easy dispersal
- They make fleshy and edible fruits, seeds get dispersed by animals and birds
- Some epiphytes are very selective in their choice of host plant such as *Tortula pogorum*, present on the bark of trees, only within the city limits
- Epiphytes contribute to a rich ecosystem. They not only grow on trees but plants like mosses grow on rocks and moist areas of houses, etc.

SOURCE:-

Shankar environment book

61. With reference to India's struggle for independence, consider the following statements about the Pabna Peasant Uprisings:

- 1. The main form of struggle was that of legal resistance and there was very less violence during this uprising.**
- 2. Bengal peasants showed complete Hindu-Muslim solidarity during this uprising.**

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 movement was nonviolent to some extent but Zamindars were killed at some places and violence did happen. **So statement 1 is correct.**

Bengal peasants showed complete Hindu-Muslim solidarity during this uprising. **So statement 2 is correct.**

ADDITIONAL INFORMATION:-

- Pabna Peasant Uprising (1873-76) was a resistance movement by the peasants (“Ryots”) against the lords of the lands in Bengal (“zamindars”) in the Yusufshahi pargana (now the Sirajganj District, Bangladesh) in Pabna.
- The Pabna rebellion was different from most contemporary peasant rebellions. This movement began as the peasants organised an agrarian league in May 1873 to resist the demands of the zamindars.
- Pabna (now in Bangladesh) was a jute production and trading centre and was relatively prosperous. Here half of the cultivators had managed to win occupancy rights because of the Bengal Tenancy Act, 1859. But the zamindari rents had increased multiple times.
- The zamindars tried to stop the peasants to get occupancy right and this was a reason of revolt there.
- The peasants were much more organised than in other revolts via meetings, appeals and marches. They moved to the court and challenged the zamindars, raised funds to pay for legal expenses, to meet the cost of legal battle.
- The movement was nonviolent to some extent but Zamindars were killed at some places and violence did happen.

62. If the same satellite is launched using the same launch vehicle from various places of the Earth, then in which of the following places that launch vehicle will consume less fuel during launch?

- (a) **Quito**
- (b) Los Angeles
- (c) Warsaw
- (d) Buenos Aires

EXPLANATION:-

Launching satellite from a place where gravitational force is less would cause less fuel. Among the given places quito is the nearest to the equator. **So, Option (a) is correct.**

ADDITINOAL INFORMATION:

When a spacecraft is launched into orbit, it should end up spinning around the Earth quickly enough not to be pulled back in by the Earth's gravity. The huge rockets used in launching a spaceship help this to happen by giving a huge amount of thrust, enough to achieve escape velocity. However, the spin of the Earth itself can help give it a push as well. Anything on the surface of the Earth at the equator is already moving at 1670 kilometers per hour. If a ship is launched from the equator it goes up into space, and it is also moving around the Earth at the same speed it was moving before launching. This is because of inertia. This speed will help the spacecraft keep up a good enough speed to stay in orbit.

Why the equator? Believe it or not, the surface of the Earth is traveling faster there. If you look at two spots on one line from pole to pole, one spot on the equator and the other halfway to the pole, each will make a complete revolution in 24 hours and return to where it was. But since the Earth's shape is round, and the widest point is at the equator the spot on the equator would have to go more miles in that twenty four hours. That means that the land is moving faster at the equator than any other place on the surface of the Earth

SOURCE:-

<http://www.qrg.northwestern.edu/projects/vss/docs/navigation/2-why-launch-from-equator.html>

63. Consider the following statements about the Central Vigilance Commission (CVC) in India:

- 1. It is a statutory body established under the Central Vigilance Commission Act, 2003 and is responsible only to the Parliament of India.**
- 2. It shall be appointed by the President on the recommendation of a Committee consisting of the Prime Minister, the Union Minister of Home Affairs and the Leader of the Opposition in the House of the People.**
- 3. It has its investigation agency and has the power of suo-motu investigation.**
- 4. It does not have powers to register criminal cases rather can deal only with vigilance and disciplinary cases.**

Which of the statements given above are correct?

- (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:

Central Vigilance Commission (CVC) is an apex Indian governmental body created in 1964 to address governmental corruption. In 2003, the Parliament enacted a law conferring statutory status on the CVC. It has the status of an autonomous body, free of control from any executive authority, charged with monitoring all vigilance activity under the Central Government of India, advising various authorities in central Government organizations in planning, executing, reviewing and reforming their vigilance work. It is responsible only to the Parliament of India. **So, Statement 1 is correct.**

The Central Vigilance Commissioner and the Vigilance Commissioners shall be appointed by the President on recommendation of a Committee consisting of the Prime Minister (Chairperson), the Minister of home affairs (Member) and the Leader of the Opposition in the House of the People. **So, Statement 2 is correct.**

CVC does not have its own investigation agency. CVC is only an advisory body. Central Government Departments are free to either accept or reject CVC's advice in corruption cases. **So, Statement 3 is not correct.**

CVC does not have powers to register criminal case. It deals only with vigilance or disciplinary cases. **So, Statement 4 is correct.**

ADDITIONAL INFORMATION:

Limitations of CVC

- CVC is only an advisory body. Central Government Departments are free to either accept or reject CVC's advice in corruption cases.
- CVC does not have adequate resources compared with number of complaints that it receives. It is a very small set up with a sanctioned staff strength of 299.[8] Whereas, it is supposed to check corruption in more than 1500 central government departments and ministries.
- CVC cannot direct CBI to initiate inquiries against any officer of the level of Joint Secretary and above on its own. Such a permission has to be obtained from the concerned department.
- CVC does not have powers to register criminal case. It deals only with vigilance or disciplinary cases.
- CVC has supervisory powers over CBI. However, CVC does not have the power to call for any file from CBI or to direct CBI to investigate any case in a particular manner. CBI is under administrative control of Department of Personnel and Training (DoPT), which means that, the powers to appoint, transfer, suspend CBI officers lie with DoPT.
- Appointments to CVC are indirectly under the control of Govt of India, though the leader of the Opposition (in Lok Sabha) is a member of the Committee to select CVC and VCs. But the

Committee considers candidates put up before it. These candidates are decided by the Government.

- As a result, although CVC is relatively independent in its functioning, it has neither resources nor powers to inquire and take action on complaints of corruption that may act as an effective deterrence against corruption

SOURCE:

<https://www.cvc.nic.in/about/background>

64. With reference to the genetic materials, consider the following statements about the differences between DNA and RNA:

- 1. DNA has deoxyribose sugar while RNA has ribose sugar.**
- 2. RNA mutate at a faster rate compared to DNA.**
- 3. DNA can be easily degradable compared to RNA.**

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:

Ribose, found in RNA, is a "normal" sugar, with one oxygen atom attached to each carbon atom. Deoxyribose, found in DNA, is a modified sugar, lacking one oxygen atom (hence the name "deoxy"). So, Statement 1 is correct.
Average mutation rates in RNA viruses are estimated to be about 100 times higher than those for DNA viruses. So, Statement 2 is correct.
While DNA contains deoxyribose, RNA contains ribose, characterised by the presence of the 2'-hydroxyl group on the pentose ring (Figure 5). This hydroxyl group make RNA less stable than DNA because it is more susceptible to hydrolysis. So, Statement 3 is not correct.

ADDITIONAL INFORMATION:

Summary of Differences Between DNA and RNA

1. DNA contains the sugar deoxyribose, while RNA contains the sugar ribose. The only difference between ribose and deoxyribose is that ribose has one more -OH group than deoxyribose, which has -H attached to the second (2') carbon in the ring.

2. DNA is a double-stranded molecule, while RNA is a single-stranded molecule.
3. DNA is stable under alkaline conditions, while RNA is not stable.
4. DNA and RNA perform different functions in humans. DNA is responsible for storing and transferring genetic information, while RNA directly codes for amino acids and acts as a messenger between DNA and ribosomes to make proteins.
5. DNA and RNA base pairing is slightly different since DNA uses the bases adenine, thymine, cytosine, and guanine; RNA uses adenine, uracil, cytosine, and guanine. Uracil differs from thymine in that it lacks a methyl group on its ring.

Comparison of DNA and RNA

While both DNA and RNA are used to store genetic information, there are clear differences between them. This table summarizes the key points:

Main Differences Between DNA and RNA		
Comparison	DNA	RNA
Name	DeoxyriboNucleic Acid	RiboNucleic Acid
Function	Long-term storage of genetic information; transmission of genetic information to make other cells and new organisms.	Used to transfer the genetic code from the nucleus to the ribosomes to make proteins. RNA is used to transmit genetic information in some organisms and may have been the molecule used to store genetic blueprints in primitive organisms.
Structural Features	B-form double helix. DNA is a double-stranded molecule consisting of a long chain of nucleotides.	A-form helix. RNA usually is a single-strand helix consisting of shorter chains of nucleotides.
Composition of Bases and Sugars	deoxyribose sugar phosphate backbone adenine, guanine, cytosine, thymine bases	ribose sugar phosphate backbone adenine, guanine, cytosine, uracil bases
Propagation	DNA is self-replicating.	RNA is synthesized from DNA on an as-needed basis.
Base Pairing	AT (adenine-thymine) GC (guanine-cytosine)	AU (adenine-uracil) GC (guanine-cytosine)
Reactivity	The C-H bonds in DNA make it fairly stable, plus the body	The O-H bond in the ribose of RNA makes the molecule more

Main Differences Between DNA and RNA		
	destroys enzymes that would attack DNA. The small grooves in the helix also serve as protection, providing minimal space for enzymes to attach.	reactive, compared with DNA. RNA is not stable under alkaline conditions, plus the large grooves in the molecule make it susceptible to enzyme attack. RNA is constantly produced, used, degraded, and recycled.
Ultraviolet Damage	DNA is susceptible to UV damage.	Compared with DNA, RNA is relatively resistant to UV damage.

SOURCE:

<https://www.thoughtco.com/dna-versus-rna-608191>

65. Consider the following statements about the Monetised Deficit in India:

- 1. It is the monetary support the Reserve Bank of India extends to the Central Government as part of the government's borrowing programme.**
- 2. This exercise leads to an increase in the total money supply in the financial system and results in increasing inflation.**
- 3. Open Market Operations conducted by the Reserve Bank of India is a part of Monetised Deficit.**

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:

Monetised deficit is the monetary support the Reserve Bank of India (RBI) extends to the Centre as part of the government's borrowing programme. In other words, the term refers to the purchase of government bonds by the central bank to finance the spending needs of the government. **So, Statement 1 is correct.**

Also known as debt monetisation, the exercise leads to an increase in total money supply in the system, and hence inflation, as RBI creates fresh money to purchase the bonds. The same bonds are later used to bring down inflation as they are sold in the open market. This helps RBI suck excess money out of the market and rein in rising prices. **So, Statement 2 is correct.**

Open market operations is the sale and purchase of government securities and treasury bills by RBI or the central bank of the country. The objective of OMO is to regulate the money supply in the economy. Monetised deficit occurs when the government takes monetary support from the RBI to finance its debt obligations and try to reduce its unnecessary expenditures. **So, Statement 3 is not correct.**

66. Consider the following statements about the Marine Heatwaves:

1. **It can occur in summer and winter.**
2. **It occurs only in the Tropical regions.**
3. **It occurs only along the eastern coast of the continents.**

Which of the statements given above is/are correct?

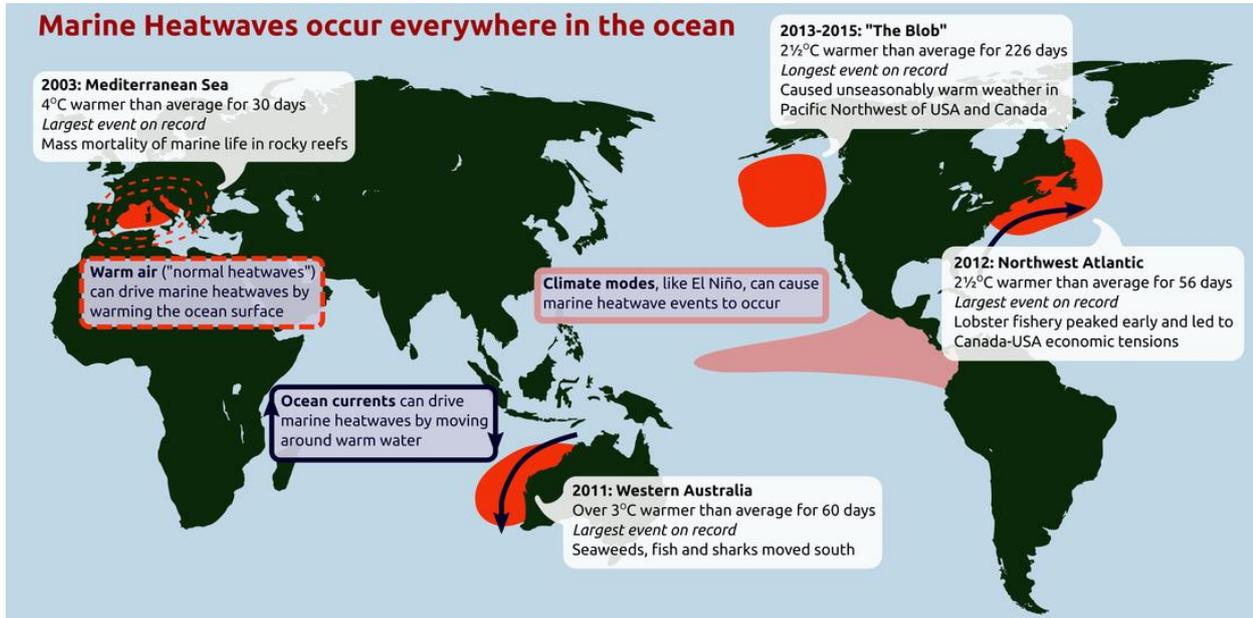
- (a) **1 only**
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

EXPLANATION:

Heatwaves can also occur in the ocean and these are known as marine heatwaves, or MHWs. These marine heatwaves, when ocean temperatures are extremely warm for an extended period of time can have significant impacts on marine ecosystems and industries. Heatwaves can happen in summer and also in winter, where they are known as “winter warm-spells”. **So, Statement 1 is correct.**

Marine heatwaves occur everywhere in the ocean. **So, Statements 2 and 3 is not correct.**

ADDITIONAL INFORMATION:



- We know that heatwaves occur in the atmosphere. We are all familiar with these extended periods of excessively hot weather.
- However, heatwaves can also occur in the ocean and these are known as marine heatwaves, or MHWs.
- These marine heatwaves, when ocean temperatures are extremely warm for an extended period of time can have significant impacts on marine ecosystems and industries.

When do they occur?

- Heatwaves can happen in summer and also in winter, where they are known as “winter warm-spells”.
- These winter events can have important impacts, such as in the southeast of Australia where the spiny sea urchin can only colonize further south when winter temperatures are above 12 °C.

Causes of marine heatwaves

- Marine heatwaves can be caused by a whole range of factors, and not all factors are important for each event.
- The most common drivers of marine heatwaves include ocean currents which can build up areas of warm water and air-sea heat flux, or warming through the ocean surface from the atmosphere.
- Winds can enhance or suppress the warming in a marine heatwave, and climate modes like El Niño can change the likelihood of events occurring in certain regions.
- MHWs can be caused due to large-scale drivers of the Earth’s climate like the El Niño Southern Oscillation (ENSO).

Impacts of the MHWs

- Marine heatwaves affect ecosystem structure, by supporting certain species and suppressing others.
- For example, after the 2011 marine heatwave in Western Australia the fish communities had a much more “tropical” nature than previously and switched from kelp forests to seaweed turfs.
- Marine heatwaves can cause economic losses through impacts on fisheries and aquaculture.
- Temperature-sensitive species such as corals are especially vulnerable to MHWs. In 2016, marine heatwaves across northern Australia led to severe bleaching of the Great Barrier Reef.

SOURCE:

<http://www.marineheatwaves.org/all-about-mhws.html>

67. “Asparagopsis Taxiformis”, sometimes seen in the news recently, is

- (a) a seaweed which has the potential to reduce methane released by the cattle and the sheep
- (b) an algae which thrive in the freezing water and spend winters lying dormant in snow and ice
- (c) a new archaeon which is discovered recently in Sambhar Salt Lake in Rajasthan
- (d) a new species of non-venomous burrowing snake in Arunachal Pradesh

EXPLANATION:

Recent studies using batch-fermentation suggest that the red macroalgae *Asparagopsis taxiformis* has the potential to reduce methane (CH₄) production from beef cattle by up to ~ 99% when added to Rhodes grass hay; a common feed in the Australian beef industry. These experiments have shown significant reductions in CH₄ without compromising other fermentation parameters (i.e. volatile fatty acid production) with *A. taxiformis* organic matter (OM) inclusion rates of up to 5%. In the study presented here, *A. taxiformis* was evaluated for its ability to reduce methane production from dairy cattle fed a mixed ration widely utilized in California, the largest milk producing state in the US. **So, Option (a) is correct.**

SOURCE:

<https://www.hindustantimes.com/science/is-seaweed-the-answer-to-india-s-other-cow-problem/story-AAIY2dvhHnOohhuJxx4Ekl.html>

68. The ‘Golden Quadrilateral’ is one of the biggest highway projects in India. Which one of the following city lies outside the area of this Quadrilateral?

- (a) Bhopal
- (b) Hyderabad



(c) Gorakhpur

(d) Ranchi

EXPLANATION:



69. Consider the following statements about the “Government of India Act, 1935”:

- 1. It allowed Provinces of British India to collect taxes independently and abolished federal distribution of taxes.**
- 2. It introduced voting rights for women to the elections to the Provincial Legislative Councils.**
- 3. The British Parliament had withdrawn its supremacy over the Indian legislatures both at the provincial and federal level.**

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

- 1 only
- 2 and 3 only
- 1 and 2 only
- 1, 2 and 3**

EXPLANATION:-

<p>There were three lists which gave the subjects under each government. Federal List (Centre), Provincial List (Provinces), Concurrent List (Both). It does not abolish federal distribution of taxes. So, Statement 1 is not correct.</p>
<p>Act of 1919 introduced voting rights for women to the Provincial Legislative Councils. So, Statement 2 is not correct.</p>
<p>The British Parliament had withdrawn its supremacy over the Indian legislatures both at provincial and federal level. It was done by act of 1947. So, Statement 3 is not correct.</p>

ADDITIONAL INFORMATION:

Features of the Act

1. It provided for the establishment of an All-India Federation consisting of provinces and princely states as units. The Act divided the powers between the Centre and units in terms of three lists— Federal List (for Centre, with 59 items), Provincial List (for provinces, with 54 items) and the Concurrent List (for both, with 36 items). Residuary powers were given to the Viceroy. However, the federation never came into being as the princely states did not join it.
2. It abolished dyarchy in the provinces and introduced ‘provincial autonomy’ in its place. The provinces were allowed to act as autonomous units of administration in their defined spheres. Moreover, the Act introduced responsible governments in provinces, that is, the governor was required to act with the advice of ministers responsible to the provincial legislature. This came into effect in 1937 and was discontinued in 1939.
3. It provided for the adoption of dyarchy at the Centre. Consequently, the federal subjects were divided into reserved subjects and transferred subjects. However, this provision of the Act did not come into operation at all.
4. It introduced bicameralism in six out of eleven provinces. Thus, the legislatures of Bengal, Bombay, Madras, Bihar, Assam and the United Provinces were made bicameral consisting of a legislative council (upper house) and a legislative assembly (lower house). However, many restrictions were placed on them.
5. It further extended the principle of communal representation by providing separate electorates for depressed classes (scheduled castes), women and labour (workers).
6. It abolished the Council of India, established by the Government of India Act of 1858. The secretary of state for India was provided with a team of advisors.
7. It extended franchise. About 10 per cent of the total population got the voting right.

8. It provided for the establishment of a Reserve Bank of India to control the currency and credit of the country.

9. It provided for the establishment of not only a Federal Public Service Commission but also a Provincial Public Service Commission and Joint Public Service Commission for two or more provinces.

10. It provided for the establishment of a Federal Court, which was set up in 1937.

The main objectivity of the act of 1935 was that the government of India was under the British Crown. So, the authorities and their functions derive from the Crown, in so far as the crown did not itself retain executive functions. His conception, familiar in dominion constitutions, was absent in earlier Acts passed for India.

Hence, the act of 1935 served some useful purposes by the experiment of provincial autonomy, thus we can say that the Government of India Act 1935 marks a point of no return in the history of constitutional development in India.

SOURCE:-

spectrum

70. Consider the following statements about the Prime Minister's National Relief Fund (PMNRF):

- 1. It was established under the Disaster Management Act, 2005.**
- 2. It accepts voluntary contributions from Individuals, Organizations, Trusts, Companies and Institutions.**
- 3. It was established entirely with public contributions and does not get any budgetary support.**

Which of the statements given above is/are correct?

- 1 only
- 3 only
- 2 and 3 only**
- 1, 2 and 3

EXPLANATION:

Prime Minister's National Relief Fund (PMNRF) was established entirely with public contributions and does not get any budgetary support. It does not established under the Disaster Management Act 2005. **So, Statement 1 is not correct and statement 3 is correct.**

PMNRF accepts voluntary contributions from Individuals, Organizations, Trusts, Companies

and Institutions etc. **So, Statement 2 is correct.**

ADDITIONAL INFORMATION:

- Prime Minister's National Relief Fund (PMNRF) in India is the fund raised to provide support for people affected by natural and man made disasters.
- Natural disasters covered under this include flood, cyclone, earthquake etc. Man made disasters include major accidents, acid attacks, riots etc.
- The fund is also allotted to the people for treatment like cancer, kidney transplantation, heart surgery etc. The fund was first consolidated during the time of the first prime minister of India Jawaharlal Nehru.
- Prime Minister's National Relief Fund (PMNRF) was established entirely with public contributions and does not get any budgetary support.
- PMNRF accepts voluntary contributions from Individuals, Organizations, Trusts, Companies and Institutions etc.
- All contributions towards PMNRF are exempt from Income Tax under section 80(G).
- The resources of the PMNRF are utilized to render immediate relief to families of those killed in natural calamities like floods, cyclones and earthquakes, etc.
- Assists partially to defray the expenses for medical treatment like heart surgery, kidney transplantation, cancer treatment of needy people and acid attack etc.
- Donations are accepted through BHIM/UPI (VPA: pmnrf@centralbank), Credit Cards / Debit Cards / Netbanking Accounts of Indian Banks only.
- Chairman of the fund is the Prime Minister and he is assisted by joint secretary.
- The whole of the fund is deposited with scheduled commercial banks and the beneficiaries are identified directly by the Prime Minister from among the beneficiaries.

SOURCE:

<https://pmnrf.gov.in/en/about>

71. In India, the Community Forest resources are recognized and permitted under which one of the following Acts?

- (a) Indian Forest Act, 1927
- (b) Forest (Conservation) Act, 1980
- (c) Scheduled Tribes and Other Traditional Forest Dwellers Act, 2006**
- (d) Biological Diversity Act, 2002

EXPLANATION:-

In India, the Community Forest resources are recognized and permitted under Scheduled Tribes and Other Traditional Forest Dwellers Act, 2006. **So, Option (c) is correct.**

ADDITIONAL INFORMATION:

1. Features of the Act

- The act recognize and vest the forest rights and occupation in Forest land in forest Dwelling Scheduled Tribes (FDST) and Other Traditional Forest Dwellers (OTFD) who have been residing in such forests for generations.
- The act also establishes the responsibilities and authority for sustainable use, conservation of biodiversity and maintenance of ecological balance of FDST and OTFD.
- It strengthens the conservation regime of the forests while ensuring livelihood and food security of the FDST and OTFD.
- It seeks to rectify colonial injustice to the FDST and OTFD who are integral to the very survival and sustainability of the forest ecosystem.
- The act identify four types of rights:
 - **Title rights**
 - It gives FDST and OTFD the right to ownership to land farmed by tribals or forest dwellers subject to a maximum of 4 hectares.
 - Ownership is only for land that is actually being cultivated by the concerned family and no new lands will be granted.
 - **Use rights**
 - The rights of the dwellers extend to extracting Minor Forest Produce, grazing areas, to pastoralist routes, etc.
 - **Relief and development rights**
 - To rehabilitation in case of illegal eviction or forced displacement and to basic amenities, subject to restrictions for forest protection
 - **Forest management rights**
 - It includes the right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use.

Who can claim these Rights?

- Members or community of the Scheduled Tribes who primarily reside in and who depend on the forests or forest lands for bona fide livelihood needs.
- It can also be claimed by any member or community who has for at least three generations (75 years) prior to the 13th day of December, 2005 primarily resided in forests land for bona fide livelihood needs.

- The Gram Sabha is the authority to initiate the process for determining the nature and extent of Individual Forest Rights (IFR) or Community Forest Rights (CFR) or both that may be given to FDST and OTFD.
- Procedure
 - First, the gram sabha (full village assembly, NOT the gram panchayat) makes a recommendation – i.e who has been cultivating land for how long, which minor forest produce is collected, etc. The gram sabha plays this role because it is a public body where all people participate, and hence is fully democratic and transparent.
 - The gram sabha's recommendation goes through two stages of screening committees at the taluka and district levels.
 - The district level committee makes the final decision (see section 6(6)). The Committees have six members – three government officers and three elected persons.
 - At both the taluka and the district levels, any person who believes a claim is false can appeal to the Committees, and if they prove their case the right is denied (sections 6(2) and 6(4)).
 - Finally, land recognised under this Act cannot be sold or transferred

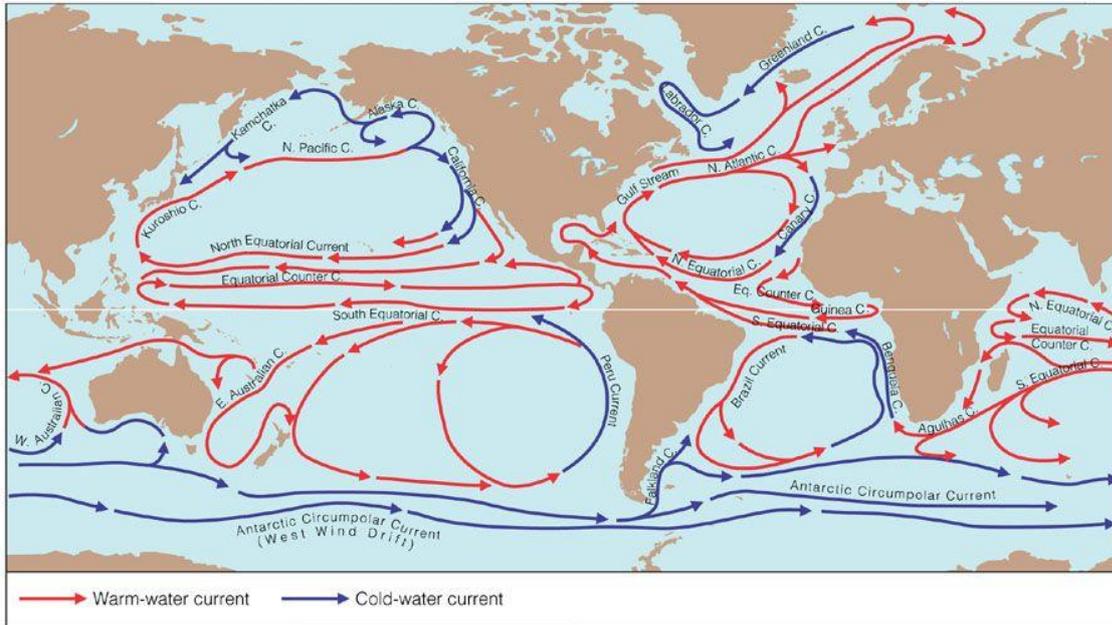
SOURCE:-

<https://www.iasparliament.com/current-affairs/supreme-courts-order-on-eviction-of-forest-dwellers-forest-rights-act>

72. If you are a clownfish using the Ocean current 'West Wind Drift' to travel across the ocean. Which of the following ocean currents should you travel along to reach the coast of Gabon in a short time to rendezvous with your friends?

- (a) Benguela Current**
- (b) East Australian Current
- (c) West Australian Current
- (d) Humboldt Current

EXPLANATION:-



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When one travels through west wind drift he should change to Benguela current to reach Gabon.
So, Option (a) is correct.

73. Which of the following pollutants are referred to as the Short-Lived Climate Pollutants (SLCPs)?

1. Black carbon
2. Methane
3. Nitrous Oxide
4. Tropospheric ozone
5. Hydrofluorocarbons

Select the correct answer using the code given below.

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

EXPLANATION:

Short-lived climate pollutants (SLCPs) are agents that have relatively short lifetime in the atmosphere – a few days to a few decades – and a warming influence on climate. The main short-lived climate pollutants are **black carbon, methane and tropospheric ozone**, which are the most important contributors to the human enhancement of the global greenhouse effect after CO₂. These short-lived climate pollutants are also dangerous air pollutants, with various detrimental impacts on human health, agriculture and ecosystems. Other short-lived climate pollutants include some **hydrofluorocarbons (HFCs)**. **So, Option (c) is correct.**

SOURCE:

<https://www.ccacoalition.org/en/content/short-lived-climate-pollutants-slcps>

74. Which one of the following statement is *not* correct?

- (a) While net borrowing is the amount borrowed during the fiscal year, gross borrowing includes net borrowing for the year and the repayment of past loans
- (b) Gross value added is the value addition done to a product resulting in the production of the final product whereas Gross Domestic Product is the total value of final products produced in the country
- (c) In the Context of Gross Value Added, Basic Prices will include production taxes and exclude production subsidies available on the commodity
- (d) **Real Effective Exchange Rate helps to compare the purchasing power of a country's currency to the US Dollar**

EXPLANATION:

Gross borrowing is the total public debt which is liable to pay which is accumulated with each passing year and net borrowing is the amount borrowed in that fiscal year. The statement is correct. **So, Option (a) is correct.**

Gross value added is the value addition done to a product resulting in the production of final product whereas Gross Domestic Product is the total value of products produced in the country. The statement is correct. **So, Option (b) is correct.**

Basic Price is the amount receivable by the producer from the purchaser after deducting any tax payable and including any subsidy receivable. The statement is correct. **So, Option (c) is correct.**

The real effective exchange rate (REER) is the weighted average of a country's currency in relation to an index or basket of other major currencies. The weights are determined by comparing the relative trade balance of a country's currency against each country within the index. This exchange rate is used to determine an individual country's currency value relative to the other major currencies in the index. It does not help to compare the purchasing power of country in relation to the dollar. **So,**

Option (d) is not correct.

75. Which one of the following does *not* apply to the ‘Doctrine of Lapse’ policy introduced by Lord Dalhousie?

- (a) If any native state ruler died without a natural heir, then that state naturally passed onto the British
- (b) The adopted son would not be entitled to inherit his foster father’s personal property and estates**
- (c) Satara was the first state to be annexed under the Doctrine of Lapse
- (d) Any adopted son of the Indian ruler could not be proclaimed as heir to that kingdom

EXPLANATION:-

As per doctrine of lapse, any adopted son of the Indian ruler could not be proclaimed as heir to the kingdom. The adopted son would only inherit his foster father’s personal property and estates. **So, Option (b) is correct.**

ADDITINOAL INFORMATION:

Before the introduction of this doctrine, the princely states had a ritualised method of adoption practised for centuries. An heir apparent would eventually be selected from a pool of candidates, who were groomed for succession from an early age, called bhayats if no competent born-to son were produced (an obviously unsuitable or treasonous born-to son could be excluded from the succession).

If the ruler died before adopting a successor, one of his widows could adopt an heir, who would immediately accede to the throne. The adoptee would cut all ties with his birth family. Once the Doctrine of Lapse came into place the following features were now faced by the Indian rulers.

- According to this doctrine, any princely state under the direct or indirect (as a vassal) control of the East India Company, should the ruler not produce a legal male heir, would be annexed by the company.
- This was not introduced by Lord Dalhousie even though it was he who documented it and used it widely to acquire territories for the British.
- As per this, any adopted son of the Indian ruler could not be proclaimed as heir to the kingdom. The adopted son would only inherit his foster father’s personal property and estates.
- The adopted son would also not be entitled to any pension that his father had been receiving or to any of his father’s titles.
- This challenged the Indian ruler’s long-held authority to appoint an heir of their choice.

States were annexed by Dalhousie by applying ‘Doctrine of Lapse’

1. The States of Satara (1848 AD)
2. Jaipur (1849 AD)
3. Sambhalpur (1849 AD)
4. Bahat (1850 A.D)
5. Udaipur (1852 AD)
6. Jhansi (1853 AD)
7. Nagpur (1854 AD)

76. Consider the following statements about the “Global Coalition for Biodiversity” which was recently seen in the news:

- 1. It is an independent body established by the Global States to strengthen the science-policy interface for biodiversity and ecosystem services.**
- 2. This coalition includes zoos, aquariums, national parks, science museums and botanical gardens from around 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:-

The coalition urged for all institutions to join and boost public awareness about the nature crisis, ahead of the crucial COP-15 of the Convention on Biological Diversity in Kunming, China in October 2020. **So, Statement 1 is not correct.**

The coalition includes zoos, aquariums, botanical gardens, national parks, and natural history and science museums from around the world. **So, Statement 2 is correct.**

ADDITINOAL INFORMATION:

The European Commission (EC) launched the ‘United for Biodiversity’ coalition on World Wildlife Day.

- It was launched by European commission on World Wildlife Day (3 March).
- The coalition includes zoos, aquariums, botanical gardens, national parks, and natural history and science museums from around the world.
- The coalition urged for all institutions to join and boost public awareness about the nature crisis, ahead of the crucial COP-15 of the Convention on Biological Diversity in Kunming, China in October 2020.

- The coalition adopted a common pledge, citing the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment finding that one million species were already at risk of extinction, and appeals to visitors to each of their institutions to raise their voice for nature.

Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)

- It is an independent intergovernmental body established by States to strengthen the science-policy interface for biodiversity and ecosystem services.
- It was established in Panama City in 2012 by 94 Governments.
- All States Members of the United Nations are eligible for IPBES membership.
- It is not a United Nations body.
- But the United Nations Environment Programme (UNEP) provides secretariat services to IPBES.
- IPBES focuses on assessments, building capacity and knowledge, policy support on Biodiversity.

SOURCE:-

<https://www.downtoearth.org.in/news/wildlife-biodiversity/global-coalition-for-biodiversity-launched-on-world-wildlife-day-69573>

77. With reference to the Constitution of India, consider the following pairs:

<i>Subjects</i>	-	<i>List</i>
1. Public Health	-	State list
2. Disaster Management	-	Union list
3. Epidemic control	-	Concurrent list

Which of the pairs given above is/are correctly matched?

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

EXPLANATION:

Public health and sanitation; hospitals and dispensaries-State List
Disaster Management is not mentioned in any of these 3 lists
The epidemic disease to the extent of "prevention of the extension from one State to another", falls under entry 29 of the concurrent list

SOURCE:

<https://www.mea.gov.in/Images/pdf1/S7.pdf>

78. Consider the following statements about the “Earth Overshoot Day (EOD)”:

- 1. It is a date when humanity’s total annual resource consumption for the year exceeds what the Earth can regenerate in that year.**
- 2. EOD shows the individual performance of the global countries in their efforts to reduce carbon footprint.**

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:

Earth Overshoot Day marks the date when humanity’s demand for ecological resources and services in a given year exceeds what Earth can regenerate in that year. We maintain this deficit by liquidating stocks of ecological resources and accumulating waste, primarily carbon dioxide in the atmosphere. **So, Statement 1 is correct.**

EOD assess the overall performance of the global countries in their efforts to reduce carbon footprint. And not individual performance. **So, Statement 2 is not correct.**

ADDITIONAL INFORMATION:

- To determine the date of Earth Overshoot Day for each year, Global Footprint Network calculates the number of days of that year that Earth’s biocapacity suffices to provide for humanity’s Ecological Footprint.
- The remainder of the year corresponds to global overshoot.
- Earth Overshoot Day is computed by dividing the planet’s biocapacity (the amount of ecological resources Earth is able to generate that year), by humanity’s Ecological Footprint (humanity’s demand for that year), and multiplying by 365, the number of days in a year:
- $(\text{Earth's Biocapacity} / \text{Humanity's Ecological Footprint}) \times 365 = \text{Earth Overshoot Day}$

SOURCE:

<https://www.overshootday.org/about-earth-overshoot-day/>

79. Consider the following statements about the Competition Commission Act, 2002 which was enacted by the Parliament of India:

- 1. The Competition Commission of India imposes penalties both on companies and individuals if they are in contravention to the provisions of this Act.**
- 2. It aims to protect the interests of consumers and ensure freedom of trade in the markets of India.**
- 3. It replaced the Monopolies and Restrictive Trade Practices Act, 1969.**

Which of the statements given above are correct?

- 1 and 2 only
- 1 and 3 only
- 2 and 3 only**
- 1, 2 and 3

EXPLANATION:

Under this Act, The Competition Commission of India (CCI) imposes penalties on companies not on Individuals. **So, Statement 1 is not correct.**

This Act to provide, keeping in view of the economic development of the country, for the establishment of a Commission to prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India, and for matters connected therewith or incidental thereto. **So, Statement 2 is correct.**

The Competition Act, 2002 was enacted by the Parliament of India and governs Indian competition law. It replaced the archaic The Monopolies and Restrictive Trade Practices Act, 1969. **So, Statement 3 is correct.**

ADDITIONAL INFORMATION:

- The Competition Act, 2002 was enacted by the Parliament of India and governs Indian competition law. It replaced the archaic The Monopolies and Restrictive Trade Practices Act, 1969. Under this legislation, the Competition Commission of India was established to prevent the activities that have an adverse effect on competition in India. This act extends to whole of India.
- It is a tool to implement and enforce competition policy and to prevent and punish anti-competitive business practices by firms and unnecessary Government interference in the market. Competition laws is equally applicable on written as well as oral agreement, arrangements between the enterprises or persons.
- The Competition Act, 2002 was amended by the Competition (Amendment) Act, 2007 and again by the Competition (Amendment) Act, 2009.

- The Act establishes a Commission which is duty bound to protect the interests of free and fair competition (including the process of competition), and as a consequence, protect the interests of consumers. Broadly, the Commission's duty is:-
 - To prohibit the agreements or practices that have or are likely to have an appreciable adverse effect on competition in a market in India, (horizontal and vertical agreements / conduct);
 - To prohibit the abuse of dominance in a market;
 - To prohibit acquisitions, mergers, amalgamations etc. between enterprises which have or are likely to have an appreciable adverse effect on competition in market(s) in India.
- Competition Commission of India is a statutory body of the Government of India responsible for enforcing The Competition Act, 2002 throughout India and to prevent activities that have an appreciable adverse effect on competition in India. It was established on 14 October 2003. It became fully functional in May 2009 with Dhanendra Kumar as its first Chairman.

SOURCE:

<https://www.cci.gov.in/about-cci>

80. Which of the following statements is/are correct about the Chinese pangolin and Indian pangolin?

- 1. In India, Chinese pangolin and Indian pangolin are found in their natural habitat.**
- 2. Chinese pangolin and Indian pangolin are categorised as critically endangered and endangered respectively by the International Union for Conservation of Nature.**

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:-

Both Chinese pangolin and Indian pangolin are naturally found in India. **So, Statement 1 is correct.**

Chinese pangolin and Indian pangolin are categorised as critically endangered and endangered respectively by the IUCN. **So, Statement 2 is correct.**

ADDITIONAL INFORMATION:

- India is home to two species of pangolin.

- While the Chinese Pangolin (*Manis pentadactyla*) is found in northeastern India, the Indian Pangolin is distributed in other parts of the country as well as Sri Lanka, Bangladesh and Pakistan.
- Both these species are protected and are listed under the Schedule I Part I of the Wild Life (Protection) Act, 1972 and under Appendix I of the Convention on International Trade in Endangered Species (CITES).
- Commonly known as ‘scaly anteaters’, the toothless animals are unique, a result of millions of years of evolution.
- Pangolins evolved scales as a means of protection. When threatened by big carnivores like lions or tigers they usually curl into a ball.
- The scales defend them against dental attacks from the predators.

SOURCE:-

<https://www.worldwildlife.org/stories/what-is-a-pangolin>

81. With reference to the medieval history of India, who among the following was/were the famous architect(s) lived during the reign of Akbar?

- 1. Ustad Ahmad Lahori**
- 2. Mir Momin Astarawadi**
- 3. Ataullah**

Select the correct answer from the code given below.

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

EXPLANATION:-

Ustad Ahmad Lahori , Mir Momin Astarawadi both lived during the period of akbar. Ustad Ahmad Lahori had laid the foundations of the Red Fort at Delhi (built between 1638 and 1648). Mir Abd-ul Karim had been the favourite architect of the previous emperor Jahangir and is mentioned as a supervisor, together with Makramat Khan, for the construction of the Taj Mahal. Mir Momin Astarabadi was one such migrant who was from Astarabad in Persia (Iran). He was from a family of scholars and his family had instilled him with qualities like discipline and civility. He worked as a tutor to the imperial crown prince, Hyder Mirza but as the prince died unexpectedly followed by his father Tahmasp Safavi; he left Persia and went to Mecca. Finally he came to Golconda in 1580 when Sultan Mohammad Quli was its ruler.

ADDITIONAL INFORMATION:

In architecture the first great Mughal monument was the mausoleum to Humayun, erected during the reign of Akbar (1556–1605). The tomb, which was built in the 1560s, was designed by a Persian architect Mirak Mirza Ghiyas. Set in a garden at Delhi, it has an intricate ground plan with central octagonal chambers, joined by an archway with an elegant facade and surmounted by cupolas, kiosks, and pinnacles. At the same time Akbar was building his fortress-palace in his capital, Agra. Native red sandstone was inlaid with white marble, and all the surfaces were ornately carved on the outside and sumptuously painted inside.

Akbar went on to build the entire city of Fatehpur Sikri (City of Victory) in which extensive use was made of the low arches and bulbous domes that characterize the Mughal style. Built in 1571 the choice of the site of Sikri reflected Akbar's gratitude to a Muslim saint at Sikri for the birth of his son. Courtiers soon followed suit and built homes surrounding the palace and mosque. The new city became the capital of the empire, but in 1585 it was abandoned.

Under Akbar, Persian artists directed an academy of local painters. The drawings, costumes, and ornamentation of illuminated manuscripts by the end of the 16th cent. illustrate the influence of Indian tastes and manners in the bright coloring and detailed landscape backgrounds. Modeling and perspective also began to be adapted from Western pictures. Basawan, Lal, and Daswanth were Akbar's most famous painters.

82. With reference to the famous events in India, consider the following pairs:

<i>Events</i>	-	<i>Occurring places</i>
1. Desert festival	-	Jaisalmer, Rajasthan
2. Rath Yatra	-	Puri, Odisha
3. Cattle Fair	-	Sonepur, Bihar
4. International Craft Fair	-	Surajkund, Haryana

Which of the pairs given above is/are correctly matched?

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

EXPLANATION:

Desert Festival Jaisalmer is an annual event that take place in February month in the beautiful city Jaisalmer. It is held in the Hindu month of Magh (January), three days prior to the full moon.

The festival is celebrated amidst the beautiful dunes of the Thar Desert in the Sam dunes. **So, pair 1 is correct.**

RathaJatra also referred to as Ratha Yatra or Chariot festival, is any public procession in a chariot. The term particularly refers to the annual Rathajatra in Odisha, Jharkhand, West Bengal and other East Indian states, particularly the Odia festival that involve a public procession with a chariot with deities Jagannath (Vishnu avatar), Balabhadra (his brother), Subhadra (his sister) and Sudarshana Chakra (his weapon) on a ratha, a wooden deula-shaped chariot. It attracts over a million Hindu pilgrims who join the procession each year. **So, pair 2 is correct.**

Sonepur Cattle Fair is held on Kartik Poornima (the full moon day) over the months of November and December in Sonepur, Bihar, on the confluence of river Ganges (Gandak). It is also known as Harihar Kshetra Mela and it attracts visitors from all over Asia. To date, it is the biggest cattle fair in Asia and usually lasts from between fifteen days to one month in duration. It historically began when Chandragupta Maurya (340 - 297 BCE) bought elephants and horses across the river Ganges. The Sonepur Cattle Fair used to attract traders from places as far away as Central Asia. **So, pair 3 is correct.**

Surajkund International Crafts Mela in Surajkund, Haryana is organized by the Surajkund Mela Authority & Haryana Tourism in collaboration with Union Ministries of Tourism, Textiles, Culture and External Affairs.

The Surajkund Mela is unique as it showcases the richness and diversity of the handicrafts, handlooms and cultural fabric of India, & is the largest crafts fair in the world. The Mela was initiated in 1987 to promote the pool of skilled artisans, who used indigenous technology, but were suffering due to the cheaper machine-made imitations. **So, pair 4 is correct.**

83. Consider the following statements about the National Strategy for Financial Inclusion (2019-24):

- 1. It has been finalized and approved by the Financial Stability Development Council (FSDC).**
- 2. It aims to ensure that every adult had access to a financial service provider through a mobile device by March 2024.**
- 3. It envisions making the Public Credit Registry (PCR) fully operational by March 2022.**

Which of the statements given above is/are correct?

- 1 only
- 1 and 2 only
- 2 and 3 only
- 1, 2 and 3**

EXPLANATION:

Keeping in view the global trend, the Reserve Bank of India under the aegis of Financial Inclusion Advisory Committee (FIAC) initiated the process of formulation of National Strategy for Financial

Inclusion (NSFI) for the period 2019-2024. Wide ranging discussions were held with all stakeholders. Based on the inputs/feedback received, NSFI has been finalised and approved by the Financial Stability Development Council (FSDC). So, Statement 1 is correct.
National Strategy for Financial Inclusion (NSFI) for the period 2019-2024 aims to ensure that every adult had access to a financial service provider through a mobile device by March 2024. So, Statement 2 is correct.
The plan is also to make the Public Credit Registry (PCR) fully operational by March 2022 so that authorised financial entities could leverage the same for assessing credit proposals from all citizens. So, Statement 3 is correct.

ADDITIONAL INFORMATION:

National Strategy for Financial Inclusion (NSFI)

- The Reserve Bank of India (RBI) has chalked out an ambitious strategy for financial inclusion of all till 2024.
- Financial inclusion is increasingly being recognised as a key driver of economic growth and poverty alleviation the world over.
- The strategy aims to strengthen the ecosystem for various modes of digital financial services in all Tier-II to Tier VI centres to create the necessary infrastructure to move towards a less-cash society by March 2022.
- One of the objectives of the strategy includes increasing outreach of banking outlets of to provide banking access to every village within a 5-km radius or a hamlet of 500 households in hilly areas by March 2020.
- RBI said that the aim was also to see that every adult had access to a financial service provider through a mobile device by March 2024.
- With the aim of providing basic of financial services, a target has been set that every willing and eligible adult, who has been enrolled under the PM Jan Dhan Yojana, be enrolled under an insurance scheme and a pension scheme by March 2020.
- The plan is also to make the Public Credit Registry (PCR) fully operational by March 2022 so that authorised financial entities could leverage the same for assessing credit proposals from all citizens.

SOURCE:

<https://www.thehindu.com/business/rbi-chalks-out-financial-inclusion-strategy-for-2024/article30537029.ece>

84. Consider the following statements about the Particulate Matter (PM) pollution:

- 1. Construction activity and road dust are the main contributors to PM_{2.5} pollution.**
- 2. Vehicular emissions, industrial emissions are major components contributing to PM₁₀ in the urban areas.**
- 3. Reactive Nitrogen is the highest component in the PM_{2.5} emissions.**

Which of the statements given above is/are correct?

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

EXPLANATION:

Construction activity and road dust are the main contributors for the PM₁₀ pollution. **So, Statement 1 is not correct.**

Vehicular emissions, industrial emissions are major components contributing to PM_{2.5} in urban areas. **So, Statement 2 is not correct.**

Reactive nitrogen is the highest component in the PM_{2.5} emissions. **So, Statement 3 is correct.**

ADDITIONAL INFORMATION:

- PM is also called Particulate Matter or particle pollution, which is a mixture of solid particles and liquid droplets present in the atmosphere.
- The particles present in the air are so minute that you cannot even view through naked eyes. Some particles are so small that they can only be detected by using electron microscope. Particle pollution consists of PM_{2.5} and PM₁₀ which are very dangerous.
- PM_{2.5} refers to the atmospheric particulate matter that has a diameter of less than 2.5 micrometres, which is about 3% of the diameter of human hair.
- The particles in PM_{2.5} category are so small that they can only be detected with the help of the electron microscope. These are smaller than PM₁₀ particles. PM₁₀ are the particles with a diameter of 10 micrometers and they are also called fine particles. An environmental expert says that PM₁₀ is also known as respirable particulate matter.

SOURCE:

<https://economictimes.indiatimes.com/news/politics-and-nation/road-dust-is-the-top-contributor-to-delhis-polluted-air-high-levels-need-to-be-curbed/articleshow/50130519.cms>

85. Consider the following statements about the “Solar Risk Mitigation Initiative” which was recently in the news:

- 1. The World Bank - Energy Sector Management Assistance Program (WB-ESMAP) in partnership with the International Solar Alliance (ISA) developed the Solar Risk Mitigation Initiative.**
- 2. It aims to support countries in developing sustainable solar programs that will attract private investments and so reduce reliance on public finances.**

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2**
- Neither 1 nor 2

EXPLANATION:-

SRMI aims to support countries in developing sustainable solar programs that will attract private investments and so reduce reliance on public finances. **So, Statement 2 is correct.**

The World Bank– Energy Sector Management Assistance Program (WB-ESMAP), in partnership with, Agence Française de Développement (AFD), International Renewable Energy Agency (IRENA) and International Solar Alliance (ISA) developed the Solar Risk Mitigation Initiative (SRMI). **So, Statement 1 is correct.**

ADDITINOAL INFORMATION:

- The World Bank– Energy Sector Management Assistance Program (WB-ESMAP), in partnership with, Agence Française de Développement (AFD), International Renewable Energy Agency (IRENA) and International Solar Alliance (ISA) developed the Solar Risk Mitigation Initiative (SRMI).
- This unique approach offers technical assistance to help countries develop evidence-based solar targets, implement a sustainable solar program, and maintain robust procurement processes with transaction advisors.
- SRMI aims to support countries in developing sustainable solar programs that will attract private investments and so reduce reliance on public finances.
- It has three components to mitigate the risk of solar deployment:
 1. Sustainable Solar Targets
 2. Transparent Procurement
 3. Viable Risk Mitigation Coverage

SOURCE:-

<https://www.iasparliament.com/article/upsc-daily-current-affairs-prelim-bits-04-02-2020?q=international%20solar%20alliance>

86. With reference to the pardoning power of the President of India, which one of the following statements is not correct?

- (a) The President can grant pardon in all cases where the sentence is given is the sentence of death
- (b) There is no provision in the constitution of India to challenge the legality of pardoning power
- (c) The power of the President to grant pardon extends in all cases where the punishment or sentence is by a Court Martial
- (d) The pardoning power of the President is absolute in nature**

EXPLANATION:

Article 72 of the Constitution empowers the President to grant pardons to persons who have been tried and convicted of any offence in all cases where the: Punishment or sentence for an offence against a Union Law, Punishment or sentence is by a court-martial (military court), and. Punishment is a Death sentence.

There is no provision in the constitution of India to challenge the legality of pardoning power

The power of the President to grant pardon extends in all cases where the punishment or sentence is by a Court Martial

The pardoning power of the president is not absolute. It is governed by the advice of the Council of Ministers. **So, Option (d) is not correct.**

87. Consider the following statements about the Climate Technology Centre and Network (CTCN):

- 1. It is the operational arm of the UNFCCC Technology Mechanism, hosted by the UN Environment Programme and the UN Industrial Development Organization.**
- 2. It promotes the accelerated transfer of environmentally sound technologies for low carbon and climate-resilient development at the request of developing countries.**

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 CTCN is the operational arm of the UNFCCC Technology Mechanism. **So, Statement 1 is correct.**

The Centre promotes the accelerated transfer of environmentally sound technologies for low carbon and climate resilient development at the request of developing countries. **So, Statement 2 is correct.**

ADDITIONAL INFORMATION:

- The Climate Technology Centre & Network facilitates the transfer of technologies through three core services :
 - Providing technical assistance at the request of developing countries to accelerate the transfer of climate technologies;
 - Creating access to information and knowledge on climate technologies.
 - Fostering collaboration among climate technology stakeholders via the Centre’s network of regional and sectoral experts from academia, the private sector, and public and research institutions.
- Through these services, we aim to address barriers that hinder the development and transfer of climate technologies, and to thereby help create an enabling environment for:
 - Reduced greenhouse gas emissions and climate vulnerability
 - Improved local innovation capacities
 - Increased investments in climate technology projects.
- The United Nations Environment Programme (UNEP) hosts the CTCN in collaboration with the United Nations Industrial Development Organization (UNIDO) and the support of a consortium of partners (see below) that are engaged in some 1,500 activities related to climate technologies in over 150 countries.

SOURCE:

<https://www.ctc-n.org/about-ctcn>

88. Consider the following pairs:

<i>Volcanic site</i>		<i>Country</i>
1. Mount Etna	-	Japan
2. Krakatau Island	-	Indonesia
3. Mayotte Island	-	France

Which of the pairs given above are correctly matched?

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

EXPLANATION:

Mount Etna, or Etna is an active stratovolcano on the east coast of Sicily, Italy, in the Metropolitan City of Catania, between the cities of Messina and Catania. It lies above the convergent plate margin between the African Plate and the Eurasian Plate. It is the highest active volcano in Europe outside the Caucasus and the highest peak in Italy south of the Alps. **So, pair 1 is not correct.**

Krakatoa, or Krakatau is a caldera in the Sunda Strait between the islands of Java and Sumatra in the Indonesian province of Lampung. The caldera is part of a volcanic island group (Krakatoa

Archipelago) comprising four islands: Lang, Verlaten, Rakata, and Anak Krakatau. **So, pair 2 is correct.**

Mayotte is an overseas department and region of France officially named the Department of Mayotte. It consists of the main island, Grande-Terre (or Maore), a smaller island, Petite-Terre (or Pamanzi), and several islets around these two. Mayotte is part of the Comoros archipelago, located in the northern Mozambique Channel in the Indian Ocean off the coast of Southeast Africa, between northwestern Madagascar and northeastern Mozambique. **So, pair 3 is correct.**

89. In which of the following activities, the Indian Geo Imaging Satellite (GISAT) would be used?

- 1. Check on natural hazards and disasters**
- 2. Border surveillance and Terrorist infiltration**
- 3. Telecommunications**
- 4. Regional Navigation**

Select the correct answer using the code given below.

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

EXPLANATION:

Geo Imaging Satellite or GISAT is an Indian imaging satellite class for geostationary orbit with a high temporal resolution, meant for providing near real time imaging with fast revisit capability and real time monitoring.

Objectives of GISAT

- Facilitates near real time observation of the Indian sub continent, under cloud free condition, at frequent intervals.
- Helps quick monitoring of natural disasters. **(statement 1)**
- Keep a constant watch on borders. **(statement 2)**
- Monitor any changes in the geographical condition of the country.
- Helps to obtain spectral signatures of agriculture, forestry, mineralogy, disaster warning, cloud properties, snow, glaciers and oceanography.

So, Option (a) is correct.

SOURCE:

<https://www.thehindu.com/sci-tech/gisat-1indias-first-earth-imaging-satellite-on-geostationary-orbit/article30970923.ece>

90. Consider the following pairs:

<i>Harappan Site</i>	-	<i>River Associated</i>
1. Kalibangan	-	Ghaggar
2. Lothal	-	Bhogawa
3. Banawali	-	Saraswati

Which of the pairs given above is/are correctly matched?

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

EXPLANATION:

Kalibangan (Black Bangles), Rajasthan is situated on the bank of river Ghaggar. It has evidence of ploughed field, wooden furrow, seven fire-altars, bones of camel and two types of burials (Circular grave and rectangular grave) have been found. **So, pair 1 is correct.**

Lothal (Gujarat) is situated on the bank of river Bhogawa. The city was divided into Citadel and the lower town and dockyard. It has evidence of rice has been found here. **So, pair 2 is correct.**

Banawali (Haryana) is situated on the bank of river Saraswati. It has evidence of both pre-Harappan and Harappan culture and barley with good quality has been found here. **So, pair 3 is correct.**

ADDITIONAL INFORMATION:

- Harappa - Situated on the bank of river Ravi in Montgomery district of Punjab (Pakistan).
- Mohenjo-Daro (Mound of Dead)- Situated on the Bank of river Indus in Larkana district of Punjab (Pakistan).
- Chanhudaro (Sindh, Pakistan) - Situated on the Bank of river Indus in Sindh, Pakistan.
- Lothal (Gujarat)- Situated on the bank of river Bhogawa.
- Kalibangan (Black Bangles), Rajasthan - Situated on the bank of river Ghaggar
- Dholavira - Situated on the bank of river Luni of Kachchh district in Gujarat.
- Surkotada (Gujarat) - Situated between the rivers Sabarmati and the Bhogawa.
- Banawali (Haryana) - Situated on the bank of river Saraswati.

91. Consider the following statements about the North Eastern Council (NEC) of India:

1. **The Union Home Minister is the ex-officio Chairman of this council.**
2. **The President of India may nominate a Union Minister to be a member of this Council.**
3. **It can discuss any matter concerning the interstate transportation and communications in which some or all northeastern states of India have a common interest.**

Which of the statements given above is/are correct?

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

EXPLANATION:

The Union Home Minister is the ex-officio Chairman of the council. **So, Statement 1 is correct.**

If necessary, The President of India may nominate a Union Minister to be a member of this Council.

So, Statement 2 is correct.

It can discuss any matter concerning inter-State Transport and Communications of north eastern states. They are only deliberative and advisory bodies. **So, Statement 3 is correct.**

ADDITIONAL INFORMATION:

North-Eastern Council

- In addition to the above Zonal Councils, a North-Eastern Council was created by a separate Act of Parliament—the North-Eastern Council Act of 1971.
- Its members include Assam, Manipur, Mizoram, Arunachal Pradesh, Nagaland, Meghalaya, Tripura and Sikkim.
- Its functions are similar to those of the zonal councils, but with few additions. It has to formulate a unified and coordinated regional plan covering matters of common importance.
- It has to review from time to time the measures taken by the member states for the maintenance of security and public order in the region.

SOURCE:

Indian polity by M Laxmikanth

92. Consider the following statements about the Cooperative banks in India:

- 1. A cooperative bank is a financial entity which belongs to its members, who are at the same time the owners and the customers of their bank.**
- 2. These banks must be registered under the cooperative societies act and are regulated only by the Registrar of the Cooperative Societies of the respective state government.**
- 3. Maintaining cash reserve ratio does not apply to these banks.**

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:

Co-operative banks are financial entities established on a co-operative basis and belonging to their members. This means that the customers of a co-operative bank are also its owners. These banks provide a wide range of regular banking and financial services. **So, Statement 1 is correct.**

The short-term co-operative credit structure operates with a three-tier system - Primary Agricultural Credit Societies (PACS) at the village level, Central Cooperative Banks (CCBs) at the district level and State Cooperative Banks (StCBs) at the State level. PACS are outside the purview of the Banking Regulation Act, 1949 and hence not regulated by the Reserve Bank of India. StCBs/DCCBs are registered under the provisions of State Cooperative Societies Act of the State concerned and are regulated by the Reserve Bank. Powers have been delegated to National Bank for Agricultural and Rural Development (NABARD) under Sec 35 A of the Banking Regulation Act (As Applicable to Cooperative Societies) to conduct inspection of State and Central Cooperative Banks. **So, Statement 2 is not correct.**

Maintaining cash reserve ratio and capital adequacy ratio is applicable to Cooperative banks in India. **So, Statement 3 is not correct.**

ADDITIONAL INFORMATION:

- Co-operative banks are financial entities established on a co-operative basis and belonging to their members.
- This means that the customers of a co-operative bank are also its owners.
- These banks provide a wide range of regular banking and financial services.
- Co-operative Banks are broadly classified into Urban and Rural co-operative banks based on their region of operation.
- Rural Co-operative Banks (RCBs) could either be short-term or long-term in nature.
- Short-Term Co-operative Banks are further sub-divided into State Co-operative Banks, District Central Co-operative Banks, and Primary Agricultural Credit Societies.
- The long-term institutions are either State Cooperative Agriculture or Rural Development Banks (SCARDBs) or Primary Cooperative Agriculture and Rural Development Banks (PCARDBs).
- Urban Co-operative Banks (UBBs) are either scheduled or non-scheduled.
- Scheduled and non-scheduled UCBs are again of two kinds- multi-state and those operating in single state.
- In India, co-operative banks are registered under the States Cooperative Societies Act.
- They also come under the regulatory ambit of the Reserve Bank of India (RBI) under two laws;
 - Banking Regulations Act, 1949
 - Banking Laws (Co-operative Societies) Act, 1955.

SOURCE:

https://www.rbi.org.in/scripts/FS_Overview.aspx?fn=2755

93. With reference to the Indian freedom struggle, Chittu Pandey, Y.B. Chavan and Nana Patil are well-known for

- (a) **formation of parallel governments during the Quit India movement**
- (b) participating in the Second Round Table Conference representing the Indian National Congress
- (c) leading a contingent of Indian National Army during the Imphal expedition
- (d) assisting in the formation of Interim Government under the leadership of Jawaharlal Nehru

EXPLANATION:-

Ballia - First parallel government formed under Chittur Pandey, Tamruk (Midnapur, Bengal), Satara (Maharashtra) - longest running parallel government. **So, Option (a) is correct.**

ADDITINOAL INFORMATION:

- Also known as the India August Movement or August Kranti.
- It was officially launched by the Indian National Congress (INC) led by Mahatma Gandhi on 9 August 1942.
- The movement gave the slogans 'Quit India' or 'Bharat Chodo'. Gandhi gave the slogan to the people – 'Do or die'.
- In line with the Congress ideology, it was supposed to be a peaceful non-violent movement aimed at urging the British to grant India independence.
- The Quit India Resolution was passed by the Congress Working Committee on 8 August 1942 in Bombay. Gandhi was named the movement's leader.
- The resolution stated the provisions of the movement as:
 1. An immediate end to British rule over India.
 2. Declaration of the commitment of free India to defend itself against all kinds of imperialism and fascism.
 3. Formation of a provisional government of India after British withdrawal.
 4. Sanctioning a civil disobedience movement against British rule.
- Gandhi's instructions to various sections of the public:
 1. Government servants: do not resign your job but proclaim loyalty to the INC.
 2. Soldiers: be with the army but refrain from firing on compatriots.
 3. Peasants: pay the agreed-upon rent if the landlords/Zamindars are anti-government; if they are pro-government, do not pay the rent.

4. Students: can leave studies if they are confident enough.
5. Princes: support the people and accept the sovereignty of them.
6. People of the princely states: support the ruler only if he is anti-government; declare themselves as part of the Indian nation.

Response to Quit India Movement

- The British government responded to the call of Gandhi by arresting all major Congress leaders the very next day. Gandhi, Nehru, Patel, etc. were all arrested. This left the movement in the hands of the younger leaders like Jayaprakash Narayan and Ram Manohar Lohia. New leaders like Aruna Asaf Ali emerged out of the vacuum of leadership.
- Over 100000 people were arrested in connection with this movement. The government resorted to violence in order to quell the agitation. They were mass floggings and lathi charges. Even women and children were not spared. About 10000 people died in police firing in total.
- There was no communal violence.
- The INC was banned. Its leaders were jailed for almost the whole of the war. Gandhi was released on health grounds in 1944.
- The people responded to Gandhi's call in a major way. However, in the absence of leadership, there were stray incidences of violence and damage to government property. Many buildings were set on fire, electricity lines were cut and communication and transport lines were broken.
- Some parties did not support the movement. There was opposition from the Muslim League, the Communist Party of India (the government revoked the ban on the party then) and the Hindu Mahasabha.
- The League was not in favour of the British leaving India without partitioning the country first. In fact, Jinnah asked more Muslims to enlist in the army to fight the war.
- The Communist party supported the war waged by the British since they were allied with the Soviet Union.
- Subhas Chandra Bose, was by this time, organizing the Indian National Army and the Azad Hind government from outside the country.
- C Rajagopalachari, resigned from the INC since he was not in favour of complete independence.
- In general, the Indian bureaucracy did not support the Quit India Movement.
- There were strikes and demonstrations all over the country. Despite the communist group's lack of support to the movement, workers provided support by not working in the factories.
- In some places, parallel governments were also set up. Example: Ballia, Tamluk, Satara.
- The chief areas of the movement were UP, Bihar, Maharashtra, Midnapore, and Karnataka. The movement lasted till 1944.

SOURCE:-

spectrum

94. Recent studies show that there is a fall in the population of Bees at an alarming rate. Which of the following is/are the possible reason(s) for the disappearance of Bees?

- 1. Loss of flower meadows**
- 2. Use of pesticides**
- 3. Parasites and diseases**

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:

Possible causes for the disappearance of bees are as follows

- **Pesticides**
- **Pathogens and immunodeficiency theories**
- Viral and fungal combination
- Fungicides
- Antibiotics and miticides
- Climate change (**loss of flower meadows due to climate change**)
- Bee rentals and migratory beekeeping
- Selective commercial breeding and lost genetic diversity in industrial apiculture
- Malnutrition
- Electromagnetic radiation
- Genetically modified crops

So, Option (d) is correct.

ADDITIONAL INFORMATION:

- Colony collapse disorder (CCD) is an abnormal phenomenon that occurs when the majority of worker bees in a honey bee colony disappear, leaving behind a queen, plenty of food, and a few nurse bees to care for the remaining immature bees.
- While such disappearances have occurred sporadically throughout the history of apiculture, and have been known by various names (including disappearing disease, spring dwindle, May disease, autumn collapse, and fall dwindle disease), the syndrome was renamed colony collapse disorder in late 2006 in conjunction with a drastic rise in reports of disappearances of western honey bee (*Apis mellifera*) colonies in North America.
- Colony collapse disorder causes significant economic losses because many agricultural crops worldwide depend on pollination by western honey bees. According to the Agriculture and

Consumer Protection Department of the United Nations Food and Agriculture Organization (FAO), the total value of global crops pollinated by honey bees was estimated at nearly USD\$200 billion in 2005. In the United States, shortages of bees have increased the cost to farmers renting them for pollination services by up to 20%.

- Several possible causes for CCD have been proposed, but no single proposal has gained widespread acceptance among the scientific community. Suggested causes include pesticides; infections with various pathogens, especially those transmitted by Varroa and Acarapis mites; malnutrition; genetic factors; immunodeficiencies; loss of habitat; changing beekeeping practices; or a combination of factors. A large amount of speculation has surrounded the contributions of the neonicotinoid family of pesticides to CCD, but many collapsing apiaries show no trace of neonicotinoids.

SOURCE:

<https://www.sciencenewsforstudents.org/article/why-are-bees-vanishing-pesticides-disease-other-threats>

95. With reference to the ancient history of India, which one of the following statements is not correct about the Mauryan Empire?

- (a) There were no private ownership of land during that period**
- (b) Taxes were collected both in cash and kind
- (c) There was village labour, bonded labour and slave labour during that period
- (d) The weight and measures were regulated by the State

EXPLANATION:-

There was private ownership of land during mauryan period. Tax collected was tax on crop and not rent on land. So, Statement 1 is correct.
Taxes were collected both in cash and kind. One-sixth of the revenue was collected as tax. So, Statement 2 is not correct.
There was village labour, bonded labour and slave labour. So, Statement 3 is not correct.
The weight and measures were regulated by the states through Pauthavadhyakhsa. So, Statement 4 is not correct.

ADDITIONAL INFORMATION:

- Mauryan administration was highly centralized. The king was the supreme power and source of all authority. He was assisted by a Council of Ministers. It was called 'Mantriparishad'. The ministers were called 'Mantris.'
- The council was headed by 'mantriparishad-adhyakshya' akin to the Prime Minister of today.
 - Tirthas: the Highest category of officials in the administration. There were 18 Tirthas.

- Adhyakshya: Ranked next only to Tirthas. There were 20 Adhyakshyas. They had economic and military functions.
- Mahamattas: Higher ranking officials.
- Amatyas: High ranking officials almost like present-day secretaries. They had administrative and judicial roles.
- The Adhyakshyas were formed into a secretariat, which was divided into many departments.
- Arthashastra mentions many Adhyakshyas for commerce, storehouses, gold, ships, agriculture, cows, horses, city, chariots, mint, infantry, etc.
 - Yuktas: Subordinate officers responsible for the king's revenue.
 - Rajjukas: Officers in charge of land measurement and boundary-fixing.
 - Sansthadyasksha: Superintendent of mint
 - Samasthadyasksha: Superintendent of markets
 - Sulkaadhyaksha: Superintendent of tolls
 - Sitaadhyaksha: Superintendent of agriculture
 - Navadhyaksha: Superintendent of ships
 - Lohadhyaksha: Superintendent of iron
 - Pauthavadhyaksha: Superintendent of weights and measures
 - Akaradhyaksha: Superintendent of mines
 - Vyavharika Mahamatta: Judiciary officers
 - Pulisanj: Public relations officers
- Registration of births and deaths, foreigners, industries, trade, manufacture and sale of goods, sales tax collection were under the administration's control.

SOURCE:-

Themes 2

96. If the value of Indian Rupee depreciates very low compared to US Dollars, then which of the following shall be true?

- 1. Exports from India become more competitive in the global market.**
- 2. Narrowing of Current Account Deficit in India.**
- 3. Rise in the cost-push inflation in India.**
- 4. Rise in investment by the Indian investors in US Stock Exchanges.**

Select the correct answer using the code given below.

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

EXPLANATION:

Oil, natural gases, pulses and other essential items are imported from other countries. So, even if

the rupee depreciates, these items have to be imported. So, CAD will not be narrowed as exports will be overshadowed by this. **So, Statement 2 is not correct.**

As rupee depreciates, it is not profitable for the investors to invest in other countries as they have to pay more rupees to receive dollars for investment. **So, Statement 4 is not correct.**

97. Consider the following statements about Saint Kabir:

- 1. He always objected the ritualistic and ascetic methods as a means of salvation.**
- 2. His verses are found in Sikhism's scripture Guru Granth Sahib.**
- 3. He was a contemporary of Firoz Shah Tughlaq.**

Which of the statements given above is/are correct?

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

EXPLANATION:

Kabir was a great opponent of the caste system. He stressed that in God's creation all were equal. He advised his followers to give up such inhuman practices as untouchability, feelings of high and low etc. He further opposed the worship of stone images, or even the worship of different gods and goddesses and was against rituals and ceremonies in religion. **So, Statement 1 is correct.**

Kabir's verses were incorporated into Adi Granth. **So, Statement 2 is correct.**

Saint Kabir was contemporary of Guru Nanak and Delhi Sultan SikandarLodhi. **So, Statement 3 is not correct.**

ADDITIONAL INFORMATION:

About Kabir:

SantKabir Das was a very renowned **saint, poet and social reformer** of India who lived during the 15th century. His esteemed works and poems describe the greatness and oneness of the Supreme Being.

He did not believe in any religious discrimination and readily accepted all the religions.

SantKabir Das propagated that there is the presence of same Supreme Being in all religions.

SantKabir Das was a highly acclaimed poet of his time. His writings significantly **influenced the Bhakti movement**. Some of his famous writings include '**SakhiGranth**', '**Anurag Sagar**', '**Bijak**' and '**KabirGranthawali**'.

A religious community known as '**KabirPanth**' was founded by him and the members of this forum are referred as 'KabirPanthis', implying the followers of Kabir Das. He was admired by individual of all faiths and his teachings are still alive and passed from generations.

Swami Ramananda influence: KabirDas' ideologies were greatly influenced by Vaishnava saint Swami Ramananda who accepted Kabir as his disciple.

98. Consider the following pairs:

- | <i>(Prehistoric sites)</i> | <i>(Important findings)</i> |
|----------------------------|-----------------------------|
| 1. Inamgaon - | Statue of mother Goddess |
| 2. Adamgarh - | Domestication of animals |
| 3. Chirand - | Serpent cult |

Which of the pairs given above is/are correctly matched?

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

EXPLANATION:-

Inamgaon is a post-Harappan agrarian village and archaeological site located in Maharashtra, western India. Situated along the right bank of the Ghod River, it is considered to be the 'regional centre' of the Bhima Valley. Inamgaon is one of the most intensively and extensively excavated and well reconstructed Chalcolithic sites of the Deccan region as well as of India so far. The statue of mother goddess is found in inamgaon. **So pair 1 is correctly matched.**

Adamgarh Hills is located in the Hoshangabad town of the Hoshangabad district in the Indian state of Madhya Pradesh. These rock shelters are situated on the south of Narmada river. These contain paintings of Prehistoric period, done in red and white colours. Few shelters were excavated and remains from Palaeolithic period to historical period were observed. Evidence for domestication of animals is found here. **So pair 2 is correctly matched.**

Chirand is an archaeological site in the Saran district of Bihar, India, situated on the northern bank of the Ganga River. It has a large pre-historic mound which is known for its continuous archaeological record from the Neolithic age (about 2500–1345 BC) to the reign of the Pal dynasty who ruled during the pre-medieval period. The excavations in Chirand have revealed stratified Neolithic, Chalcolithic, and Iron Age settlements, and transitions in human habitation patterns dating from 2500 BC to 30 AD. It had serpent cult. **So pair 3 is correctly matched.**

99. Consider the following pairs:

Tribes *Forest type associated*

1. Chenchu - Tropical Dry Evergreen
2. Gonds - Tropical Moist Deciduous
3. Karbi - Montane Wet Temperate

Which of the pairs given above are correctly matched?

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

EXPLANATION:

The Chenchus are Adivasi, a designated Scheduled Tribe in the Indian states of Andhra Pradesh, Telangana, Karnataka and Odisha. They mostly live in Tropical Dry Deciduous Forests. **So pair 1 is correctly matched.**

Gonds are an Indian ethnic group. They speak Gondi language which is a Dravidian language. They are one of the largest tribal groups in India. They are spread over the states of Madhya Pradesh, eastern Maharashtra (Vidarbha), Chhattisgarh, Uttar Pradesh, Telangana, Andhra Pradesh, Bihar and Odisha. They mostly live in Tropical Moist Deciduous. **So pair 2 is correctly matched.**

Karbis are one of the major ethnic communities in Northeast India and especially in the hill areas of Assam. They mostly live in Montane Forests. **So pair 3 is correctly matched.**

100. Consider the following pair:

Heritage site *Location*

1. Rakhigarhi - Haryana
2. Hastinapur - Uttar Pradesh
3. Shivsagar - Andhra Pradesh

Which of the pairs given above are correctly matched?

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

EXPLANATION:

Rakhigarhi in Haryana's Hissar district is one of the most prominent and largest sites of the Harappan civilisation. It is one among the five known townships of the Harappan civilisation in the Indian subcontinent. **So, pair 1 is correct.**

Excavations at Hastinapur, in Meerut district of Uttar Pradesh, were led by Dr B B Lal, who was at the time Superintendent of the Excavations Branch of the Archaeological Survey of India (ASI). **So, pair 2 is correct.**

Sivasagar is named after a lake in the city of Sivasagar in Assam, which was the epicentre of the Ahom kingdom that existed in the Brahmaputra Valley between the 13th and 19th century CE. **So, pair 3 is not correct.**

ADDITIONAL INFORMATION:

Rakhigarhi

- Rakhigarhi is among the largest known townships of the Harappan civilisation, which existed between 2,600-1,800 BC. It is located in the Hisar district of Haryana, approximately 150 kilometres north-west of Delhi.
- The site, which consists of seven mounds, was discovered by the Archeological Survey of India in 1963.
- Excavations in Rakhigarhi have traced this civilisation to as early as 5,500 BC. The site gained prominence last year when a study of DNA samples of the skeletons found there showed that there are no traces of the R1a1 gene or Central Asian 'steppe' genes, loosely termed as the 'Aryan gene'.
- In 2012, the Global Heritage Fund declared Rakhigarhi as one of the 10 most endangered heritage sites in Asia because of the encroachments into the area.

Hastinapur

- Hastinapur is located in Meerut and is considered to be the capital of the 'Kuru Kingdom'.
- The site is part of the ASI's list of 'Mahabharata sites,' which are places that are believed to have been featured in the epic. Hastinapur is believed to have been the capital of the kingdom of the Pandavas and Kauravas. It has also found mention in ancient Jain texts.
- Even though archaeologists claim to have found deposits of a layer associated with the Mahabharata time-period, they have failed to find it in a stratified form. Excavations at the Mahabharata sites — including Hastinapura — seek to find this link.

Sivasagar

- Sivasagar is named after a lake in the city of Sivasagar in Assam, which was the epicentre of the Ahom kingdom that existed in the Brahmaputra Valley between the 13th and 19th century CE.
- Assam history has a special reference to the Ahom regime.
- The site hosts burial mounds of the kings who ruled the Ahom kingdom for 600 years, and they were made a part of the world heritage sites in 2014.
- There are several prominent tourism sites — the Rang Ghar, TalatalGhar, Namdang Stone Bridge — built by Ahom rulers.
- Rang Ghar used to be a site for buffalo fights and other sports for the Ahom rulers. The TalatalGhar was initially an army base camp for the Ahom kings, used during wars, while the Namdang Stone Bridge was a connecting bridge between Assam and the rest of India.

Dholavira

- Like Rakhigari, Dholavira, which is located in the Kutch district of Gujarat, is also a site of Harappan civilisation.
- It was discovered by the ASI in 1967. Artefacts found in Dholavira included terracotta pottery, beads, gold and copper ornaments, tools, urns and some imported vessels that indicate trade links with lands as far away as Mesopotamia.
- Dholavira was a thriving metropolis during the 3,000 BCE-1,800 BCE period. According to the UNSECO, “Globally, Dholavira can be compared to the cities of Ancient River Valley Civilization, the urban metropolises of Egyptian, Chinese and Mesopotamian.”

Adichanallur

- This is a site located in Thoothukudi district, Tamil Nadu, and is believed to be dating backing to 696-905 BC, making it the oldest site in the state so far.
- Adichanallur is an urn-burial site, first discovered in 1876. In 2005, around 169 clay urns containing human skeletons, nearly 3,800 years old, were unearthed.
- Apart from the skeletons, several gold diadems with a hole on each end for tying them around the forehead were also found, along with a number of bronze figurines of buffalos, goats tigers, and elephants.

SOURCE:

<https://indianexpress.com/article/explained/explained-the-five-iconic-archaeological-sites-mentioned-in-the-budget-6246095/>