



(Compilations of the Multiple Choice Questions)

For the 3rd Week

Of

# August

2020

(17th August to 22nd August)

Visit our website www.sleepyclasses.com or

our YouTube channel for entire GS Course **FREE** of cost

Also Available: Prelims Crash Course | Prelims Test Series

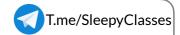




# **Table of Contents**

1.	Geography	1
2.	History	4
3.	Polity, Governance & IR	8
4.	Economy	12
5.	Environment	16
6.	Science & Technology	19





# 1. Geography

### Click here to watch the following questions on YouTube

- 1. Graded Response Action Plan has been in news recently. Choose the correct statement for the same:
  - A. It includes the measures which will be taken by different government agencies to prevent worsening of Air Quality of Delhi-NCR (National Capital Region).
  - B. It includes the measures which will be taken by different government agencies to prevent the spread of Naxalism in North East States.
  - C. It includes the measures which will be taken by different government agencies to access the mining affect areas and use the District Mineral Funds for the same.
  - D. It includes the measures which will be taken by different government agencies to achieve SDG's by stipulated timeline.

**Answer: A** 

- 2. The "Asian Elephant Specialist Group (AsESG)" has been in news recently. Which of the following is/ are correct in context with the same?
  - 1. It is a global network of voluntary specialists concerned with the study, monitoring, management, and conservation of Asian elephants all over the world.
  - 2. Gajah is the bi-annual journal of the group.
  - A. Only 1
  - B. Only 2
  - C. Both 1 and 2
  - D. Neither 1 nor 2

**Answer: B** 

- The International Union for Conservation of Nature's (IUCN) 10th Asian Elephant Specialist Group (AsESG) Meeting started on December 5, 2019, at Kota Kinabalu in Sabah, Malaysia.
- It is a global network of voluntary specialists concerned with the study, monitoring, management, and conservation of Asian elephants in 13 range states.
- Asian elephants across the current 13 range states: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos PDR, Malaysia, Myanmar (Burma), Nepal, Sri Lanka, Thailand, and Vietnam.





3. Consider the following statements: (UPSC QUESTION)

The nation-wide 'Soil Health Card Scheme' aims at

- 1. Expanding the cultivable area under irrigation.
- 2. Enabling the banks to assess the quantum of loans to be granted to farmers on the basis of soil quality.
- 3. Checking the overuse of fertilizers in farmlands.

Which of the above statements is/are correct?

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

**Answer: B** 

- 4. Which of the following bacteria have recently been found effective for carrying out Arsenic Bioremediation?
  - A. Thiobacillus and Acidothiobacillus
  - B. Oil Zapper and Oilivorous-S
  - C. Bacillus flexus and Acinetobacter junii
  - D. None of the above

Answer: C

- Using two indigenous strains of bacterium isolated from arsenic-contaminated field, researchers from CSIR-National Botanical Research Institute (CSIR-NBRI) and the University of Lucknow have shown that arsenic can be effectively removed from contaminated soil with the help of microbes.
- The strains are named as Bacillus flexus and Acinetobacter junii.
- 5. Which of the following is/are correct in context with "Fisheries Sector in India "? [ECONOMIC SURVEY]
  - 1. The sector accounts for 6.58 percent of GDP from agriculture, forestry and fishing.
  - 2. The total fish Production in the country is more from Marine Fisheries than Inland Fisheries.
  - A. Only 1
  - B. Only 2
  - C. Both 1 and 2





D. Neither 1 nor 2

**Answer: A** 

### **Explanation**

Fisheries Sector

- The sector provides livelihood to about 16 million fishers and fish farmers at the primary level and almost twice the number along the value chain.
- The sector accounts for 6.58 percent of GDP from agriculture, forestry and fishing.
- The total fish production in the country was 13.42 million metric tonnes (MMT) during 2018-19. (Marine fisheries- 3.71 MMT and Inland fisheries- 9.71 MMT)
- Fish production or fish farming is a form of aquaculture in which fish are raised in enclosures to be sold as food."

# Essay Course 2021

With Video Lectures and Evaluated Practice Essays

@ ₹4999/-

www.SleepyClasses.com

YouTube.com/SleepyClasses ||

+91 6280133177





# 2. History

### Click here to watch the following questions on YouTube

- 1. Arrange the following in chronological order
  - 1. The Policy of Ring Fence
  - 2. The Policy of Equal Federation
  - 3. The Policy of Subordinate Union
  - 4. The Policy of Subordinate Isolation
  - A. (1)(4)(3)(2)
  - B. (1)(3)(2)(4)
  - C. (3)(2)(4)(1)
  - D. (4) (2) (1) (3)

### Answer: A

- The Company's Struggle for Equality from a Position of Subordination (1740-1765)
  - ✓ Starting with Anglo-French rivalry with the coming of Dupleix in 1751, the East India Company asserted political identity with capture of Arcot (1751).
  - ✓ With the Battle of Plassey in 1757, the East India Company acquired political power next only to the Bengal nawabs.
  - ✓ In 1765 with the acquisition of the Diwani of Bengal, Bihar and Orissa, the East India Company became a significant political power
- Policy of Ring Fence (1765-1813)
  - ✓ This policy was reflected in Warren Hastings' wars against the Marathas and Mysore, and aimed at creating buffer zones to defend the Company's frontiers.
  - ✓ Major powers such as Hyderabad, Awadh and the Marathas accepted subsidiary alliance. Thus, British supremacy was established.
- Policy of Subordinate Isolation (1813-1857)
  - ✓ Now, the imperial idea grew and the theory of paramountcy began to develop. The states surrendered all forms of external sovereignty but retained sovereignty in internal administration.
  - ✓ This policy of annexation culminated in usurpation of eight states by Dalhousie including some big states such as Satara and Nagpur.
- Policy of Subordinate Union (1857-1935)
  - √ The year 1858 saw the assumption of direct responsibility by the Crown.





- ✓ The paramount supremacy of the Crown presupposed and implied the subordination of states.
- Policy of Equal Federation (1935-1947)
  - ✓ The Government of India Act, 1935 proposed a Federal Assembly with 125 out of 375 seats for the princes and the Council of States with 104 out of 160 seats for the princes, under its scheme of an all-India federation, which was subject to ratification by states representing more than half of the population and entitled to more than half of the seats in the Council of States.
  - ✓ This scheme never came into existence and after the outbreak of World War II (September 1939) it was dropped altogether.

### 2. English East India Company lost the monopoly of Chinese trade by

- A. The Charter Act of 1813
- B. The Charter Act of 1833
- C. The Charter Act of 1853
- D. The Charter Act of 1893

### Answer: B

### **Explanation**

- The Charter Act of 1813
  - ✓ The Company's monopoly over trade in India ended, but the Company retained the trade with China and the trade in tea
- The Charter Act of 1833
  - √ The Company's monopoly over trade with China and in tea also ended.

### 3. Which of the following statements is <u>incorrect</u>?

- A. Amrita Bazar Patrika was originally a Bengali paper.
- B. Samachar Darpan, the Vernacular newspaper was started during the period of Warren Hastings.
- C. Bombay Times became the Times of India.
- D. The Bengal Gazette, the Weekly Newspaper, was started by James Augustus Hickey.

### **Answer: B**

- Originally called The Bombay Times and Journal of Commerce, the paper was founded in 1838 to serve the British residents of western India.
- At first published twice weekly, the paper became a daily in 1851 and changed its name to The Times of India in 1861.





- Samachar Darpan was the first Bengali weekly newspaper. It was published by the Baptist Missionary Society and published on 23 May 1818 from the Baptist Mission Press at Serampore.
- The Governor at the time was Lord Hastings.
- 4. Match the List I with List II and select the correct answer from the codes given below:

List - I List - II

1. Treaty of Allahabad a. 1769

2. Treaty of Madras b. 1765

3. Treaty of Purandar c. 1776

4. Treaty of Mangalore d. 1784

1 2 3 4

A.b c d a

B. c d a b

C.bacd

D. a b d c

Answer: C

- The Treaty of Allahabad
  - ✓ After the Battle of Buxar in 1764, Robert Clive concluded two important treaties at Allahabad in August 1765—one with the Nawab of Awadh and the other with the Mughal Emperor, Shah Alam II.
- The Treaty of Madras
  - ✓ This was a consequence of the first Anglo-Mysore War. Haider Ali was lined up in battle against the East India Company which was being supported by the Nizam and the Marathas.
  - √ Haider Ali won the tactical battle and the English were forced to conclude a very humiliating treaty
    with Haidar on April 4, 1769—Treaty of Madras.
- The Treaty of Purandar
  - ✓ This was a consequence of the First Anglo-Maratha War.
  - ✓ It was signed on 1 March 1776 by the peshwa of the Maratha people and the East India Company. Based on the terms of the accord, the British were able to secure Salsette.
  - ✓ Treaty was signed between the then Governor General Warren Hasting who sent Colonel Upton and Nana Phadnavis of Peshwa in which British accepted Sawai Madhav Rao as a new Peshwa and Maratha accepted not to recognise existence of French in India.





- The Treaty of Mangalore
  - ✓ It was signed between Tipu Sultan and the British East India Company on 11 March 1784. It was signed in Mangalore and brought an end to the Second Anglo-Mysore War.
- 5. The Ilbari ruler who introduced Sijada, Paibos and Nauroz to the Delhi Sultanate was
  - A. Qutabuddin Aibek
  - B. Iltutmish
  - C. Balban
  - D. Bahram Shah

**Answer: C** 

- Sijda Under this, the people had to kneel down and touch the ground with their head while greeting the Sultan.
- Balban introduced rigorous court discipline and new customs such as prostration and kissing the Sultan's feet to prove his superiority over the nobles.
- He also introduced the Persian festival of Nauroz to impress the nobles and people with his wealth and power. He stood forth as the champion of Turkish nobility.





# 3. Polity, Governance & IR

### Click here to watch the following questions on YouTube

- 1. Which of the following is correct about PM CARES Fund?
  - 1. The Fund has been created under the Registrations Act 1908
  - 2. the Fund is not audited by the CAG
  - A. Only 1
  - B. Only 2
  - C. Both 1 and 2
  - D. Neither 1 nor 2

**Answer: C** 

### **Explanation**

- The PM CARES Fund is a charitable trust registered under the Registration Act, 1908 at New Delhi on 27.03.2020. The trust does not receive any Budgetary support or any Government money.
- With regard to a recent petition, Supreme Court "refused" to order transfer of funds from the PM CARES Fund to the National Disaster Response Fund (NDRF), saying they "are two entirely different funds with different object and purpose" and "there is no occasion" for such a direction.
- It also said guidelines specifically provide for audit of the NDRF by the Comptroller & Auditor General of India, but PM CARES Fund, being a public charitable trust, "there is no occasion for audit by the Comptroller & Auditor General of India".
- 2. Which of the following was the mandate of the G. Rohini Commission?
  - A. Implementation of Clause 6 of Assam Accord
  - B. Committee to formulate New Education Policy
  - C. Sub-categorisation of OBCs
  - D. Look into the violence in Delhi during CAA protests

**Answer: C** 

- The Union Cabinet in June 2020 approved a six-month extension to the commission appointed to examine sub-categorisation of Other Backward Classes.
- Headed by retired Delhi High Court Chief Justice G. Rohini, the commission will now have till January 31, 2021 to submit its report, the government said in a statement. The commission had been appointed in October 2017 with the initial deadline of 12 weeks. It has received several extensions since then.





- The National Commission for Backward Classes (NCBC) proposed the sub-categorisation of Other Backward Classes (OBCs) back in 2015. In October 2017, President Ram Nath Kovind, in exercise of the powers conferred by Article 340 of the Constitution, appointed a commission to examine the issue of sub-categorisation of OBCs, chaired by retired Justice G. Rohini, to ensure social justice in an efficient manner by prioritising the Extremely Backward Classes (EBCs).
- 3. Which of the following statements are correct?
  - 1. Article 16 provides equality of opportunity for all citizens in matters relating to employment or appointment to any office under the State.
  - 2. The state government has authority to make any law prescribing, in regard to a class or classes of employment or appointment to an office under the Government of, or any local or other authority within, a State or Union territory, any requirement as to residence within that State or Union territory prior to such employment or appointment.
  - A. 1 only
  - B. 2 only
  - C. Both 1 and 2
  - D. Neither 1 nor 2

### Answer: A

- Article 16 of the Constitution of India, talks about the right of equal opportunity in the matters of public employment. It states that:
  - ✓ There shall be equality of opportunity for all citizens in matters relating to employment or appointment to any office under the State,
  - ✓ No citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them, be ineligible for, or discriminated against in respect of, any employment or office under the State.
  - ✓ Nothing in this article shall prevent Parliament from making any law prescribing, in regard to a class or classes of employment or appointment to an office under the Government of, or any local or other authority within, a State or Union territory, any requirement as to residence within that State or Union territory prior to such employment or appointment.
  - ✓ Nothing in this article shall prevent the State from making any provision for the reservation of appointments or posts in favour of any backward class of citizens which, in the opinion of the State, is not adequately represented in the services under the State.
- 4. Consider the following statements about are correct about the Parliamentary Standing Committee on Information Technology?
  - 1. The committee was first constituted in 1993 and only has jurisdiction over subject matters dealt with by the Ministry of Electronics & IT, and Ministry of Information and Broadcasting.





- 2. It is a Departmentally Related Standing Committee consisting of 21 members from Lok Sabha and 10 from Rajya Sabha
- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

### **Explanation**

- The Standing Committee on Information Technology, one of the 24 Departmentally Related Committees in existence, is constituted under Rule 331C of the Rules of Procedure and Conduct of Business in Lok Sabha. It was first constituted in April 1993. The following Ministries/Departments of the Government of India are under its jurisdiction:
  - √ Ministry of Communications;
  - ✓ Department of Posts
  - ✓ Department of Telecommunications
  - ✓ Ministry of Electronics and Information Technology; and
  - ✓ Ministry of Information and Broadcasting. Composition of the Committee
- The Committee consist of 31 members; 21 members from Lok Sabha, nominated by the Speaker, Lok Sabha and 10 from Rajya Sabha nominated by the Chairperson, Rajya Sabha. The Chairperson of the Committee is appointed by the Speaker from amongst the members of the Committee from Lok Sabha. The term of office of the members of the Committee does not exceed one year.
- 5. Which of the following is correct with regard to the doctrine of constitutional morality?
  - 1. It has been defined in the Constitution
  - 2. It is limited to applying the provisions and a literal text which a constitution contains
  - A. 1 only
  - B. 2 only
  - C. Both 1 and 2
  - D. Neither 1 nor 2

Answer: D

### **Explanation**

• The concept of constitutional morality was first propounded by the British Classicist named George Grote in the 19th century in his book "A History of Greece." In Grote's formulation, constitutional morality meant as:





- ✓ That all citizens would respect and adhere the constitution.
- ✓ No own would disobey authorities acting under the constitution.
- ✓ All citizens would have the unrestrained freedom to criticize public officials acting in the discharge of their constitutional duties.
- ✓ All Public officials would have to act within the confines of the constitution.
- ✓ All the contenders for political power would respect the constitution and know that their rivals also respect the same.
- In Indian context first the word Constitutional Morality was propounded by Dr. B.R. Ambedkar on 4 November 1948 in parliamentary debate to inculcate the morality in the constitution with its great importance and effectiveness. However, it is not mentioned in the Constitution itself.
- In recent times, the doctrine become buzzword as the word "Constitutional Morality" is reiterated by Apex court in many landmark judgements including Navtej Johar case. Former CJI Dipak Mishra in his judgement said "that magnitude and sweep of constitution morality is not confined to the provisions and a literal text which a constitution contains, rather it embraces within itself a virtue of a wide magnitude that ushers in a pluralistic and inclusive society."





# 4. Economy

### Click here to watch the following questions on YouTube

- 1. Which of the following is/are correct in context of Fair and Remunerative Price (FRP) of sugarcane?
  - 1. It is decided on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP).
  - 2. Price of sugar is also announced along with the FRP.
  - A. 1 only
  - B. 2 only
  - C. Both are correct
  - D. None is correct

### Answer: A

- With the amendment of the Sugarcane (Control) Order, 1966 on 22.10.2009, the concept of Statutory Minimum Price (SMP) of sugarcane was replaced with the 'Fair and Remunerative Price (FRP)' of sugarcane for 2009-10 and subsequent sugar seasons.
- The cane price announced by the Central Government is decided on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP) in consultation with the State Governments and after taking feedback from associations of sugar industry.
- The amended provisions of the Sugarcane (Control) Order, 1966 provides for fixation of FRP of sugarcane having regard to the following factors: -
  - √ Cost of production of sugarcane
  - ✓ Return to the growers from alternative crops and the general trend of prices of agricultural commodities
  - ✓ Availability of sugar to consumers at a fair price
  - ✓ Price at which sugar produced from sugarcane is sold by sugar producers
  - √ Recovery of sugar from sugarcane
  - √ The realization made from sale of by-products viz. molasses, bagasse and press mud or their imputed value.
- Price of sugar are market driven & depends on demand & supply of sugar.
- However, with a view to protect the interests of farmers, concept of Minimum Selling Price (MSP) of sugar has been introduced w.e.f. 07.06.2018 so that industry may get atleast the minimum cost of production of sugar, so as to enable them to clear cane price dues of farmers.





- 2. Which of the following could be the benefits derived from Ethanol Blending Programme (EBP)?
  - 1. Reducing pollution
  - 2. Conserve foreign exchange
  - 3. Enabling sugar industry to clear cane price arrears of farmers
  - A. 1 only
  - B. 2 & 3 only
  - C. 2 only
  - D. All are correct

Answer: D

- Ethanol is an agro-based product, mainly produced from a by-product of the sugar industry, namely molasses.
- In years of surplus production of sugarcane, when prices are depressed, the sugar industry is unable to make timely payment of cane price to farmers.
- The Ethanol Blending Programme (EBP) seeks to achieve blending of Ethanol with motor sprit with a view to reducing pollution, conserve foreign exchange and increase value addition in the sugar industry enabling them to clear cane price arrears of farmers.
- The Central Government has scaled up blending targets from 5% to 10% under the Ethanol Blending Programme (EBP).
- The procedure of procurement of ethanol under the EBP has been simplified to streamline the entire ethanol supply chain and remunerative ex-depot price of ethanol has been fixed.
- To facilitate achieving of new blending targets, a "grid" which networks distilleries to OMC depots and details quantities to be supplied has been worked out.
- For the first time the Government has also fixed ex-mill price of ethanol derived from B-heavy molasses at as well as from 100% sugarcane juice for those mills who will divert 100% sugarcane juice for production of ethanol thereby not producing any sugar.
- This will improve the liquidity of sugar mills thereby enabling them to clear cane price arrears of farmers.
- 3. Which of the following is/are correct in context of Pradhan Mantri Fasal Bima Yojana?
  - 1. It ensures comprehensive risk cover for crops against all non-preventable natural risks from presowing to post-harvest stage.
  - 2. All farmers including sharecroppers and tenant farmers growing the notified crops in the notified areas are eligible for coverage.
  - A. 1 only





- B. 2 only
- C. Both are correct
- D. None is correct

Answer: C

- Pradhan Mantri Fasal Bima Yojana (PMFBY) was launched from Kharif 2016 with aim to support
  production in agriculture by providing an affordable crop insurance product to ensure comprehensive
  risk cover for crops of farmers against all non-preventable natural risks from pre-sowing to postharvest stage. The Scheme has completed 8 crop seasons and is being implemented across States/
  Union Territories (UTs).
- After the commencement of the Scheme, The Ministry of Agriculture and Farmers Welfare (MoA&FW), Government of India (GoI) has endeavoured to make the Scheme more effective, transparent and auto administration driven with the intention to minimise manual interventions and eliminate usage of variable methodologies for implementation and execution on the ground.
- All farmers including sharecroppers and tenant farmers growing the notified crops in the notified areas are eligible for coverage.
- Such farmers are required to submit necessary documentary evidence of land records prevailing in the State (Records of Right (RoR), Land possession Certificate (LPC) etc.) and/or applicable contract/agreement details/ other documents notified/ permitted by concerned State Government in case of sharecropper's/tenant farmers and the same should be defined by the respective States in the notification itself.
- The scheme is optional for all farmers including farmers who have been sanctioned short-term Seasonal Agricultural Operations (SAO) loans/Kisan Credit Card (KCC) for the notified crops from defined FIs (hereinafter referred to as Loanee farmers).
- Existing Loanee farmers who do not want to get covered under the scheme have the option of optingout from the Schemes by submitting requisite declaration to loan sanctioning bank branches any time during the year but at least seven days prior to the cut-off date for enrolment of farmers for the respective season. All those farmers who do not submit the declaration would be essentially covered.
- In an endeavour to integrate Technology in implementation and execution of the Scheme, Government of India has designed and developed a National Crop Insurance Portal (NCIP) (<a href="www.pmfby.gov.in">www.pmfby.gov.in</a>) which has been in use since Kharif 2018.
- This has brought in better administration and coordination amongst stakeholders viz. Farmers, States, Insurers and Banks as well as ensured real time dissemination of information and transparency in implementation.
- 4. Warehousing Development and Regulatory Authority (WDRA) is formed to regulate and ensure implementation of the provisions of the Warehousing (Development and Regulation) Act, 2007 for the development and regulation of warehouses, Regulations of Negotiability of Warehouse Receipts and promote orderly growth of the warehousing business. WDRA works under the aegis of:





- A. Department of Food and Public Distribution, Ministry of Consumer Affairs
- B. Department of Industrial Policy & Promotion, Ministry of Commerce and Industry
- C. Department of Agriculture cooperation and Farmers welfare, Ministry of Agriculture and Farmers Welfare
- D. None of the above

### Answer: A

### **Explanation**

- The Warehousing Development and Regulatory Authority was established under the Warehousing (Development and Regulation) Act, 2007.
- The mission of the WDRA is to ensure that the interests of the farmers are protected through the growth and development in the warehousing sector.
- The main objectives are to improve the fiduciary trust of depositors and banks, increase liquidity in rural areas, encourage scientific warehousing of goods, lower the cost of financing, promote shorter and efficient supply chains, enhance reward for grading and quality and ensure better price risk management.
- The negotiable warehouse receipts issued by the WDRA will help the farmers to seek loans from banks against the NWRs to avoid distress sales of agricultural produce during the peak marketing season and to avoid the post-harvest storage loss.
- 5. Consider the following in terms of Gold Monetisation Scheme:
  - 1. It does not have the option for the depositors of gold to earn interest on their metal accounts.
  - 2. RBI has made it mandatory for scheduled commercial banks to offer this scheme.
  - A. 1 only
  - B. 2 only
  - C. Both are correct
  - D. None is correct

### Answer: D

- It facilitates the depositors of gold to earn interest on their metal accounts. Once the gold is deposited in metal account, it starts earning interest on the same.
- The rate of interest on such deposit will be decided by the Central Government and notified by the Reserve Bank of India from time to time.
- RBI has allowed scheduled commercial banks to offer the scheme and it is not mandatory.





## 5. Environment

### Click here to watch the following questions on YouTube

- 1. Surakhsya, a national portal recently launched deals with
  - A. Women Protection
  - B. Women and child health
  - C. Human Elephant Conflict
  - D. Wetlands conservation

Answer: C

### **Explanation**

- Beta version of a portal on Human-Elephants Conflict was recently launched.
- The National Portal on human elephant conflict called "Surakhsya" for collection of real time information & also for managing the conflicts on a real time basis will help to set the data collection protocols, data transmission pipelines and data visualization tools to enable policy-makers to leverage HEC data for policy formulation and for preparation of Action Plans for mitigation of conflicts.

World Elephant Day

- The World Elephant Day is celebrated on 12th August every year to spread awareness for the conservation and protection of the largest mammal on land.
- The day was launched in 2012 to bring attention to the urgent plight of Asian and African elephants.
- 2. Consider the following statements regarding Regenerative Agriculture
  - 1. It includes the practice of tillage.
  - 2. It helps to reverse climate change.

Which of the following statements is/are correct?

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

Answer: B

### **Explanation**

 Regenerative Agriculture describes farming and grazing practices that, among other benefits, reverse climate change by rebuilding soil organic matter and restoring degraded soil biodiversity – resulting in both carbon drawdown and improving the water cycle.





- Regenerative Agriculture is a holistic land management practice that leverages the power of photosynthesis in plants to close the carbon cycle, and build soil health, crop resilience and nutrient density.
- Regenerative agriculture improves soil health, primarily through the practices that increase soil organic matter.
- This not only aids in increasing soil biota diversity and health, but increases biodiversity both above and below the soil surface, while increasing both water holding capacity and sequestering carbon at greater depths, thus drawing down climate-damaging levels of atmospheric CO2, and improving soil structure to reverse civilization-threatening human-caused soil loss.
- Research continues to reveal the damaging effects to soil from tillage, applications of agricultural chemicals and salt based fertilizers, and carbon mining.
- Practices include that
  - ✓ contribute to generating/building soils and soil fertility and health;
  - ✓ increase water percolation, water retention, and clean and safe water runoff;
  - ✓ increase biodiversity and ecosystem health and resiliency; and
  - ✓ invert the carbon emissions of our current agriculture to one of remarkably significant carbon sequestration thereby cleansing the atmosphere of legacy levels of CO2.
- 3. Swachh Survekshan 2020 is organised by which of the following ministry?
  - A. Ministry of Jal Shakti
  - B. Ministry of Drinking Water and Sanitation
  - C. Ministry of Housing and Urban Affairs (MoUHA).
  - D. None of the above

### Answer: C

- The results of the fifth edition of the nationwide annual cleanliness survey, 'Swachh Survekshan 2020,' are out and Madhya Pradesh's Indore has yet again made it as India's cleanest city.
- While Indore has been named as India's cleanest city for the fourth time in a row, Gujarat's Surat emerged as India's second cleanest city, followed by Navi Mumbai which bagged the third spot in Ministry of Housing and Urban Affairs' swachhta city survey report.
- The announcement was made by Union Minister Hardeep Singh Puri at the Swachh Mahotsav being organised by the Ministry of Housing and Urban Affairs (MoUHA).
- 4. A mobile application called "Ganga Data Collector" has been launched by





- A. WWF for Nature
- B. Wildlife Trust of India (WTI)
- C. Wildlife Institute of India (WII)
- D. None of the above

**Answer: C** 

### **Explanation**

- Wildlife Institute of India (WII) has launched a mobile application named "Ganga Data Collector".
- It aims to provide field researchers with a complete data entry solution to monitor the aquatic population in the Ganga river.
- The application has been launched under the Biodiversity and Ganga Conservation project initiated by the National Mission for Clean Ganga (NMCG) of Union Ministry of Jal Shakti.
- The application will be used by scientists of WII, Ganga Praharis and staff of the forest department in the 11 states of the Ganga Basin for faster collection of more authentic and accurate data related to water quality and aquatic life in Ganga.
- 5. A mobile application called "Ganga Data Collector" has been launched by
  - A. WWF for Nature
  - B. Wildlife Trust of India (WTI)
  - C. Wildlife Institute of India (WII)
  - D. None of the above

**Answer: C** 

- Wildlife Institute of India (WII) has launched a mobile application named "Ganga Data Collector".
- It aims to provide field researchers with a complete data entry solution to monitor the aquatic population in the Ganga river.
- The application has been launched under the Biodiversity and Ganga Conservation project initiated by the National Mission for Clean Ganga (NMCG) of Union Ministry of Jal Shakti.
- The application will be used by scientists of WII, Ganga Praharis and staff of the forest department in the 11 states of the Ganga Basin for faster collection of more authentic and accurate data related to water quality and aquatic life in Ganga.





# 6. Science & Technology

### Click <u>here</u> to watch the following questions on YouTube

- 1. Which of the following correctly defines the term 'Green Corridor'?
  - A. Highways which are carbon neutral
  - B. Renewable energy projects along the highways
  - C. Demarcated, cleared out road route for organ transport
  - D. None of the above

Answer: C

### **Explanation**

- It is a demarcated, cleared out road route that enables an ambulance carrying organs to escape traffic snarls and reach the destination in the shortest possible time
- Organs have a short preservation time and green corridors require a concentrated effort from transplant coordinators, local police, traffic police and airport staff
- 2. Choose the correct statement(s)
  - 1. All fly ashes exhibit cementitious properties
  - 2. Carbon and Calcium are among the constituent elements
  - A. 1 Only
  - B. 2 Only
  - C. 1 and 2 Only
  - D. Neither 1 nor 2

Answer: C

### **Explanation**

Both the statements are correct

- Fly ash is a byproduct from burning pulverized coal in electric power generating plants. During combustion, mineral impurities in the coal (clay, feldspar, quartz, and shale) fuse in suspension and float out of the combustion chamber with the exhaust gases.
- All fly ashes exhibit cementitious properties to varying degrees depending on the chemical and physical properties of both the fly ash and cement. Compared to cement and water, the chemical reaction between fly ash and calcium hydroxide typically is slower resulting in delayed hardening of the concrete
- Calcium and Carbon are among the constituent elements along with silica





- 3. 'Saliva Direct' is a new entrant in the testing of COVID-19. Which of the following are true?
  - 1. The test has a very high specificity
  - 2. Invasive technique of sample collection is used
  - A. 1 only
  - B. 2 only
  - C. 1 and 2 only
  - D. Neither 1 nor 2

**Answer: D** 

### **Explanation**

Both the statements are incorrect

- The test has a very high sensitivity ranging between 88-94%
  - ✓ Sensitivity: Measures the proportion of positives that are correctly identified
  - ✓ Specificity: Measures the proportion of negatives that are correctly identified
- Instead of relying on nasopharyngeal specimens, the new test uses saliva, which makes the sample collection non-invasive
- 4. Shakuntala Devi, recently in news was born in
  - A. Calcutta, Bengal
  - B. Kochi, Kerala
  - C. Chennai, Tamil Nadu
  - D. Bangalore, Karnataka

**Answer: D** 

- Shakuntala Devi was born in 1929. She was an Indian writer and mental calculator, popularly known as 'Human Computer'
- She wrote the book The World Of Homosexuals, which is considered the first study of homosexuality in India
- 5. The movie titled 'The Man Who Knew Infinity' is based on the biography of
  - A. S. Ramanujan
  - B. S. Chandrasekhar
  - C. S.N. Bose



# T.me/SleepyClasses

D. C.V. Raman

**Answer: A** 

- S. Ramanujan was an Indian mathematician who lived during the British Rule
- He had almost no formal training in pure mathematics, he made substantial contributions to mathematical analysis