

 GENERAL STUDIES PRELIMS ANSWERS WITH NOTES
 2016 Series: A

- Which of the following statements is/are correct?
- 1. A Bill pending in the Lok Sabha lapses on its prorogation
- 2. A Bill pending in the Rajya Sabha, which has not been passed by the Lok Sabha, shall not lapse on dissolution of the Lok Sabha

A) 1 only

- B) 2 only
- C) Both 1 and 2
- D) Neither 1 nor 2

### When Bills is considered Lapsed

- When the Lok Sabha is dissolved, all business including bills, motions, resolutions, notices, petitions and so on pending before it or its committees lapse.
- A bill originated in the Lok Sabha but pending in the Lok Sabha
   lapses.
- A bill originated and passed by the Rajya Sabha but pending in Lok Sabha lapses.
- A bill originated and passed by the Lok Sabha but pending in the Rajya Sabha lapses.
- A bill originated in the Rajya Sabha and returned to that House by the Lok Sabha with amendments and still pending in the Rajya Sabha on the date of the dissolution of Lok Sabhalapses.

### When a bill does not lapse

- A bill pending in the Rajya Sabha but not passed by the Lok Sabha does not lapse.
- If the president has notified the holding of a joint sitting before the dissolution of Lok Sabha, does not lapse.
- A bill passed by both Houses but pending assent of the president does not lapse.
- A bill passed by both Houses but returned by the president for reconsideration of Rajya Sabha does not lapse.
- Some pending bills and all pending assurances that are to be examined by the Committee on Government Assurances do not lapse on the dissolution of the Lok Sabha.



#### **Bills Lapsing**

- Adjournment (of a sitting) does not affect the bills or any other business pending before the House and the same can be resumed when the House meets again.
- Prorogation of a session does not affect the bills or any other business pending before the House.
- An adjournment suspends the work in a sitting for a specified time, which may be hours, days or weeks. In this case, the time of reassembly is specified.
- An adjournment only terminates a sitting and not a session of the House.

### Adjournment Sine Die

- Adjournment sine die means terminating a sitting of Parliament for an indefinite period. In other words, when the House is adjourned without naming a day for reassembly, it is called adjournment sine die.
- Prorogation means the termination of a session of the House by an order made by the President under article 85(2)(a) of the Constitution. Prorogation terminates both the sitting and session of the House.
- A dissolution ends the very life of the existing House, and a new House is constituted after general elections are held

#### 2/A2016



- Which of the following is/are the indicator/indicators used by IFPRI to compute the Global Hunger Index Report?
  - 1. Undernourishment
  - 2. Child stunting
  - 3. Child mortality

Select the correct answer using the code given below

A) 1 only

B) 2 and 3 only

C) 1,2 and 3

D) 1 and 3 only

#### Global Hunger Index

- The Global Hunger Index (GHI) is a tool designed to comprehensively measure and track hunger at global, regional, and national levels. GHI scores are calculated each year to assess progress and setbacks in combating hunger.
- The International Food Policy Research Institute (IFPRI) calculates GHI scores each year to assess progress, or the lack thereof, in combating hunger.
- The Index ranks countries on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst.
- The GHI combines 4 component indicators
- the proportion of the undernourished as a percentage of the population;
- the proportion of children under the age of five suffering from wasting, a sign of acute undernutrition;
- the proportion of children under the age of five suffering from stunting, a sign of chronic undernutrition; and
- The mortality rate of children under the age of five.

- There has been a persistent deficit budget year after year.
   Which action/actions of the following can be taken by the Government to reduce the deficit?
  - 1. Reducing revenue expenditure
  - 2. Introducing new welfare schemes
  - 3. Rationalizing subsidies
  - 4. Reducing import duty

- A) 1 only B) 2 and 3 only
- C) 1 and 3 only D) 1,2,3 and 4

#### Controlling of Deficit Budget

- A budget deficit is when spending exceeds income.
- The obvious way to reduce a budget deficit is to increase tax rates and cut government spending.
- The deficit spending can help promote higher growth, which will enable higher tax revenues and the deficit will fall over time.
- Austerity can be self-defeating.
- A deficit budget is not a sign of government inefficiency. In fact, budgetary deficit may be a planned strategy of the government during periods of depression when the government needs to accelerate the pace of expenditure in the economy.

- The establishment of 'Payment Banks' is being allowed in India to promote financial inclusion. Which of the following statements is/are correct in this context?
  - 1. Mobile telephone companies and supermarket chains that are owned and controlled by residents are eligible to be promoters of Payment Banks
  - 2. Payment Banks can issue both credit cards and debit cards
  - 3. Payment Banks cannot undertake lending activities

- A) 1 and 2 only
- C) 2 only

- B) 1 and 3 only
- D) 1,2 and 3

#### Payment Banks

- These banks cannot issue loans and credit cards.
- Both current account and savings accounts can be operated by such banks.
- Payments banks can issue ATM cards or debit cards and provide online or mobile banking.
- Payment Bank can take only up to ₹1 lakh as deposit from a customer.
- Payments banks can't accept fixed or recurring deposits.
- An applicant for starting a Payment Bank has to undertake is to incorporate a Public Limited Company under the Companies Act, 2013, as per RBI regulations.
- Jio is India's 5<sup>th</sup> payments bank

- With reference to 'LiFi' recently in news, which of the following statements is/are correct?
- 1. It uses light as the medium for high-speed data transmission
- 2. It is a wireless technology and is several times faster than 'WiFi'.

A) 1 only

B) 2 only

C) Both 1 and 2

D) Neither 1 nor 2

- Li-Fi (short for light fidelity) is wireless communication technology which utilizes light to transmit data and position between devices.
- The term was first introduced by Harald Haas during a 2011 TED Global talk in Edinburgh.
- LiFi is a mobile wireless technology that uses light rather than radio frequencies to transmit data.
- LiFi uses light for data transmission while WiFi uses electromagnetic waves at radio frequencies for data transmission.
- Because it uses visible light, and light cannot penetrate walls, the signal's range is limited by physical barriers.

- The term 'Intended Nationally Determined Contributions' is sometimes seen in the news in the context of
- A) pledges made by the European countries to rehabilitate refugees from the war-affected Middle East
- B) plan of action outlined by the countries of the world to combat climate change
- C) capital contributed by the member countries in the establishment of Asian Infrastructure Investment Bank
- D) plan of action outlined by the countries of the world regarding Sustainable Development Goals

## **Intended Nationally Determined Contributions**

- Intended Nationally Determined Contributions (INDC) are (intended) reductions in greenhouse gas emissions under the United Nations Framework Convention on Climate Change (UNFCCC).
- The intended contributions were determined without prejudice to the legal nature of the contributions
- China and US together contribute 38% of total global emission.
   India 4.1% of global emission
- The INDCs contain steps taken towards emissions reductions and also aim to address steps taken to adapt to climate change impacts, and what support the country needs, or will provide, to address climate change.

- Which one of the following is a purpose of 'UDAY', a scheme of the Government?
- A) Providing technical and financial assistance to start-up entrepreneurs in the field of renewable sources of energy
- B) Providing electricity to every household in the country by 2018
- C) Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time
- D) Providing for financial turnaround and revival of power distribution companies

- Ministry of Power, Government of India launched Ujwal DISCOM Assurance Yojana (UDAY).
- UDAY seeks to empower loss making Discoms to break even in two-three years by helping the Discoms in improving their operational efficiencies (compulsory smart metering, upgradation of transformers, popularising LED bulbs) etc.
- This is the scheme for the Financial Turnaround of Power Distribution Companies (DISCOMs)
- Uday had adversely impacted state finances as Uday bonds had increased their debt liability and added to their fiscal deficit.

- With reference to 'IFC Masala Bonds' sometimes seen in the news, which of the statements given below is/are correct?
  - 1. The International Finance Corporation, which offers these bonds, is an arm of the World Bank
  - 2. They are the rupee-denominated bonds and are a source of debt financing for the public and private sector

A) 1 only

- B) 2 only
- C) Both 1 and 2
- D) Neither 1 nor 2

- Masala bonds are bonds issued outside India by an Indian entity or corporate. These bonds are issued in Indian currency than local currency. Indian corporates usually issue Masala Bonds to raise funds from foreign investors. As it is pegged into Indian currency, if the rupee rates fall, investors bear the risk.
- The first Masala bond was issued by the World Bank- backed IFC in November 2014 when it raised 1,000 crore bond to fund infrastructure projects in India.
- Under the Masala bond program, IFC has issued bonds worth almost 110 billion rupees, including the first green Masala bond to support climate-smart investment in India.

- Regarding the taxation system of Krishna Deva, the ruler of Vijayanagar, consider the following statements:
  - 1. The tax rate on land was fixed depending on the quality of the land
  - 2. Private owners of workshops paid an industries tax

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





- The economy of the empire was largely dependent on agriculture.
- Tax policies encouraging needed produce made distinctions between land use to determine tax levies.
- The tax rate on land was fixed depending on the quality of the land
- Private owners of workshops paid an industries tax

#### 10/A2016



- Which one of the following books of ancient India has the love story of the son of the founder of Sunga dynasty?
  - A) Swapnavasavadatta
  - B) Malavikagnimitra
  - C) Meghadoota
  - D) Ratnavali

#### Sunga Dynasty

- The Shunga dynasty was a Brahmin dynasty, established in 185 BCE, about 50 years after Ashoka's death,
- The emperor Brihadratha Maurya, the last ruler of the Maurya Empire, was assassinated by his Senānī or commander-in-chief, Pushyamitra Shunga, while he was reviewing the Guard of Honour of his forces.
- Pushyamitra Shunga ruled for 36 years and was succeeded by his son Agnimitra.
- The Mālavikāgnimitram is a Sanskrit play by Kalidasa. The play tells the story of the love of Agnimitra and Malavika. Malavika was the handmaiden of Queen.

- In the context of which of the following do you sometimes find the terms 'amber box', 'blue box', and 'green box' in the news?
  - A) WTO affairs
  - B) SAARC affairs
  - C) UNFCCC affairs
  - D) India- EU negotiations on FTA

- In WTO terminology, subsidies in general are identified by "Boxes" which are given the colours of traffic lights: green(permitted), amber (slow down i.e. be reduced), red (forbidden).
- A **subsidy** is a benefit given to an individual, business, or institution, usually by the government. The **subsidy** is typically given to remove some type of burden, and it is often considered to be in the overall interest of the public, given to promote a social good or an economic policy.
- Amber box subsidies are those subsidies which distort the international trade by making products of a particular country cheaper in comparison to same product in another country. Examples of such subsidies include input subsidies such as electricity, seeds, fertilizers, irrigation, minimum support prices etc.

- Which of the following is/are included in the capital budget of the Government of India?
  - 1. Expenditure on acquisition of assets like roads, buildings, machinery, etc.
  - 2. Loans received from foreign governments
  - 3. Loans and advances granted to the States and Union Territories

- A) 1 only B) 2 and 3 only
- C) 1 and 3 only D) 1,2 and 3

### Capital Budget



- Capital Budget consists of capital receipts (like disinvestment, borrowing, loans from public or foreign governments, Reserve Bank of India, etc)
- capital expenditure (like expenditure on development of machinery, health facilities, etc). It is the expenditure that increases the earning capacity of an existing fixed asset.
- Examples of capital expenses include the purchase of fixed assets, such as new buildings or business equipment, upgrades to existing facilities, and the acquisition of intangible assets, such as patents.
- Repayment of loan is also capital expenditure because it reduces liability. These expenditures are met out of capital receipts of the government including capital transfers from rest of the world.

- What is/are the importance/importances of the 'United Nations' Convention to Combat Desertification?
  - 1. It aims to promote effective action through innovative national programmes and supportive inter-national partnerships
  - 2. It has a special/particular focus on South Asia and North Africa regions, and its Secretariat facilities the allocation of major portion of financial resources to these regions
  - 3. It is committed to bottom-up approach, encouraging the participation of local people in combating the desertification

A) 1 only

- B) 2 and 3 only
- C) 1 and 3 only D) 1,2 and 3

# United Nations Convention to Combat Desertification and Services PPT

- It was established in 1994

  UNCCD is the sole legally binding international agreement linking environment and development to sustainable land management.
- The objectives of the UNCCD seeks to improve land productivity, to restore (or preserve) land, to establish more efficient water usage and to introduce **sustainable** development in the affected areas and more generally, improve the living conditions of those populations affected by drought and desertification
- Preventive actions include: Integrating land and water management to protect soils from erosion, salinization, and other forms of degradation. Protecting the vegetative cover, which can be a major instrument for soil conservation against wind and water erosion.

- Recently, which one of the following currencies has been proposed to be added to the basket of IMF's SDR?
  - A) Rouble
  - B) Rand
  - C) Indian Rupee
  - D) Renminbi





- The value of the SDR is based on a basket of five currencies the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling.
- In 2016, Executive Board of the IMF decided to add Chinese Renminbi to be included in the SDR basket as fifth currency.

- With reference to the International Monetary and Financial Committee (IMFC), consider the following statements:
  - 1. IMFC discusses matters of concern affecting the global economy, and advises the International Monetary Fund (IMF) on the direction of its work
  - 2. The World Bank participates as observer in IMFC's meetings.

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



### International Monetary and Financial Committee (IMFC)

- IMFC advises and reports to the IMF Board of Governors on the management of the international monetary and Financial systems.
- It is providing strategic direction to work and policies of the Fund
- It has 24 members drawn from the pool of 187 governors
- IMFC meets twice a year. The committee discuss matters of common concern affecting the global economy and also advises the IMF on the direction its work
- Recently IMFC met based on IMF Managing Director's Global Policy Agenda titled, 'Exceptional Times- Exceptional Action" in view of the COVID 19.

- 'Rashtriya Garima Abhiyan' is a national campaign to
  - A) rehabilitate the homeless and destitute persons and provide them with suitable sources of livelihood
  - B) release the sex workers from their practice and provide them with alternative sources of livelihood
  - C) eradicate the practice of manual scavenging and rehabilitate the manual scavengers
  - D) release the bonded Labourers from their bondage and rehabilitate them

## 'Rashtriya Garima Abhiyan'

- Rashtriya Garima Abhiyan is a National Campaign for Dignity and Eradication of Manual Scavenging.
- Rashtriya Garima Abhiyan is an NGO-led movement.
- RGA is a campaign for eradication of inhuman practice of manual scavenging and comprehensive rehabilitation of manual scavengers in India.
- Ashif Shaikh is well known for his role in the campaign (Rashtriya Garima Abhiyan) through various campaigns of Jan Sahas.
- Rashtriya Garima Abhiyaan is also known as National Campaign for Dignity and Eradication of Manual Scavenging.
- It is also associated with the Ministry of Social Justice and Empowerment, for the identification of manual scavengers and their rehabilitation.



- With reference to the cultural history of medieval India, consider the following statements:
  - 1. Siddhas (Sittars) of Tamil region were monotheistic and condemned idolatry
  - 2. Lingyats of Kannada region questioned the theory of rebirth and rejected the caste hierarchy.

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





- **Siddha** is a term that is used widely in Indian religions and culture. It means "one who is accomplished". It refers to perfected masters who have achieved a high degree of physical as well as spiritual perfection or enlightenment.
- In Jainism, the term *siddha* is used to refer the liberated souls who have destroyed all Karmas and have obtained moksha.
- In South India it refers to a being who has achieved a high degree of physical as well as spiritual perfection or enlightenment.

## Bhanu's PPT

## Lingayats

- Lingayats are worshippers of Shiva.
- Lingayat is a member of a Saiva sect of southern India marked by wearing of the lingam and characterized by denial of caste distinctions.
- They are different from Hinduism as Lingayat is the Genderneutral, caste-neutral treatment of equality.
- The **Lingayat** movement began as a revolt against Brahmanical Hinduism.

- Which of the following best describes the term 'import cover', sometimes seen in the news?
  - A) It is the ratio of value of imports to the Gross Domestic Product of a country
  - B) It is the total value of imports of a country in a year
  - C) It is the ratio between the value of exports and that of imports between two countries
  - D) It is the number of months of imports that could be paid for by a country's international reserves

### **Import Cover**

- Import Cover measures the number of months of imports that can be covered with foreign exchange reserves available with the central bank of the country. Eight to ten months of import cover is essential for the stability of a currency.
- Import cover is not the only measure that central banks look at to assess the adequacy of reserves. They also look at the composition of debt and amount volatile flows.

Consider the following pairs:

Community sometimes mentioned in the news

In the affairs of

1. Kurd

:: Bangladesh

2. Madhesi

:: Nepal

3. Rohingya

:: Myanmar

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

A) 1 and 2

B) 2 only

C) 2 and 3

D) 3 only

- Kurdish people are an Iranic ethnic group native to a mountainous region of Western Asia known as Kurdistan, which spans south eastern Turkey, north western Iran, northern Iraq, and northern Syria.
- The Kurds are one of the indigenous peoples of the Mesopotamian plains and the highlands in what are now southeastern **Turkey**, north-eastern **Syria**, northern **Iraq**, north-western **Iran** and south-western **Armenia**.
- After the Ottoman Empire was defeated in World War I, victorious Western powers agreed in the 1920 Treaty of Sevres to create a Kurdish state.
- All the nations where **Kurds** now live are opposed to granting them a homeland or true autonomy particularly Turkey.



#### Kurdistan

• The Kurdish-Turkish conflict is an armed conflict between the Republic of Turkey and various Kurdish insurgent groups, which have demanded separation from Turkey to create an independent Kurdistan, or to have autonomy and greater political and cultural rights for Kurds inside the Republic of Turkey.

### Madheshi People

- The term Madheshi people (Nepali: मधेशी) is used by academics for people of Indian ancestry residing in the Terai of Nepal and comprising various cultural groups such as Hindu caste groups, Muslims, Marwaris and indigenous people of the Terai.
- The term Madheshi people (Nepali: मधेशी) is used by academics for people of Indian ancestry residing in the Terai of Nepal and comprising various cultural groups such as Hindu caste groups, Muslims, Marwaris and indigenous people of the Terai.
- Madhesi parties demanded for proportional representation in state organs, and guarantee constituencies based on population because 20 out of 75 districts in Terai region house 50% of the population.

### Rohingyas

- The Rohingya people are a stateless Indo-Aryan ethnic group who predominantly follow Islam and reside in Rakhine State, Myanmar (previously known as Burma).
- Myanmar (Rakhine State): ~400,000
- Bangladesh: 1,300,000+
- Saudi Arabia: 190,000
- Malaysia: 150,000
- Rohingyas the most persecuted minority in the world, the Rohingya have a millennial-long history in Myanmar,

- With reference to 'Organization for the Prohibition of Chemical Weapons (OPCW), consider the following statements:
  - 1. It is an organization of European Union in working relation with NATO and WHO
  - 2. It monitors chemical industry to prevent new weapons from emerging
  - 3. It provides assistance and protection to States (Parties) against chemical weapons threats

Which of the statements given above is/are correct?

A) 1 only

- B) 2 and 3 only
- C) 1 and 3 only D) 1,2 and 3



## 'Organization for the Prohibition of Chemical Weapons (OPCW)'

- As the implementing body for the Chemical Weapons Convention, the OPCW, with its 193 Member States, oversees the global endeavour to permanently and verifiably eliminate chemical weapons
- World's declared chemical weapons stockpiles destroyed: 98.03%
- The Convention aims to eliminate an entire category of weapons of mass destruction by prohibiting the development, production, acquisition, stockpiling, retention, transfer or use of chemical weapons by States Parties.
- All States Parties have agreed to chemically disarm by destroying any stockpiles of chemical weapons they may hold and any facilities which produced them, as well as any chemical weapons they abandoned on the territory of other States Parties in the past.

- With reference to 'Pradhan Mantri Fasal Bima Yojana', consider the following statements:
  - 1. Under this scheme, farmers will have to pay a uniform premium of two percent for any crop they cultivate in any season of the year
  - 2. This scheme covers post-harvest losses arising out of cyclones and unseasonal rains.

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

# Bhanu's PPT

## Pradhan Mantri Fasal Bima Yojana

- Pradhan Mantri Fasal Bima Yojana (PMFBY) is the government sponsored crop insurance scheme that integrates multiple stakeholders on a single platform.
- It was formulated in line with One Nation-One Scheme theme by replacing earlier two schemes National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS) by incorporating their best features and removing their inherent drawbacks (shortcomings). It aims to reduce the premium burden on farmers and ensure early settlement of crop assurance claim for the full insured sum.
- PMFBY aims to provide a comprehensive insurance cover against failure of the crop thus helping in stabilising the income of the farmers.

- In which of the following regions of India are you most likely to come across the 'Great Indian Hornbill' in its natural habitat?
  - A) Sand deserts of northwest India
  - B) Higher Himalayas of Jammu and Kashmir
  - C) Salt marshes of western Gujarat
  - D) Western Ghats

## Bhanu's PPT

#### 'Great Indian Hornbill'

- The great hornbill (Buceros bicornis) also known as the concavecasqued hornbill, great Indian hornbill or great pied hornbill, is one of the larger members of the hornbill family. It is found in the Indian subcontinent and Southeast Asia.
- They are found in a few forest areas in the Western Ghats and in the forests along the Himalayas.
- India has nine hornbill species, of which four are found in the Western Ghats: Indian Grey Hornbill (endemic to India), the Malabar Grey Hornbill (endemic to the Western Ghats), Malabar Pied Hornbill (endemic to India and Sri Lanka) and the widely distributed but endangered Great Hornbill.
- Due to ongoing habitat lost and hunting in some areas, the Great Hornbill is evaluated as Near Threatened on the IUCN Red List of Threatened Species.





• A scheduled species under the 1972 Wildlife Protection Act, hornbills are hunted for their beaks, which are used to make the traditional headgear of the Nyishi tribe men. Hornbills are also hunted for their oil—believed to relieve pain and for their meat.



- Which of the following are the key features of 'National Ganga River Basin Authority (NGRBA)'?
  - 1. River basin is the unit of planning and management
  - 2. It spearheads the river conservation efforts at the national level
  - 3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis

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

## 'National Ganga River Basin Authority (NGRBA)'



- National Ganga River Basin Authority (NGRBA) is a financing, planning, implementing, monitoring and coordinating authority for the Ganges River, functioning under the water resource ministry of India.
- Now National Ganga Council is formed. It is chaired by PM
- The National Ganga Council is formed under the **Environment** (**Protection**) **Act** (**EPA**), 1986.
- It has been given overall responsibility for the superintendence of pollution prevention and rejuvenation of River Ganga Basin, including Ganga and its tributaries.
- National Mission for Clean Ganga (NMCG) acts as an implementation arm of the National Ganga Council.

### National Mission for Clean Ganga

- NMCG was established in the year 2011 as a registered society.
- It has a two-tier management structure and comprises of Governing Council and Executive Committee.
- The aims and objectives of NMCG are:
  - To ensure effective control of pollution and rejuvenation of the river Ganga by adopting a river basin approach to promote inter-sectoral coordination for comprehensive planning and management.
  - To maintain minimum ecological flows in the river Ganga with the aim of ensuring water quality and environmentally sustainable development.

- Why does the Government of India promote the use of 'Neemcoated Urea' in agriculture?
  - A) Release of Neem oil in the soil increases nitrogen fixation by the soil microorganisms
  - B) Neem coating slows down the rate of dissolution of urea in the soil
  - C) Nitrous oxide, which is a greenhouse gas, is not at all released into atmosphere by crop fields
  - D) It is a combination of a weedicide and a fertilizer for particular crops

- Neem coating leads to more gradual release of urea, helping plants gain more nutrient and resulting in higher yields. Lower underground water contamination due to leaching of urea
- Neem coating slows down the rate of dissolution of urea in soil.
- Resulting in an improved yield of crops especially in rice and wheat.
- **Urea** is being provided to the farmers at a statutorily notified Maximum Retail Price (MRP). his **subsidy** is given by Government of India to the P&K fertilizer companies which are therefore able to provide P&K fertilizers to the farmers at a subsidized MRP, which is lower than it would have been

## Bhanu's PPT

## Subsidy

- The government's food, fuel and fertiliser **subsidy** bill has been pegged at Rs 2.27 lakh crore for the **2020**-21
- A subsidy is a benefit given to an individual, business, or institution, usually by the government.
- The **subsidy is** typically given to remove some type of burden, and it **is** often considered to be in the overall interest of the public, given to promote a social good or an economic policy.
- The total **fuel subsidy** from 2004-05 to 2018-19 was Rs 10.99 lakh crore.
- **Subsidies** come in various forms including: direct (cash grants, interest-free loans) and indirect (tax breaks, insurance, low-interest loans, accelerated depreciation, rent rebates).

- Consider the following statements:
  - 1. The Chief Secretary in a State is appointed by the Governor of that State
  - 2. The Chief Secretary in a State has a fixed tenure

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

## Bhanu's PPT

## **Chief Secretary**

- The **Chief Secretary** is usually the senior most **IAS** officer of the senior most batch in the **state**.
- The appointee for the office is approved by **state Chief** Minister, based on appointee's ability and strong confidence with him
- No fixed tenure is imposed on the office but term can be extended.
- A Chief Secretary functions as the central point of interdepartmental coordination at the departmental level
- Chief Secretary is considered to be 'a linchpin' in the administration. Chief Secretary of the state also acts as the exofficio Chairman of the State Civil Service Board, which recommends transfer/postings of officers of All India Services and State Civil Services in the state

- With reference to 'Stand Up India Scheme' which of the following statements is/are correct?
  - 1. Its purpose is to promote entrepreneurship among SC/ST and women entrepreneurs
  - 2. It provides for refinance through SIDBI

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

## Stand Up India Scheme

- Stand Up India Scheme facilitate bank loans between 10 lakh and 1 crore to atleast one scheduled caste (SC) or Scheduled Tribe, borrower and atleast one women per bank branch for setting up a greenfield enterprise. This enterprise may be in manufacturing, services or the trading sector.
- The individual must be above 18 years of age. The entrepreneur must either be a woman or belong to the SC or ST community.

- The FAO accords the status of 'Globally Important Agricultural Heritage System (GIAHS) to traditional agricultural systems. What is the overall goal of this initiative?
- 1. To provide modern technology, training in modern farming methods and financial support to local communities of identified GIAHS so as to greatly enhance their agricultural productivity
- 2. To identify and safeguard eco-friendly traditional farm practices and their associated landscapes, agricultural biodiversity and knowledge systems of the local communities
- 3. To provide Geographical Indication status to all the varieties of agricultural produce in such identified GIAHS

Select the correct answer using the code given below.

A) 1 and 3 only

B) 2 only

C) 2 and 3 only

D) 1,2 and 3



## 'Globally Important Agricultural Heritage System (GIAHS)'

- Globally Important Agricultural Heritage Systems (GIAHS) is to promote public understanding, awareness about sustainable agriculture and to safeguard the social, cultural, economic and environmental goods and services these provide to family farmers, smallholders, indigenous peoples and local communities.
- Agricultural heritage denotes the values and traditional practices adopted in ancient India, which are more relevant for present day system. Our heritage is unique than any other civilization.

- Which of the following is/are tributary/tributaries of Brahmaputra?
  - 1. Dilbang
  - 2. Kameng
  - 3. Lohit

Select the correct answer using the code given below.

A) 1 only

- B) 2 and 3 only
- C) 1 and 3 only D) 1,2 and 3



### Tributaries of Brahmaputra

LEFT
 Dibang River, called by Dimasa tribe, Lohit River, Dhansiri
 River, Kolong River

RIGHT
 Kameng River, Manas River, Beki River, Raidak River,
 Jaldhaka River, Teesta River, Subansiri River



- The term 'Core Banking Solutions' is sometimes seen in the news, which of the following statements best describes/describe this term?
- 1. It is a networking of a bank's branches which enables customers to operate their accounts from any branch of the bank on its network regardless of where they open their accounts
- 2. It is an effort to increase RBI's control over commercial banks through computerization
- 3. It is a detailed procedure by which a bank with huge nonperforming assets is taken over by another bank.

Select the correct answer using the code given below

- A) 1 only
- B) 2 and 3 only
- C) 1 and 3 only D) 1,2 and 3

- Core banking refers to a centralized system established by a bank which allows its customers to conduct their business irrespective of the bank's branch.
- Thus, it removes the impediments of geo-specific transactions.
- In fact, CORE is an acronym for "Centralized Online Real-time Exchange", thus the bank's branches can access applications from centralized data centres.

Consider the following pairs:

TERMS SOMETIMES

SEEN IN THE NEWS

1. Annex-I Countries

2. Certified Emission Reductions

3. Clean Development Mechanisms

THEIR ORIGIN

Cartagena Protocol

Nagoya Protocol

**Kyoto Protocol** 

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

A) 1 and 2 only

C) 3 only

B) 2 and 3 only

D) 1,2 and 3

- The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.
- It was adopted on 29 January 2000 and entered into force on 11 September 2003.

- In the context of the developments in Bioinformatics, the term 'transcriptome', sometimes seen in the news, refers to
  - A) a range of enzymes used in genome editing
  - B) the full range of mRNA molecules expressed by an organism
  - C) the description of the mechanism of gene expression
  - D) a mechanism of genetic mutations taking place in cells

# 'Transcriptome'

- the sum total of all the messenger RNA molecules expressed from the genes of an organism.
- the "genome" is the collection of all DNA present in the nucleus and the mitochondria of a somatic cell. The initial product of genome expression is the "transcriptome", a collection of RNA molecules derived from those genes.
- The **transcriptomic** techniques have been particularly useful in identifying the functions of genes
- Transcriptome Analysis is the study of the transcriptome, of the complete set of RNA transcripts that are produced by the genome, under specific circumstances or in a specific cell, using high-throughput methods.

- 'Mission Indradhanush' launched by the Government of India pertains to
  - A) immunization of children and pregnant women
  - B) construction of smart cities across the country
  - C) India's own search for the Earth-like planets in outer space
  - D) New Educational Policy

#### Mission Indradhanush

- Immunization Programme in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as 'Universal Immunization Programme'
- (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world. Despite being operational for many years, UIP has been able to fully immunize only 65% children in the first year of their life.

#### **Immunization**

• Through UIP, Government of India is providing vaccination free of cost against vaccine preventable diseases include diphtheria, pertussis, tetanus, polio, measles, severe form of childhood tuberculosis, hepatitis B, meningitis and pneumonia (Hemophilus influenza type B infections), Japanese encephalitis (JE) in JE endemic districts with introduction of newer vaccines such as rotavirus vaccine, IPV, adult JE vaccine, pneumococcal conjugate vaccine (PCV) and measles-rubella (MR) vaccine in UIP/national immunization programme.

#### Mission Indradhanush

- To strengthen and re-energize the programme and achieve full immunization coverage for all children and pregnant women at a rapid pace, the Government of India launched "Mission Indradhanush" in December 2014.
- The ultimate goal of Mission Indradhanush is to ensure full immunization with all available vaccines for children up to two years of age and pregnant women.
- Four phases of Mission Indradhanush have been conducted till August 2017 and more than 2.53 crore children and 68 lakh pregnant women have been vaccinated.

- Which of the following best describes/describe the aim of 'Green India Mission' of the Government of India?
- Incorporating environmental benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'
- 2. Launching the second green revolution to enhance agricultural out put so as to ensure food security to one and all in the future
- 3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures Select the correct answer using the code given below
  - A) 1 only

B) 2 and 3 only

C) 3 only

D) 1,2 and 3

#### Green India Mission

- GIM was launched in February 2014, is aimed at protecting, restoring and enhancing India's diminishing forest cover and responding to climate change by a combination of adaptation and Mitigation Measures.
- The **Green India** Mission is one of the 8 missions under the National Action Plan on Climate Change. It is a \$7billion environmental intervention, laid out in 2011.
- It is intended at responding to climate change by a combination of adaptation and mitigation measures.
- The scheme is monitored by **Ministry of Environment and Forests** (MoEF).
- India released its much-awaited National Action Plan on Climate
  Change (NAPCC) to mitigate and adapt to climate change on June 30,
  2008,

- With reference to pre-packaged items in India, it is mandatory to the manufacturer to put which of the following information on the main label, as per the Food Safety and Standards (Packaging and Labelling) Regulations, 2011?
- 1. List of ingredients including additives
- 2. Nutrition information
- 3. Recommendations, if any, made by the medical profession about the possibility of any allergic reactions
- 4. Vegetarian/ non-vegetarian

- A) 1,2 and 3
- C) 1,2 and 4

- B) 2,3 and 4
- D) 1 and 4 only



## Food Safety and Standards (Packaging and Labelling)

 The FSSAI has drafted the new Food Safety and Standards(Labelling and Display) Regulations 2019.
 These regulations prescribe the labelling requirements of prepackaged foods and display of essential information on premises where food is manufactured, processed, served and stored.

Name and complete address of manufacturer
"Best Before"
Date of Manufacturing
Date of Packaging
Lot Number, Code Number, net Quantity
Non-Veg Food
Use- by Date
Name of Food
List of Ingredients, Food additives, Flavours, Colours
All types of gum
Nutritional Information

- 'Project Loan' sometimes seen in the news, is related to
  - A) waste management technology
  - B) wireless communication technology
  - C) solar power production technology
  - D) water conservation technology

- 'Net metering' is sometimes seen in the news in the context of promoting the
  - A) production and use of solar energy by households/consumers
  - B) use of piped natural gas in the kitchens of households
  - C) installation of CNG kits in motorcars
  - D) installation of water meters in urban households





- Net metering is a billing mechanism that credits solar energy system owners for the electricity they add to the grid.
- For example, if a residential customer has a PV system on their roof, it may generate more electricity than the home uses during daylight hours.
- When power is fed to the grid meter actually runs in reverse.
- The primary difference between net billing and net metering is that there are differing rates used to value the excess energy fed into the grid and energy received from the grid under net billing.

- India's ranking in the 'Ease of Doing Business Index' is sometimes seen in the news. Which of the following has declared that ranking?
  - A) Organization for Economic Cooperation and Development (OECD)
  - B) World Economic Forum
  - C) World Bank
  - D) World Trade Organization (WTO)



## Ease of Doing Business

- Ease of Doing Business rankings Economies are ranked on their ease of doing business, from 1-190. A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm.
- The Ease of Doing Business (EoDB) index is a ranking system established by the World Bank Group. In the EODB index, 'higher rankings' (a lower numerical value) indicate better, usually simpler, regulations for businesses and stronger protections of property rights.

- Banjaras during the medieval period of Indian history were generally
  - A) agriculturists
  - B) Warriors
  - C) Weavers
  - D) traders

#### **Banjaras**

- Banjaras were historically pastoralists, traders and transporters of goods on the inland regions of India, for which they used boats, carts, camels, oxen, donkeys and sometimes the relatively scarce horse
- They often travelled in groups for protection, this *tanda* being led by an elected headman variously described as a *muqaddam*, *nayak* or *naik*.
- They also serviced the needs of armies, whose movements naturally followed the same trade and caravan routes.
- Some Banjara subgroups engaged in trading specific goods but most traded in anything that might make them money like oilseed, sugarcane, opium, fruits and flowers, gums, Chironji, tobacco, Labana, Multani, Mukeri

- Who of the following had first deciphered the edicts of Emperor Ashoka?
  - A) Georg Buhler
  - B) James Prinsep
  - C) Max Muller
  - D) William Jones

- The inscriptions found in the central and eastern part of India were written in Magadhi Prakrit using the Brahmi script, while Prakrit using the Kharoshthi script, Greek and Aramaic were used in the northwest. These edicts were deciphered by British archaeologist and historian James Prinsep.
- They were kept in public places and along trade routes so that maximum number of people would read them. More than religious discourses, they talk about the moral duties of the people, how to conduct life, Ashoka's desire to be a good and benevolent ruler, and about Ashoka's work towards this end.
- Ashoka inscriptions can be classified into three:
   Pillar edicts, Major rock edicts and Minor rock edicts.



- With reference to the 'Gram Nyayalaya Act', which of the following statements is/are correct?
  - 1. As per the Act, Gram Nyayalayas can hear only civil cases and not criminal cases
  - 2. The Act allows local social activists as mediators/reconciliators

- A) 1 only B) 2 only
- C) Both 1 and 2 D) Neither 1 nor 2

- An Act to provide for the establishment of Gram Nyayalayas at the grass roots level for the purposes of providing access to justice to the citizens at their doorsteps and to ensure that opportunities for securing justice are not denied to any citizen by reason of social, economic or other disabilities.
- Gram Nyayalayas Act, 2008 is an Act of Parliament of India enacted for establishment of Gram Nyayalayas or village courts for speedy and easy access to justice system in the rural areas of India. The Act came into force from 2 October 2009.
- The Gram Nyayalaya shall be a mobile court and shall exercise the powers of both Criminal and Civil Courts. The Gram Nyayalaya shall try criminal cases, civil suits, claims or disputes which are specified in the First Schedule and the Second Schedule to the Act.



- With reference to the 'Trans-Pacific Partnership', consider the following statements:
  - 1. It is an agreement among all the Pacific Rim countries except China and Russia
  - 2.It is a strategic alliance for the purpose of maritime security only

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

# 'Trans-Pacific Partnership'

- The Trans-Pacific Partnership (TPP), also called the Trans-Pacific Partnership Agreement, was a proposed trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam, and the United States signed on 4 February 2016.
- It is a comprehensive agreement, affecting trade in goods, rules of origin, trade remedies, sanitary and phytosanitary measures, technical barriers to trade, trade in services, intellectual property, government procurement and competition policy.
- US withdrew from TPP in Jan, 2017.



- Consider the following statements: The India-Africa Summit
  - 1. held in 2015 was the third such Summit
  - 2. was actually initiated by Jawaharlal Nehru in 1951

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

#### India Africa Summit

- The India-Africa Forum Summit (IAFS) is the official platform for the African-Indian relations. IAFS will be held once in every three years.
- India & Tunisia, signed a memorandum of understanding on the creation of a Tunisian-Indian centre for innovation in information and communication technologies in the North African country.
- Fourth edition of India-Africa Summit, scheduled for September 2020 in India. The third edition of the Summit was held here in 2015.
- A meeting between acting Minister of Foreign Affairs Sabri Bachtobji and Indian Minister of External Affairs held in Jan, 2020.
- They discussed "the different aspects of bilateral and multilateral cooperation as well as several issues of regional and international issues of common interest.



- What is/are the purpose/purposes of 'Marginal Cost of Funds based Lending Rate (MCLR) announced by RBI?
  - 1. These guidelines help improve the transparency in the methodology followed by banks
  - 2. These guidelines help ensure availability of bank credit at interest rates which are fair to the borrowers as well as the banks.

A) 1 only

B) 2 only

B) Both 1 and 2

D) Neither 1 nor 2

- Marginal cost of funds-based lending rate (MCLR) is an internal reference rate for banks fixed by the Reserve Bank of India (RBI).
- The lending interest rate is determined basis the marginal cost or incremental cost of arranging each rupee for the borrower.
- MCLR is calculated based on the loan tenor, i.e., the amount of time a borrower has to repay the loan. This tenor-linked benchmark is internal in nature. The bank determines the actual lending rates by adding the elements spread to this tool. The Marginal Cost of Funds Based Lending Rate (MCLR) was introduced in April 2016 to help borrowers availing various loans (including home loans) benefit from the Reserve Bank of India's (RBI) rate cut.

- What is/are unique about 'Kharai camel' a breed found in India?
  - 1. It is capable of swimming up to three kilometers in seawater
  - 2. It survives by grazing on mangroves
  - 3. It lives in the wild and cannot be domesticated

A) 1 and 2 only

B) 3 only

C) 1 and 3 only

D) 1,2 and 3

- Kharai camels have a special ability to swim in seawater and feed on saline plants and mangroves, which is how they get their name, Kharai ('salty' in Gujarati). They are also known as dariyataru (meaning sea-swimmer). Due to their unique diet, these camels swim to islands near the shore in search of food.
- Camels are smarter than horses
- Camels are slightly slower than horses because they can only reach speeds of around 20 to 25 miles per hour while horses have an average gallop speed around 25 to 30 miles per hour.
- The camel is not the rude, vulgar and unruly creature of myth, but a stately, noble and amiable servant

- Recently, our scientists have discovered a new and distinct species of banana plant which attains a height of about 11 meters and has orange coloured fruit pulp. In which part of India has it been discovered?
  - A) Andaman Islands
  - B) Anaimalai Forests
  - C) Maikala Hills
  - D) Tropical rain forests of northeast

## New Species of Banana

- Scientists at the Botanical Survey of India (BSI) have discovered a new species of banana from a remote tropical rain forest on the Little Andaman islands.
- Named Musa paramjitiana after the founder Dr. Paramjit
   Singh the director of Botanical Survey of India
- It is Sweet and Sour tasting
- It has a potential high yielding disease resistant variety of seedless, edible bananas
- It is classified as a critically endangered species

- Which one of the following is the best description of 'INS Astradharini', that was in the news recently?
  - A) Amphibious warfare ship
  - B) Nuclear-powered submarine
  - C) Torpedo launch and recovery vessel
  - D) Nuclear-powered aircraft carrier

- INS Astradharini is an indigenously designed and built torpedo launcher built by Shoft Shipyard, Bharuch for the Indian Navy.
- It was commissioned on 06th October 2015 by Vice Admiral Satish Soni,
   Flag Officer Commanding Eastern Naval Command at Visakhapatnam.
- The design of the Astradharini was a collaborative effort of NSTL, M/s Shoft Shipyard and IIT Kharagpur and has a unique design of a catamaran hull form that significantly reduces its power requirement and is built with indigenous steel.
- Length: 50m; speed 15 Knots, having modern navigation and communication systems
- It will be used to carry out the technical trials of underwater weapons and systems developed by NSTL, a naval systems laboratory of DRDO.

- What is 'Greased Lightning-10 (GL10), recently in the news?
  - A) Electric plane tested by NASA
  - B) Solar-powered two seater aircraft designed by Japan
  - C) Space observatory launched by China
  - D) Reusable rocket designed by ISRO

# 'Greased Lightning-10 (GL10)

- The GL-10 Greased Lightning is a hybrid diesel-electric tiltwing aircraft.
- NASA Langley researchers have designed and built a battery-powered, 10-engine remotely piloted aircraft (UAV). The Greased Lightning GL-10 prototype has a 10-foot wingspan and can take off like a helicopter and fly efficiently like an airplane.
- It can be used for small package delivery or vertical take off and landing, long endurance surveillance for agriculture, mapping and other applications.

- With reference to 'Initiative for Nutritional Security through Intensive Millets Promotion' which of the following statements is are correct?
- 1. This initiative aims to demonstrate the improved production and postharvest technologies, and to demonstrate value addition techniques, in an integrated manner, with cluster approach
- Poor, small, marginal and tribal farmers have larger stake in this scheme.
- An important objective of the scheme is to encourage farmers of commercial crops to shift to millet cultivation by offering them free kits of critical inputs of nutrients and micro-irrigation equipment

A) 1 only

- B) 2 and 3 only
- C) 1 and 2 only D) 1,2 and 3

# 'Initiative for Nutritional Security through Intensive Millets Promotion'

- The Central government launched the Initiative for Nutritional Security through Intensive Millet Promotion (INSIMP) in 2011-12 to promote millets as "nutricereals". The scheme aims to catalyse increased production of millets in the country. In doing so, it aims to enhance India's nutritional security.
- The scheme aims to demonstrate the improved production and post-harvest technologies in an integrated manner with visible impact to catalyze increased production of millets in the country.

- The 'Swadeshi' and 'Boycott' were adopted as methods of struggle for the first time during the
  - A) agitation against the Partition of Bengal
  - B) Home Rule Movement
  - C) Non-Cooperation Movement
  - D) visit of the Simon Commission to India

- The Swadeshi Movement, now known as 'Make in India' campaign was officially proclaimed on August 7, 1905 at the Calcutta Town Hall, in Bengal.
- Boycott movement was also launched along with the Swadeshi movement. The movements included using goods produced in India and burning British-made goods.
- The two reasons for starting Swadeshi and boycott movement were: Partition of Bengal by British in 1905. Drain of wealth in the form of de-industrialization of local industries and handicrafts and transportation of raw material to England and import of finished goods from there

- With reference to the religious history of India, consider the following statements:
  - 1. The concept of Bodhisattva is central to Hinayana sect of Buddhism
  - 2. Bodhisattva is a compassionate one on his way to enlightenment
  - 3. Bodhisattva delays achieving his own salvation to help all sentient beings on their path to it

A) 1 only

B) 2 and 3 only

C) 2 only

D) 1,2 and 3

#### **Bodhisattva**

- Bodhisattva one whose essence is enlightenment, from bodhi enlightenment + sattva essence.
- four bodhisattvas, each of whom expounds a portion of the Fifty-two Stages of Bodhisattva Practice.

Dharmaprajna Gunavana Vajraketu Vajragarbha

- 'Doctors Without Borders (Medicines Sans Frontiers)', often in the news, is
  - A) a division of World Health Organization
  - B) a non-governmental international organization
  - C) an inter-governmental agency sponsored by European Union
  - D) a specialized agency of the United Nations

- Doctors Without Borders (MSF) treats people where the need is greatest.
- Their mission is to provide lifesaving medical care to those most in need. All MSF members agree to honor the following principles: MSF provides assistance to populations in distress, to victims of natural or man-made disasters, and to victims of armed conflict.
- Doctors Without Borders was founded in 1971 by 13 physicians and journalists who were dissatisfied with the neutrality of the Red Cross. The founding members believed that people in distress had the right to medical intervention and that the need to provide assistance to those people transcended national borders.

- With reference to an initiative called 'The Economics of Ecosystems and Biodiversity (TEEB)', which of the following statements is/are correct?
  - 1. It is an initiative hosted by UNEP, IMF and World Economic Forum.
  - 2. It is a global initiative that focuses on drawing attention to the economic benefits of biodiversity.
  - 3. It presents an approach that can help decision-makers recognize, demonstrate and capture the value of ecosystems and biodiversity

Select the correct answer using the code given below.

- A) 1 and 2 only
- C) 2 and 3 only

- B) 3 only
- D) 1,2 and 3

### 'The Economics of Ecosystems and Biodiversity (TEEB)'

- The Economics of Ecosystems and Biodiversity (**TEEB**) is a global initiative focused on "making nature's values visible".
- Its principal objective is to mainstream the values of biodiversity and ecosystem services into decision-making at all levels.
- **Biodiversity** is "the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems." It is the foundation of life on Earth.

- With reference to 'Red Sanders' sometimes seen in the news, consider the following statements:
  - 1.It is a tree species found in a part of South India
  - 2. It is one of the most important trees in the tropical rain forest areas of South India

A) 1 only

- B) 2 only
- C) Both 1 and 2
- D) Neither 1 nor 2

#### **Red Sanders**



- The wood is famous for its medicinal properties and commercial uses. The Red SanderWood at the center of the trunk (heartwood) is mainly used for medical purposes. Red sander Wood has various medical uses such as fluid retention, treating digestive tract problems, purification of blood and treatment of coughs.
- Red sanders is a species of Pterocarpus endemic to the southern Eastern Ghats mountain range of South India.
- Pterocarpus santalinus L.f. (Red Sanders) is an endemic and endangered tree species in the southern Eastern Ghats. Red Sanders bearing forest is a one of the climax forest type in tropical dry deciduous forests in India. The natural habitat of Red Sanders is a hilly region with hot dry climate.

Which of the following statements is/are correct?

Proper design and effective implementation of UN-REDD+ Programme can significantly contribute to

- 1. Protection of diversity
- 2. Resilience of forest ecosystem
- 3. Poverty reduction

Select the correct answer using the code given below.

A) 1 and 2 only

B) 3 only

C) 2 and 3 only

D) 1,2 and 3

- REDD+ (or REDD-plus) refers to "reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries"
- REDD+ was first negotiated under the United Nations Framework Convention on Climate Change (UNFCCC) in 2005, with the objective of mitigating climate change through reducing net emissions of greenhouse gases through enhanced forest management in developing countries.

- What is 'Green house Gas Protocol'?
- A) It is an international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions
- B) It is an initiative of the United Nations to offer financial incentives to developing countries to reduce greenhouse gas emissions and to adopt eco-friendly technologies
- C) It is an inter-governmental agreement ratified by all the member countries of the United Nations to reduce greenhouse gas emissions to specified levels by the year 2022
- D) It is one of the multilateral REDD+ initiatives hosted by the World Bank

#### 'Green house Gas Protocol'

- The Greenhouse Gas Protocol (GHGP) provides accounting and reporting standards, sector guidance, calculation tools, and trainings for business and government.
- The GHG Protocol also provides webinar, e-learning and in-person training and capacity-building support on its standards and tools.
- Water vapor is the most potent of the greenhouse gases in Earth's atmosphere, and it's sort of a unique player among the greenhouse gases. The amount of water vapor in the atmosphere cannot, in general, be directly modified by human behaviour—it's set by air temperatures.
- Atmospheric levels of carbon dioxide—the most dangerous and prevalent greenhouse gas.

- With reference to 'Financial Stability and Development Council', consider the following statements:
  - 1. It is an organ of NITI Aayog
  - 2. It is headed by the Union Finance Minister
  - 3. It monitors macroprudential supervision of the economy.

- A) 1 and 2 only
- C) 2 and 3 only

- B) 3 only
- D) 1,2 and 3

### 'Financial Stability and Development Council'

- Financial Stability and Development Council (FSDC) is an apex-level body constituted by the government of India.
- It is a regulatory body. Chairperson is Finance Minister
- It is an autonomous body dealing with macro prudential and financial regularities in the entire financial sector of India.
- An apex-level FSDC is not a statutory body.
- The new body envisages to strengthen and institutionalise the mechanism of maintaining financial stability, financial sector development.

- With reference to 'Agenda 21', sometimes seen in the news, consider the following statements:
  - 1. It is a global action plan for sustainable development
  - 2. It originated in the World Summit on Sustainable Development held in Johannesburg in 2002

- A) 1 only B) 2 only
- C) Both 1 and 2 D) Neither 1 nor 2

- Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the environment.
- Its aim is to achieve global sustainable development. One major objective of the Agenda 21 initiative is that every local government should draw its own local Agenda 21. Since 2015, Sustainable Development Goals are included in the newer Agenda 2030.
- Agenda 21 is a declaration accepted by the heads of the states in the Earth summit held at Rio De Janeiro (1992) ,Brazil. The two principles of agenda 21 are: 1. To combat environmental damage, poverty disease through global cooperation an common interests mutual needs and shared responsibilities.

- Satya Shodhak Samaj organised
  - A) a movement for upliftment of tribals in Bihar
  - B) a temple-entry movement in Gujarat
  - C) an anti-caste movement in Maharashtra
  - D) a peasant movement in Punjab

#### Satya Shodhak Samaj

- Satyashodhak Samaj (Truth-seekers' Society) was a social reform society founded by Jyotirao Phule in Pune, Maharashtra, on 24 September 1873.
- The Samaj had a mission of education and increased social rights and political access for underprivileged groups, women, Shudras and Dalits in Maharashtra.
- The Samaj was disbanded during 1930s as leaders left to join the Indian National Congress Party.
- It maintained faith in one god, rejected any kind of intermediary between god and man (brahmins and rituals) rejected caste system.
- The Samaj also developed arguments against brahman social and political superiority.

Which of the following statements is/are correct?

Viruses can infect

- 1. bacteria
- 2. fungi
- 3. Plants

Select the correct answer using the code given below

- A) 1 and 2 only
- C) 1 and 3 only

- B) 3 only
- D) 1,2 and 3

- A virus is a submicroscopic infectious agent that replicates only inside the living cells of an organism. Viruses infect all types of life forms, from animals and plants and even microorganisms including Bacteria
- There are millions of types of viruses in the environment.
- Viruses are found in all ecosystems
- When infected, a host cell is forced to rapidly produce thousands of identical copies of the original virus.
- Out side the cell they are independent can be powdered also. Virus contain genetic material DNA or RNA.

- The term 'Base Erosion and Profit Shifting' is sometimes seen in the news in the context of
  - A) mining operation by multinational companies in resourcerich but backward areas
  - B) curbing of tax evasion by multinational companies
  - C) exploitation of genetic resources of a county by multinational companies
  - D) Lack of consideration of environmental costs in the planning and implementation of developmental projects



### 'Base Erosion and Profit Shifting'

- Domestic tax base erosion and profit shifting (BEPS) due to multinational enterprises exploiting gaps and mismatches between different countries' tax systems affects all countries.
- Developing countries' higher reliance on corporate income tax means they suffer from BEPS disproportionately.
- Base erosion and profit shifting (BEPS) refers to corporate tax planning strategies used by multinationals to "shift" profits from higher-tax jurisdictions to lower-tax jurisdictions, thus "eroding" the "tax-base" of the higher-tax jurisdictions.

- Recently, India's first 'National Investment and Manufacturing Zone' was proposed to be set up in
  - A) Andhra Pradesh
  - B) Gujarat
  - C) Maharashtra
  - D) Uttar Pradesh

### 'National Investment and Manufacturing Zone'

- National Investment & Manufacturing Zones (NIMZs) are one of the important instruments of National Manufacturing Policy, 2011.
   NIMZs are envisaged as large areas of developed land with the requisite eco-system for promoting world class manufacturing activity.
- Government has granted final approval to three National Investment and Manufacturing Zone (NIMZ) one in Kalinganagar, Jajpur district of Odisha, another in Prakasam district of Andhra Pradesh and a third in Sangareddy district (erstwhile Medak district) of Telangana.
- The central ministries and concerned departments are engaged in the creation or upgradation of external infrastructure linkages for these NIMZs,

- What is are the purpose/purposes of 'District Mineral Foundations 'in India?
  - 1. Promoting mineral exploration activities in mineral-rich districts
  - 2. Protecting the interests of the persons affected by mining operations
  - 3. Authorizing State Governments to issue licenses for mineral exploration

Select the correct answer using the code given below.

A) 1 and 2 only

B) 2 only

C) 1 and 3 only

D) 1,2 and 3

#### 'District Mineral Foundations'



- District Mineral Foundation (DMF) is a trust set up as a non-profit body, in those districts affected by the mining works, to work for the interest and benefit of persons and areas affected by mining related operations.
- It is funded through the contributions from miners.
- Section 9B of MMDR Act 1957 mandates the State Governments to establish District Mineral Foundation (DMF) in each district affected by mining related operations. 2. Section 15A of the Act empowers the State to collect funds for DMF in case of minor minerals.
- District Mineral Foundations are statutory bodies set up as non-profit organizations in districts which are affected by the mining works. ... They derive their legal status from Mines and Minerals (Development and Regulation) Amendment Act, 2015 and is established as a non-profit trust

- 'SWAYAM' an initiative of the Government of India, aims at
  - A) promoting the self-Help Groups in rural areas
  - B) providing financial and technical assistance to young startup entrepreneurs
  - C) Promoting the education and health of adolescent girls
  - D) providing affordable and quality education to the citizens for free

- SWAYAM (Study Webs of Active-learning for Young Aspiring Minds)
- SWAYAM is an initiative launched by the Ministry of Human Resource Development, Government of India under Digital India covering all advanced education, High School and skill sector courses. It was launched on 9th July 2017 the President of India.
- SWAYAM is India's national MOOC platform, to ensure access, equity and quality. All these courses can be taken for free.
- Courses: Teacher Education, Advanced Dynamics and Vibration. Advanced Mechanics. Artificial Intelligence. Bioengineering. Bioprocesses. Biosciences. Communication and Signal Processing. Biology.

- The Montague-Chelmsford Proposals were related to
  - A) social reforms
  - B) educational reforms
  - C) reforms in police administration
  - D) constitutional reforms

- The Montagu-Chelmsford Reforms or more briefly known as Mont-Ford Reforms were reforms introduced by the colonial government in British India to introduce self-governing institutions gradually in India.
- The Montague-Chelmsford proposals lead to initiation of Government of India Act, 1919.
- On 20<sup>th</sup> August 1917, Montagu presented the historic Montagu Declaration (August Declaration) in the British Parliament. This declaration proposed the increased participation of Indians in the administration and the development of self-governing institutions in India.

- What is/are common to the two historical places known as Ajanta and Mahabalipuram?
  - 1. Both were built in the same period
  - 2. Both belong to the same religious denomination
  - 3. Both have rock-cut monuments

Select the correct answer using the code given below

- A) 1 and 2 only
- C) 1 and 3 only

- B) 3 only
- D) None of the statements given above is correct

- The Ajanta Caves are approximately 30 rock-cut Buddhist cave monuments which date from the 2nd century BCE to about 480 CE in Aurangabad district of Maharashtra
- Ajanta is among the finest examples of some of the earliest Buddhist architecture, cave paintings and sculptures. These caves comprise Chaitya halls or shrines, dedicated to Lord Buddha and Viharas or monasteries, used by Buddhist monks for meditation and the study of Buddhist teachings.
- The construction of Ajanta caves started during the reign of Harisena, a king of Vataka dynasty.



- Mahabalipuram, also known as Mamallapuram, is a town in Chengalpattu district in the south eastern Indian state of Tamil Nadu
- The town's religious centre was founded by a 7th-century-ce Hindu Pallava king—Narasimhavarman, also known as Mamalla—for whom the town was named.
- It has been classified as a UNESCO World Heritage Site since 1984
- Shiva Parvathi Deities, Vishnu in a reclining pose



- With reference to 'Bitcoins' sometimes seen in the news, which of the following statements is/are correct?
  - 1. Bitcoins are tracked by the Central Banks of Countries
  - 2. Anyone with a Bitcoin address can send and receive Bitcoins from anyone else with Bitcoin address
  - 3. Online payments can be sent without either side knowing the identity of the other

Select the correct answer using the code given below.

- A) 1 and 2 only
- C) 3 only

- B) 2 and 3 only
- D) 1,2and 3

#### **Bitcoins**



- Bitcoin is a digital or virtual currency created in 2009 that uses peer-to-peer technology to facilitate instant payments
- There is no central authority or banks; managing transactions and the issuing of bitcoins is carried out collectively by the network. Bitcoin is open-source; its design is public, nobody owns or controls Bitcoin
- Bitcoin is a cryptocurrency. In records transactions on a secure decentralised block-chain based network.
- Bitcoin mining is the process by which new bitcoins are entered into circulation,
- Miners are awarded bitcoin whenever they add a new block of transactions to the blockchain.
- The amount of new bitcoin released with each mined block is called the "block reward."



- Consider the following statements:
  - 1. New Development Bank has been set up by APEC
  - 2. The headquarters of New Development Bank is in Shanghai

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

#### New Development Bank

- The New Development Bank (NDB) aims to mobilize resources for development projects in BRICS, emerging economies and developing countries.
- The NDB starts with an objective of funding infrastructure projects in developing countries and meeting aspirations of millions through sustainable development. Started in 2014
- The NDB is a multilateral development bank established by Brazil, Russia, India, China and South Africa
- NDB Projects in India: Delhi-Ghaziabad-Meerut Regional Rapid Transit System Project
   Mumbai Metro Rail II Project
- President of NDB Mr. K. V. Kamath. HQ: Shanghai, China

- 'Gadgil Committee Report' and 'Kasturirangan Committee Report' some times seen in the news, are related to
  - A) constitutional reforms
  - B) Ganga Action Plan
  - C) Linking of rivers
  - D) protection of Western Ghats



### 'Gadgil and 'Kasturirangan Committee Reports

- The Gadgil panel submitted its 552-page report to the Ministry of Environment and Forests in 2011 and since then no government cared to implement its recommendations.
- The major recommendations of the Gadgil panel include a ban on growing of single commercial crops like tea, coffee, cardamom, rubber, banana, pineapple that are causing widespread soil erosion.
- The panel in its report suggested promoting ecologically suitable farming methods. The report said, "A policy shift is urgently warranted curtailing the environmentally disastrous practices and switching over to a more sustainable farming approach in the Western Ghats."

- Consider the following:
  - 1. Calcutta Unitarian Committee
  - 2. Tabernacle of New Dispensation
  - 3. Indian Reform Association

Keshab Chandra Sen is associated with the establishment of which of the above?

- A) 1 and 3 only
- C) 3 only

- B) 2 and 3 only
- D) 1,2 and 3

#### Keshab Chandra Sen

- Keshab Chandra Sen (1838-1884) was a Hindu philosopher and social reformer who attempted to incorporate Christian theology within the framework of Hindu thought.
- He founded in 1880 a new 'universal' religion Naba Bidhan (New Dispensation).
- Debendarnath Tagore conferred the **Brahmananda** (whose delight is God) epithet upon **Keshab Chandra Sen**. When the **Keshab Chandra Sen** entered into the Brahmo Samaj, he had a great attachment with Debander nath Tagore.
- Keshab Chandra joined the Brahmo Samaj in 1857 and met the Maharshi in 1858. At once a strong attachment was formed between the two. Keshab Chandra's mastery over Bengali as well as over the English language helped greatly to spread the message of the Brahmo Samaj in and outside Bengal.

#### Calcutta Unitarian Committee

- Raja Ram Mohan Roy established the "Calcutta Unitarian Committee". Annie Besant started the Central Hindu School.
- On 8 April 1931 Emperor Akbar Shah II sent Raja Ram
   Mohan to England as his ambassador to the court of King William
   IV to present the case of restrictions placed on his rights.
- He was the first high-caste brahmin to travel to England.
- In August 1828 **Roy** formed the Brahmo Samaj (Society of Brahma), a Hindu reformist sect that utilized Unitarian and other liberal Christian elements in its beliefs. The Brahmo Samaj was to play an important part, later in the century, as a Hindu movement of reform.

### Tabernacle of New Dispensation

- In 1881 Keshab founded the Church of the New Dispensation (Naba Bidhan) for the purpose of establishing the truth of all the great religions in an institution that he believed would replace them all.
- When he died in 1884, the Brahmo Samaj began to decline.

#### **Indian Reform Association**

• The Indian Reform Association was formed on 29 October 1870 with Keshub Chunder Sen as president. It represented the secular side of the Brahmo Samaj and included many who did not belong to the Brahmo Samaj. The objective was to put into practice some of the ideas Sen was exposed to during his visit to Great Britain.

#### 70/A2016

- Which of the following is NOT a member of "Gulf Cooperation Council"?
  - A) Iran
  - B) Saudi Arabia
  - C) Oman
  - D) Kuwait

### "Gulf Cooperation Council"

- The Cooperation Council for the Arab States of the Gulf ooriginally the Gulf Cooperation Council (GCC) is a regional intergovernmental political and economic union consisting of all Arab states of the Persian Gulf.
- Members: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.
- Iraq and Iran is not the member
- The Charter of the GCC was signed on 25 May 1981, formally establishing the institution.
- The capital city of **Iran** is Tehran while Baghdad serves as the seat of centralized power in **Iraq**.
- Most Iranians were Persian while Iraqis were of Arab heritage.

- What is/are the purpose/purposes of Government's 'Sovereign Gold Bond Scheme' and 'Gold Monetization Scheme'?
  - 1. To bring the idle gold lying with Indian households into the economy
  - 2. To promote FDI in the gold and jewelry sector
  - 3. To reduce India's dependence on gold imports

Select the correct answer using the code given below.

A) 1 only

- B) 2 and 3 only
- C) 1 and 3 only D) 1,2 and 3

### 'Sovereign Gold Bond Scheme'

- Sovereign gold bonds are RBI mandated certificates issued against grams of gold, allowing individuals to invest in gold without the strain of safekeeping their physical asset.
- A holding certificate is issued in the name of an investor upon successful purchase of a sovereign gold bond.
- Sovereign Gold Bonds is a low-risk investment
- Sovereign Gold Bonds are Government securities denominated in multiples of gram of gold with a minimum unit of 1 gram and maximum of 500 grams. While investors can also hold SGBs in physical form, most choose to hold it in demat form for ease of trading.

#### 72/A2016

- 'Belt and Road Initiative' is sometimes mentioned in the news in the context of the affairs of
  - A) African Union
  - B) Brazil
  - C) European Union
  - D) China

#### 'Belt and Road Initiative'

- The 'One Belt, One Road' (OBOR) initiative is a foreign policy and economic strategy of the People's Republic of China. The term derives from the overland 'Silk Road Economic Belt' and the '21st-Century Maritime Silk Road', concepts introduced by PRC President Xi Jinping in 2013
- It is a global infrastructure development strategy to invest in nearly 70 countries and international organizations.
- The purpose of the Belt & Road Initiative is to promote regional economic development, through creation of win-win cooperation and joint prosperity. It intends to increase understanding and trust, and to strengthen communication and friendship among countries in the region.

- Pradhan Mantri MUDRA Yojana is aimed at
  - A) bringing the small entrepreneurs into formal financial system
  - B) providing loans to poor farmers for cultivating particular crops
  - C) providing pensions to old and destitute persons
  - D) funding the voluntary organizations involved in the promotion of skill development and employment generation

### Pradhan Mantri MUDRA Yojana

- PM Mudra Loan Yojana is a scheme initiated by Government of India to provide funding support of maximum up to ₹ 10 lakh to individuals, MSMEs, and non-corporate and non-farm small/micro enterprises.
- Mudra loans are offered under PMMY with the help of Public and Private Sector Banks, Non-Banking Financial Companies (NBFCs), Micro Finance Institutions (MFIs) and Regional Rural Banks (RRBs).
- The basic motive of MUDRA scheme is to extend the facility of institutional finance to individuals and MSMEs engaged in trading, manufacturing and service sectors.
- The basic motive of MUDRA scheme is to extend the facility of institutional finance to individuals and MSMEs engaged in trading, manufacturing and service sectors.

#### Pradhan Mantri MUDRA Yojana

- Loans offered under 3 categories: Shishu, Kishor and Tarun
- Loan Amount: up to Rs. 10 lakh
- Collateral/Security: Not required
- Age Criteria: 18 years and Maximum 65 years
- Repayment Tenure: Up to 5 years Interest Rate: Varies from bank to bank
- Shishu For loan amount up to Rs. 50,000
- Kishor -For loan amount from Rs. 50,001- Rs 5 lakh
- Tarun For loan amount more than 5 lakhs and up to Rs 10 lakh

#### 74/A2016

- In which of the following regions of India are shale gas resources found?
  - 1. Cambay Basin
  - 2. Cauvery Basin
  - 3. Krishna-Godavari Basin

Select the correct answer using the code given below.

A) 1 and 2 only

B) 3 only

C) 2 and 3 only

D) 1,2 and 3

#### Shale Gas



- India has identified six basins as areas for shale gas exploration: Cambay (Gujarat), Assam-Arakan (North East), Gondwana (Central India), Krishna Godavari onshore (East Coast), Cauvery onshore, and Indo-Gangetic basins.
- Shale gas is natural gas produced from shale formations that typically function as both the reservoir and the source rocks for the natural gas. In terms of chemical makeup, shale gas is typically a dry gas composed primarily of methane (60-95% v/v), but some formations do produce wet gas.
- Shale gas is a fossil fuel.
- Shale, any of a group of fine-grained, laminated sedimentary rocks consisting of silt- and clay-sized particles. Shale is the most abundant of the sedimentary rocks

- 'Global Financial Stability Report' is prepared by the
  - A) European Central Bank
  - B) International Monetary Fund
  - C) International Bank for Reconstruction and Development
  - D) Organization for Economic Cooperation and Development

### 'Global Financial Stability Report'

- The Global Financial Stability Report provides an assessment of the global financial system and markets, and addresses emerging market financing in a global context. It focuses on current market conditions, highlighting systemic issues that could pose a risk to financial stability and sustained market access by emerging market borrowers.
- The Global Financial Stability Report is prepared by IMF
- Financial stability is important as it reflects a sound financial system, which in turn is important as it reinforces trust in the system and prevents phenomena such as a run on banks, which can destabilize an economy.



### Financial Stability Report of India

- The Financial Stability Reports, published by Reserve Bank of India, after approved by FSDC Sub- Committee since its inception, taking inputs from financial sector regulators i.e. RBI, SEBI, PFRDA, IRDAI including Ministry of Finance, are periodic exercise for reviewing the nature, magnitude and implications of risks
- In this report RBI comments on Banking sector, SEBI, Risks, Global economic scene, GDP among other

- Regarding 'Atal Pension Yojna', which of the following statements is/are correct?
  - 1. It is a minimum guaranteed pension scheme mainly targeted at unorganized sector workers
  - 2. Only one member of a family can join the scheme
  - 3. same amount of pension is guaranteed for the spouse for life after subscriber's death

Select the correct answer using the code given below.

A) 1 only B) 2 and 3 only

C) 1 and 3 only D) 1,2 and 3

#### 'Atal Pension Yojna'

- Atal Pension Yojana is a pension scheme for workers in the Unorganised sector like personal maids, drivers, gardeners etc.
- It was launched in 2015.
- It is a social security scheme. The scheme was replacement of Swavalban Yojana
- Eligibility: Indian citizen, Having valid bank account and are 18 to 40 years old.
- APY aims to help these workers save money for their old age while they are working and guarantees returns post retirement.
- APY is a periodic contribution based pension plan and promises a fixed monthly pension of Rs 1000/ Rs 2000/ Rs 3000/ Rs 4000 or Rs 5000.

- The term 'Regional Comprehensive Economic Partnership' often appears in the news in the context of the affairs of a group of countries known as
  - A) G20
  - B) ASEAN
  - C) SCO
  - D) SAARC

# 'Regional Comprehensive Economic Partnership'

- The Regional Comprehensive Economic Partnership (RCEP) is a proposed free trade agreement in the Indo-Pacific region between the ten member states of the Association of Southeast Asian Nations (ASEAN)
- At the East Asia Summit meeting that ended in early November in Bangkok, where the issue of concluding the much-hyped Regional Comprehensive Economic Partnership (RCEP) agreement was at center stage, India ultimately decided to opt out, saying its key concerns were not addressed.
- There are 16 countries involved in RCEP: the 10 members of ASEAN—Brunei-Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam plus the six countries with which ASEAN has free trade agreements—Australia, China, India, Japan, Korea, and New Zealand.

- On which of the following can you find the Bureau of Energy Efficiency Star Label?
  - 1. Ceiling fans
  - 2. Electric geysers
  - 3. Tubular florescent lamps

Select the correct answer using the code given below

A) 1 and 2 only

B) 3 only

B) 2 and 3 only

D) 1,2 and 3

### Bureau of Energy Efficiency Star Label

- ENERGY STAR is the trusted, government-backed symbol for energy efficiency helping us all save money and protect the environment through energy-efficient products and practices.
- The ENERGY STAR label was established to: Reduce greenhouse gas emissions and other pollutants caused by the inefficient use of energy
- Star Label inform prospective purchasers that the product is highly energy efficient for its category.
- A star rating, ranging from 1 to 5 in the ascending order of energy efficiency is provided to products registered with the Bureau.

- India is an important member of the 'International Thermonuclear Experimental Reactor'. If this experiment succeeds, what is the immediate advantage for India?
  - A) It can use thorium in place of uranium for power generation
  - B) It can attain a global role in Satellite Navigation
  - C) It can drastically improve the efficiency of its fission reactors in power generation
  - D) It can build fusion reactors for power generation

# 'International Thermonuclear Experimental Reacto Bhanu's PPT

- ITER is an international nuclear fusion research and engineering megaproject, which will be the world's largest magnetic confinement plasma physics experiment.
- One of the primary **goals of ITER** operation is to demonstrate the control of the plasma and the fusion reactions with negligible consequences to the environment.
- In all, 35 countries are sharing the cost of the ITER Project.
- Without the electrons, atoms have a positive charge and repel. This means that you have to have super high atomic energies to get these things to have nuclear **fusion**.
- The main feature of the 180-hectare ITER site in Saint Paul-lez-Durance, southern France, is a man-made level platform that was completed in 2009. This 42-hectare platform measures 1 kilometre long by 400 metres wide, and compares in size to 60 soccer fields.

 In the context of the history of India, consider the following pairs:

TERM	DESCRIPTION
1. Eripatti	:: Land, revenue from which was
	apart for the maintenance of the
	village tank
2. Taniyurs	:: Villages donated to a single
	Brahmin or a group of Brahmins
3. Ghatikas	:: Colleges generally attached to the temples

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

A) 1 and 2

B) 3 only

C) 2 and 3

D) 1 and 3

#### **Eripatti**

• Tank lands; lands registered in the name of a particular tank; expenses for periodical dredging and maintenance of the tank were to be carried out with the funds generated as revenue from these lands.

#### **Taniyurs**

• Taniyurs During the Chola regime, Taniyurs developed out of Brahmadeyas and temple settlements and can include several hamlets and revenue villages.

#### **Ghatikas**

- The Ghatika were the most important educational institutions in South india during ancient times and the most important Ghatika of the Pallavas was located in Kanchipuram.
- Ghatikas were separate from temples.



- Consider the following statements:
  - 1. The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015
  - 2. The Alliance includes all the member countries of the United Nations

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

#### The International Solar Alliance

- The International Solar Alliance (ISA) is an alliance of 121 countries initiated by India, most of them being sunshine countries, which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn.
- HQ: Gurugram
- The International Solar Alliance (ISA) initiative was launched at the UN Climate Change Conference in Paris on 30
   November 2015 by Hon'ble Prime Minister Narendra Modi and French President Francois Hollande.

- 'European Stability Mechanism' sometimes seen in the news, is an
  - A) agency created by EU to deal with the impact of millions of refugees arriving from Middle East
  - B) agency of EU that provides financial assistance to eurozone countries
  - C) agency of EU to deal with all the bilateral and multilateral agreements on trade
  - D) agency of EU to deal with the conflicts arising among the member countries



### 'European Stability Mechanism'

- The European Stability Mechanism (ESM) was set up as an international financial institution by the euro area Member States to help euro area countries in severe financial distress. It provides emergency loans but in return, countries must undertake reform programmes.
- The European Stability Mechanism (ESM) is an intergovernmental organization located in Luxembourg City, which operates under public international law for all eurozone Member States having ratified a special ESM intergovernmental treaty.
- The ESM was established in 2012. It concerns only EU member States that are part of the Eurozone.

- Which of the following is/are the advantage/advantages of practising drip irrigation?
  - 1. Reduction in weed
  - 2. Reduction in soil salinity
  - 3. Reduction in soil erosion

Select the correct answer using the code given below.

- A) 1 and 2 only
- B) 3 only
- C) 1 and 3 only
- D) None of the above is an advantage of practising drip irrigation

### **Drip Irrigation Advantages**

- Drip irrigation is the most efficient water and nutrient delivery system for growing crops. It delivers water and nutrients directly to the plant's roots zone, in the right amounts, at the right time, so each plant gets exactly what it needs, when it needs it, to grow optimally.
- Fertilizer and nutrient loss is minimized due to a localized application and reduced leaching.
- Drip Irrigation is enabling higher yields to be produced from any land, while saving water, fertilizer and energy. Water application efficiency is high if managed correctly. Field levelling is not necessary.
- Sprinkler irrigation systems are best suited for large, flat areas that need a substantial volume of water. Drip irrigation systems are most effective for precisely watering small areas or plants that require a specific watering schedule.

- Regarding 'Digilocker', sometimes seen in the news, which of the following statements is/are correct?
  - 1. It is a digital locker system offered by the Government under Digital India Programme
  - 2. It allows you to access your e-documents irrespective of your physical location

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

#### Digi Locker

- DigiLocker is a key initiative under Digital India program.
- DigiLocker is a digital locker facility provided by the government. It allows all Indian citizens to store scanned or digital formats of their documents. The technology used by DigiLocker is Cloud computing, where all citizens are given 1 GB (gigabyte) of storage space on a secure and private cloud account.

- Recently, linking of which of the following rivers was undertaken?
  - A) Cauvery and Tungabhadra
  - B) Godavari and Krishna
  - C) Mahanadi and Sone
  - D) Narmada and Tapti

- The National River Linking Project (NRLP) formally known as the National Perspective Plan, envisages the transfer of water from water 'surplus' basins where there is flooding to water 'deficit' basins where there is drought/scarcity, through inter-basin water transfer projects.
- River Linking is a project of linking two or more rivers by creating a network of manually created reservoirs and canals, and providing land areas that otherwise does not have river water access and reducing the flow of water to sea using this means.
- First, the Mahanadi, Godavari. Krishna and Kaveri rivers would all be inter-linked by canals. Reservoirs and dams would be built along the course of these rivers. These would be used to transfer surplus water from the Mahanadi and Godavari rivers to the south of India.

#### Linking of Rivers

Godavari Krishna River linking

Vykuntapuram barrage would be constructed on Krishna river located near 16° 34′41″N 80° 24′43″E in the upstream of Prakasam barrage with FRL at 25m MSL to receive Godavari water diverted from Polavaram dam.

As the water availability in the Krishna river was becoming inadequate to meet the water demand, Godavari River is linked to the Krishna river by commissioning the Polavaram right bank canal with the help of Pattiseema lift scheme in the year 2015 to augment water availability to the Prakasam Barrage in Andhra Pradesh.

- In the cities of our country, which among the following atmospheric gases are normally considered in calculating the value of Air Quality Index?
  - 1. Carbon dioxide
  - 2. Carbon monoxide
  - 3. Nitrogen dioxide
  - 4. Sulfur Dioxide
  - 5. Methane

Select the correct answer using the code given below

- A) 1,2 and 3 only
- C) 1,4 and 5 only

- B) 2,3 and 4 only
- D) 1,2,3,4 and 5

### Air Quality Index

- Air Quality Index (AQI) Calculation
- The Air Quality Index is based on measurement of particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), Ozone (O<sub>3</sub>), Nitrogen Dioxide (NO<sub>2</sub>), Sulfur Dioxide (SO<sub>2</sub>) and Carbon Monoxide (CO) emissions.
- "Good" AQI is 0 to 50. Air quality is considered satisfactory, and air pollution poses little or no risk. "Moderate" AQI is 51 to 100. Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people.

- With reference to 'Astrosat', the astronomical observatory launched by India, which of the following statements is/are correct?
  - 1. Other than USA and Russia, India is the only country to have launched a similar observatory into space
  - 2. Astrosat is a 2000kg satellite placed in an orbit at 1650 km above the surface of the Earth.

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

#### **ASTROSAT**



- AstroSat is the first dedicated Indian astronomy mission aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously - for a more detailed understanding of our universe.
- The payloads cover the energy bands of Ultraviolet (Near and Far), limited optical and X-ray regime (0.3 keV to 100keV).
- It was India's first dedicated multi-wavelength space telescope. It was launched on a PSLV-XL on 28 September 2015.
- The satellite has The Ultra-Violet Imaging Telescope, or the UVIT, is a remarkable 3-in-1 imaging telescope. Weighing all of 230 kg, the UVIT can simultaneously observe in the visible, the near-ultraviolet (NUV) and the far-ultraviolet (FUV). UVIT comprises of two separate telescopes.

- With reference to the economic history of medieval India, the term 'Araghatta' refers to
  - A) bonded labour
  - B) land grants made to military officers
  - C) waterwheel used in the irrigation of land
  - D) wasteland converted to cultivated land

### 'Araghatta' Water Wheel

- Araghatta is a Persian wheel used in irrigation in medieval India. It is a mechanical device used to lift water.
- It uses animal power to lift water from sources, especially from open wells.
- The animals used here are cattle, bullocks, etc. Araghatta is made of ara + ghatta, ara means spoke and ghatta means pot.
- One of the earliest mentions of the Persian Wheel occurs in the Babur's memoirs, the Babur Nama (1526-30).

- With reference to the cultural history of India, the memorizing of chronicles, dynastic histories and epic tales was the profession of who of the following?
  - A) Shramana
  - B) Parivraajakas
  - C) Agrahaarika
  - D) Maagadha

#### Shramana



- Shramana means "seeker, one who performs acts of austerity, ascetic". Shramana is a wandering monk in certain austere traditions of ancient India, including Jainism, Buddhism, and ajvika religion.
- The Shramana tradition gave rise to Jainism and Buddhism.

#### Parivraajakas

- Parivrājaka literally means 'one who roams about all round the place.
- The institution of sanyasa is very old. It is the last of the four asramas or stations of life. A sanyāsin was supposed to live by begging and constantly moving.
- He should never have a fixed abode for himself.
- This discipline was imposed on him to cut off all the connections of the earlier life and become free from all the bonds to contemplate on God.

#### Maagadha

 Maagadha is supposed to be a courtier with these roles to perform. "The memorizing of chronicles, dynastic histories, or epic tales was the work of a different group of people, the sutas and magadhas."

#### Agrahaarika

 Contribution of land or taxes from a village by the king to the Brahmins

- Recently, for the first time in our country, which of the following States has declared a particular butterfly as "State Butterfly"?
  - A) Arunachal Pradesh
  - B) Himachal Pradesh
  - C) Karnataka
  - D) Maharashtra

### State Butterfly

- Papilio polymnestor, the blue Mormon, is a large swallowtail butterfly found in south India and Sri Lanka. It is the "state butterfly" of the Indian state of Maharashtra.
- Maharashtra has become the first State in the country to have a 'State butterfly.'
- The Blue Mormon is a large, swallowtail butterfly found primarily in Sri Lanka and India, mainly restricted to the Western Ghats of Maharashtra, South India and coastal belts. It may occasionally be spotted in the Maharashtrian mainland between Vidarbha and Western Maharashtra.



- Consider the following statements: the Mangalyaan launched by ISRO
  - 1. is also called the Mars Orbiter Mission
  - 2. made India the second country to have a spacecraft orbit the Mars after USA
  - 3. made India the only country to be successful in making its very first attempt

Which of the statements given above is/are correct?

- A) 1 only B) 2 and 3 only
- C) 1 and 3 only D) 1,2 and 3

### The Mangalyaan launched by ISRO



- It was launched on 5 November 2013 by the Indian Space Research Organisation (ISRO).
- The Mars Orbiter Mission (MOM), also called Mangalyaan is a space probe orbiting Mars since 24 September 2014.
- The Mars Orbiter Mission (MOM) was initially estimated to survive around six months, but it is still active and has captured the seasonal variations of the red planet for two Martian years
- Mars is farther away from the sun, it has to travel a greater distance around the sun. It takes Mars about twice as long as it does for Earth to make one circle around the sun. Therefore, a year on Mars lasts twice as long

- What was the main reason for the split in the Indian National Congress at Surat in 1907?
  - A) Introduction of communalism into Indian politics by Lord Minto
  - B) Extremists' lack of faith in the capacity of the moderates to negotiate with the British Government
  - C) Foundation of Muslim League
  - D) Aurobindo Ghosh's inability to be elected as the President of the Indian national Congress

#### **Congress Split**



- The Surat Split was the splitting of the Indian National Congress into two groups the Extremists and the Moderates at the Surat session in 1907.
- The moderates wanted "ras Bihari Ghosh"as president of the Indian National Congress and Extremist wanted "Lala Lajpat Rai" as president.
- The moderates also wanted to drop the resolutions on swadeshi, boycott movements and national education. Rash Behari Ghosh became the president in the session which was held at Surat. Tilak was not even allowed to speak and this angered the extremists, who wanted to cancel the session.
- The most prominent leaders of the Assertive Nationalists were Bal Gangadhar Tilak, Lala Lajpat Rai and Bipin Chandra Pal, who are known collectively as the Lal-Bal-Pal trio.

- The plan of Sir Stafford Cripps envisaged that after the Second World War
  - A) India should be granted complete independence
  - B) India should be partitioned into two before granting independence
  - C) India should be made a republic with the condition that she will join the Commonwealth
  - D) India should be given Dominion status

### **Cripps Mission**

- The Cripps Mission was sent by the British government to India in March 1942 to obtain Indian cooperation for the British war efforts in the 2nd World War. It was headed by Sir Richard Stafford Cripps, a labour minister in Winston Churchill's coalition government in Britain.
- From 22 March to 11 April 1942, Stafford Cripps, a member of the War Cabinet, was dispatched to India to discuss the British Government's Draft Declaration on the Constitution of India with representative Indian leaders from all parties.
- Cripps plan was rejected by Congress because it did not grant responsible Cabinet Government at the Centre even without Defence during the war. The veto of ministerial decisions was to continue and the India Office was also to retain control of Indian affairs in London.

#### 94/A2016

Consider the following pairs:

#### **FAMOUS PLACE**

REGION

- 1. Bodhgaya :: Baghelkhand
- 2. Khajuraho :: Bundelkhand
- 3. Shirdi :: Vidarbha
- 4. Nashik :: Malwa
- 5. Tirupati :: Rayalseema

Which of the pairs given above are correctly matched?

A) 1,2 and 4

B) 2,3,4 and 5

C) 2 and 5 only

D) 1,3,4 and 5

- Bodh Gaya is a religious site and place of pilgrimage associated with the Mahabodhi Temple Complex in Gaya district in the Indian state of Bihar.
- The Mahabodhi Temple is a UNESCO World Heritage Site in Bodh Gaya. It is the place where Buddha is said to have attained enlightenment.
- The site contains a descendant of the Bodhi tree under which Buddha gain enlightenment.
- The temple complex includes two large straightsided shikhara towers, the largest over 55 metres (180 feet) high. This is a stylistic feature that has continued in Jain and Hindu Temples to the present day, and influenced Buddhist architecture in other countries, in forms like the pagoda.

### Khajuraho

- The Khajuraho Group of Monuments is a group of Hindu temples and Jain temples in Chhatarpur district, Madhya Pradesh.
- Built between 950-1050 CE by the Chandela dynasty, Khajuraho Temples are one of the most important specimens of the Indian art. These set of Hindu and Jain temples took around a hundred years to take shape. Originally a collection of 85 temples, the number has come down to 25.
- Khajuraho was an ancient city in the Madhya Pradesh region of northern India. From the 10th to 12th century CE it was the capital of the Chandella kings who ruled Bundelkhand
- The temples are famous for their nagara-style architectural symbolism and their erotic sculptures.

#### Shirdi



- t is located 185 km east of the Western Seashore line (the Ahmednagar-Manmad road), a very busy route. **Shirdi** is famously known as the home of the late 19th century saint Shri Sai Baba. The Shri Saibaba Sansthan Trust located in **Shirdi** is one of the richest temple organisations.
- Sai Baba of **Shirdi**, also known as **Shirdi** Sai Baba, was an Indian spiritual master who is regarded by his devotees as a saint and a fakir.
- He is revered by both his Hindu and Muslim devotees during, as well as after his life time.
- he preached the importance of realization of the self and criticized love towards perishable things.
- His teachings concentrate on a moral code of love, forgiveness, helping others, charity, contentment, inner peace and devotion to the God and guru.

- Nashik is an ancient city in the northern region of the Indian state of Maharashtra. Situated on the banks of river Godavari.
- Nasik is well known for being one of the Hindu pilgrimage sites, that of Kumbh Mela which is held every 12 years.
- The city located about 190 km north of state capital Mumbai, is called the "Wine Capital of India" as half of India's vineyards and wineries are located in Nashik.
- Nashik was known as Panchavati before Ramayana period. Nashik has mythological, historical, social and cultural importance.

### Tirupati



- The town of Tirupati in Andhra Pradesh is famous for its temples, the most famous and popular of which is Sri Venkateswara Temple sitting atop one of the seven peaks of Tirumala Hills. The town is famous for footfall of pilgrims from around the country as well as the world.
- Balaji's eyes are closed. He was giving severe punishments to those persons, whenever they had done mistakes. People were fearing to wander in the vicinity of Him. Archakas decided to cover his eyes by increasing the size of Namam with camphor, to cool him.
- Neela Devi accepts the hair sacrificed by Devotees of Lord Venkatesha(Vishnu) and Lord blesses his devotees who sacrifice their hair for the sake of the Lord. This is the reason why Devotees tonsure or shave their head in Tirumala.

- Nila Devi (or Neela Devi) is the third consort of Lord Maha Vishnu, the other two being Sri Devi and Bhu Devi.
- So even though she is third wife, being older in age occupies right side of Lord along with Bhu Devi.
- Nila is basically Bhu Devi modified and both are symbol for patience and burden.
- The idol is very similar to the idol of Sridevi to signify that Sridevi and Bhudevire present the two equal spirits of Goddess Lakshmi, the consort of Vishnu. The only difference in the idols is the swap in the hand poses. The idol of Bhudevi has her right hand in Kataka hasta pose and the left in Gajakarna pose.



- The Parliament of India acquires the power to legislate on any item in the State List in the national interest if a resolution to that effect is passed by the
  - A) Lok Sabha by a simple majority of its total membership
  - B) Lok Sabha by a majority of not less than two-thirds of its total membership
  - C) Rajya Sabha by a simple majority of its total membership
  - D) Rajya Sabha by a majority of not less than two-thirds of its members present and voting

# Bhanu's PPT

### Parliament making laws on State list

- Parliament can make laws on a matter in state list, if the Rajya Sabha says that it is necessary in the national interest that Parliament should make laws on that matter. This resolution must be supported by two-thirds of the members of Rajya Sabha, present and voting. The resolution remains in force only for one year.
- According to Article 253, the Union Legislature has the power to legislate on State subjects to comply with its international agreements.
- Thus, these are the four instances where the Parliament can make laws for a subject in the State List. This shows that Indian federalism has a strong Centre.

- Recently, which of the following States has explored the possibility of constructing an artificial inland port to be connected to sea by a long navigational channel?
  - A) Andhra Pradesh
  - B) Chhattisgarh
  - C) Karnataka
  - D) Rajasthan

- The Inland Port refers to the planned development of depot into a logistics and distribution hub connecting coastal seaports to inland destinations through rail and ground transportation.
- A new inland port in the north-east city of Varanasi on the Ganges River commissioned as the country looks to make its landlocked regions accessible to world shipping.
- Rajasthan state government is exploring ways to develop an artificial inland port in Jalore by bringing in Arabian sea water into Rajasthan through Gujarat. Once implemented Rajasthan will be accessible by water transport and will not be landlocked state.

- With reference to the Agreement at the UNFCC Meeting in Paris in 2015, which of the following statements is /are correct?
  - 1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017
  - 2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2 degree or even 1.5 degree above pre-industrial levels
  - 3. Developed countries acknowledged their historical responsibility in global warming and committed to donate \$ 1000 billion a year from 2020 to help developing countries to cope with climate change.

Select the correct answer using the code given below.

A) 1 and 3 only

B) 2 only

C) 2 and 3 only

D) 1,2 and 3

#### UNFCC Meeting in Paris in 2015,

- At COP 21 in Paris, on 12 December 2015, Parties to the UNFCCC reached a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future.
- The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.



- Consider the following statements:
  - 1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the "Clib of Rome"
  - 2. The Sustainable Development Goals have to be achieved by 2030

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

# Bhanu's PPT

### The Sustainable Development Goals

- In September 2011, this idea was picked up by the **United Nations** Department of Public Information 64th NGO Conference in Bonn, Germany. The outcome document proposed 17 sustainable development goals and associated targets. In the run-up to Rio+20 there was much discussion about the idea of the SDGs.
- The SDGs were adopted by **the United Nations General Assembly** in September 2015 and look to 2030. They are far broader in scope than the Millennium Development Goals (MDGs) which focused on a narrow set of disease-specific health targets for 2015.
- The 17 Sustainable Development Goals (SDGs), with their 169 targets, form the core of the 2030 Agenda. They balance the economic, social and ecological dimensions of sustainable development, and place the fight against poverty and sustainable development on the same agenda for the first time.

- A recent movie titled The Man Who Knew Infinity is based on the biography of
  - A) S Ramanujan
  - B) S Chandrasekhar
  - C) S N Bose
  - D) C V Raman

# Bhanu's PPT

#### S Ramanujan

- Srinivasa Ramanujan FRS was an Indian mathematician who lived during the British Rule in India.
- Srinivasa Ramanujan (1887-1920) was an Indian mathematician who made great and original contributions to many mathematical fields, including complex analysis, number theory, infinite series, and continued fractions.
- An intuitive mathematical genius, Ramanujan's discoveries have influenced several areas of mathematics, but he is probably most famous for his contributions to number theory and infinite series, among them fascinating formulas (pdf) that can be used to calculate digits of pi in unusual ways.
- The Man Who Knew Infinity: A Life of the Genius Ramanujan is a biography of the Indian mathematician Srinivasa Ramanujan, written in 1991 by Robert Kanigel and published by Washington Square Press.



- Consider the following statements:
  - 1. The minimum age prescribed for any person to be a member of Panchayat is 25 years
  - 2. A Panchayat reconstituted after premature dissolution continues only for the remainder period.

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

### Panchayat Member Criteria

- The gram panchayat is divided into wards and each ward is represented by a Ward Member or Commissioner, also referred to as a Panch or Panchayat Member, who is directly elected by the villagers. The panchayat is chaired by the president of the village, known as a Sarpanch.
- For Panchayat member one must be a registered voter in the electoral roll of that Gram Panchayat, 25 years old.
- The rules are different in different states.

1	В	11	A	21	В	31	В	41	D
2	C	12	D	22	D	32	Α	42	Α
3	C	13	C	23	Α	33	C	43	С
4	В	14	D	24	В	34	C	44	Α
5	C	15	C	25	D	35	В	45	Α
6	В	16	C	26	C	36	Α	46	С
7	D	17	C	27	В	37	C	47	Α
8	С	18	D	28	D	38	D	48	С
9	C	19	C	29	Α	39	В	49	Α
10	В	20	В	30	C	40	В	50	В

51	В	61	A	71	С	81	A	91	C
52	С	62	В	72	D	82	В	92	В
53	Α	63	D	73	Α	83	C	93	D
54	D	64	D	74	D	84	C	94	С
55	Α	65	В	<b>75</b>	В	85	В	95	D
56	C	66	В	76	C	86	В	96	D
57	Α	67	В	77	В	87	D	97	В
58	C	68	D	78	D	88	Α	98	В
59	D	69	В	79	D	89	D	99	Α
60	В	70	Α	80	D	90	D	100	В

## Thank You