

**Q1.** Which of the following statements is/are correct?

1. Flue-gas desulfurization is a technology used to remove Sulfur dioxide from Exhaust flue gases of fossil-fuel power plants.
2. SNOX Flue gas desulfurization technology removes Sulfur dioxide from Nitric oxide.

Select the correct option using the codes given below:

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

• **ANS-A**

• **Explanation:**

- SNOX Flue gas desulfurization removes sulphur dioxide, nitrogen oxides and particulates from flue gases.
- Flue Gas Desulphurization Flue-gas desulfurization (FGD) is a set of technologies used to remove sulphur dioxide (SO<sub>2</sub>) from exhaust flue gases of fossil-fuel power plants, and from the emissions of other sulphur oxide emitting processes such as waste incineration
- Since stringent environmental regulations limiting SO<sub>2</sub> emissions have been enacted in many countries, SO<sub>2</sub> is being removed from flue gases by a variety of methods.
- **Common methods used are:** Wet scrubbing using a slurry of alkaline sorbent, usually limestone or lime, or seawater to scrub gases; Spray-dry scrubbing using similar sorbent slurries; Wet sulfuric acid process recovering sulfur in the form of commercial quality sulphuric acid.

- SNOX Flue gas desulfurization removes sulfur dioxide, nitrogen oxides and particulates from flue gases; Dry sorbent injection systems that introduce powdered hydrated lime (or other sorbent material) into exhaust ducts to eliminate SO<sub>2</sub> and SO<sub>3</sub> from process emissions.
- Flue gas (sometimes called exhaust gas or stack gas) is the gas that emanates from combustion plants and which contains the reaction products of fuel and combustion air and residual substances such as particulate matter (dust), sulfur oxides, nitrogen oxides, and carbon monoxide.

**Q2.** Consider the following statement about a National Park recently seen in News:

‘It is located at the border areas of Nagaland and Manipur. The Pulie Badze Wildlife Sanctuary is located close to it. Liliom Chitrangada, a species of Lily, is endemic to this place’.

Which of the following is being described above?

- (a) Ntangki National Park
- (b) Dhing Valley
- (c) Barak Valley
- (d) Dzukou valley

• **ANS-D**

• **Explanation:**

- **Location in news:** Dzukou valley The Dzukou Valley has had faced two- week long forest fire which has recently been doused.
- This valley is highly prone to forest fires and has had such incidences before.
- Dzukou Valley is popularly called the valley of flowers.
- It is located at the border area of Nagaland and Manipur.
- It is situated at an altitude of 2438 metres behind the Japfu mountains.
- The Pulie Badze Wildlife Sanctuary is located close to it.
- The forests are home to many vulnerable species of wild animals and birds.
- There are no humans in the forest. The major population of vegetation that is found in the forests is of bamboos and grasses.
- The valley also houses the famous endemic Dzukou Lily viz.
- Liliium Chitrangada Birds found in the valley are Blyth's Tragopan, Rufous-Necked Hornbill and Dark Rumped Swift along with endangered Western Hoolock Gibbons.
- The valley hosts Angami population and has been a bone of contention between the state governments of Manipur and Nagaland.

**Q3.** Consider the following statements regarding the Financial Stability Board (FSB):

1. It is funded by World Bank.
2. It monitors and makes recommendations about the global financial system.
3. The International Organization of Securities Commissions (IOSCO) works closely with FSB for securities regulation.

Which of the above statement/s is/are correct?

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

- **ANS-B**

- **Explanation:**

- Statement 1 is incorrect: Funded by bank for international settlements.
- Financial Stability Board (FSB). It was established after the G20 London Summit in April 2009 as a successor to the Financial Stability Forum (FSF).
- The Board includes all G20 major economies, FSF members, and the European Commission.
- Hosted and funded by the Bank for International Settlements, the board is based in Basel, Switzerland.
- The Financial Stability Board (FSB) is an international body that monitors and makes recommendations about the global financial system.
- Recently, the International Financial Services Centres Authority (IFSCA) has become an Associate Member of the International Organization of Securities Commissions (IOSCO).

- **About IOSCO:**

- It is the international body that brings together the world's securities regulators and is recognized as the global standard setter for the securities sector.

- IOSCO develops, implements and promotes adherence to internationally recognized standards for securities regulation. It works intensively with the G20 and the Financial
- Stability Board (FSB) on the global regulatory reform agenda.
- **IFSC in India:** The first International Financial Services Centre (IFSC) in the country has been set up at the Gujarat International Finance Tec-City (GIFT) in Gandhinagar.
- To regulate such institutions, the government established IFSCA on April 27 last year with its head office in Gandhinagar.
- In December 2019, Parliament passed a bill to set up a unified authority for regulating all financial activities at IFSCs in the country.

**Q4.** Which of the following statements regarding Gaganyaan is incorrect?

- (a) ISRO and NASA have agreed to work together for India's first manned space mission Gaganyaan.
- (b) India is planning to send three humans (Gaganyatris) into space i.e. in low earth orbit (LEO) by 2022.
- (c) This mission will make India fourth nation in the world after USA, Russia and China to launch human space flight mission.
- (d) GSLV Mk III will be used to launch Gaganyaan.

- **ANS-A**

- **Explanation:**

- Indian Space Research Organisation (ISRO) and Russia's federal space agency Roscosmos State Corporation for Space Activities (ROSCOSMOS) have agreed to work together for first manned space mission Gaganyaan.
- It is India's first manned space mission.
- This mission will make India fourth nation in the world after USA, Russia and China to launch human space flight mission.
- India is planning to send three humans (Gaganyatris) into space i.e. in low earth orbit (LEO) by 2022 i.e. by 75th Independence Day.
- GSLV Mk III, also called the LVM-3 (Launch Vehicle Mark-3) the three-stage heavy lift launch vehicle, will be used to launch Gaganyaan as it has the necessary payload capability.

**Q5.** Which of the following is/are correct about Digital lending, recently seen in the news?

1. It is a method to originate and renew loans in order to deliver faster and more efficient decisions.
2. It enhances the financial inclusion.
3. RBI has full regulatory powers in controlling digital lending platforms.

Select the correct answer using the codes given below:

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

- **ANS-C**

- **Explanation:**

- Digital lending : Digital lending is the use of online technology to originate and renew loans in order to deliver faster and more efficient decisions.
- This mode of lending includes different type of lenders.
- It has potential to make access to financial products and services more fair, efficient and inclusive.
- It enhances the financial inclusion.
- It improves the design, pricing and delivery of financial products and services.
- Digitization of the lending process brings a number of powerful benefits for banks, including better decisions, improved customer experience, and significant cost savings.
- When it comes to most of the lending apps, RBI lacks in regulatory powers since these companies are not registered as non-banking financial companies (NBFCs) but under money lending acts of various state governments. Hence statement 3 is incorrect.

**Q6.** Which of the following is incorrect about Wormholes?

- (a) Black holes and wormholes are special types of solutions to Einstein's equations.
- (b) Wormholes are not 'traversable', meaning humans may not be able to travel through.
- (c) Wormhole may 'leak' some gravity from the objects located on the other side.
- (d) Radiation produced via a wormhole would be confined to a giant sphere.

- **ANS-B**

- Explanation:

- Some wormholes may be 'traversable', meaning humans may be able to travel through them. Hence statement 2 is incorrect.

Warmholes In 1935, Einstein and physicist Nathan Rosen described how two sheets of space-time can be joined together, creating a bridge between two universes.

This is one kind of wormhole and since then many others have been imagined.

- Black holes and wormholes are special types of solutions to Einstein's equations, arising when the structure of space-time is strongly bent by gravity.
- Some wormholes may be 'traversable', meaning humans may be able to travel through them.
- For that though, they would need to be sufficiently large and kept open against the force of gravity, which tries to close them. But black holes should produce fewer gamma rays and eject them in a jet, while radiation produced via a wormhole would be confined to a giant sphere.
- Unlike a black hole, a wormhole may "leak" some gravity from the objects located on the other side. Unlike black holes which are a bit frightening as they trap everything that ventures in, wormholes may allow us to travel to faraway places faster than the speed of light.

**Q7.** The Good Governance Index takes into consideration which of the following sectors?

1. Agriculture and Allied Sectors
2. Commerce & Industries
3. Human Resource Development
4. Public Health
5. Public Infrastructure & Utilities



- 6. Environment

Select the correct option using the codes given below:

- (a) 1, 2 and 3 only
- (b) 2, 4, 5 and 6 only
- (c) 3, 4 and 5 only
- (d) 1, 2, 3, 4, 5 and 6

- **ANS-D**

- **Explanation:**

- **Good Governance Index:**

- It is a uniform tool across States to assess the Status of Governance and impact of various interventions taken up by the State
- Government and UTs. The purpose behind developing a comprehensive index, termed as Good Governance Index (GGI), is to create a tool which can be used uniformly across the state, and eventually district level, to assess the status of governance and impact of various interventions taken up by Central and State Governments including Union Territories (UTs). Another significant contribution of the GGI would be contributing in tracking the progress of Sustainable Development Goals (SDGs) at state level.

- **The GGI takes into consideration ten sectors:**

Лакшья Академи

- Agriculture and Allied Sectors
- Commerce & Industries
- Human Resource Development
- Public Health
- Public Infrastructure & Utilities
- Economic Governance
- Social Welfare & Development
- Judicial & Public Security
- Environment
- Citizen-Centric Governance
- These ten Governance Sectors are measured on total 50 indicators.

**Q8.** The Grand Renaissance Dam, recently seen in the news, has been constructed on which of the following river?

- (a) Blue Nile
- (b) White Nile
- (c) Zambezi
- (d) Zaire
- **ANS-A**
- **Explanation:**

- **The Grand Renaissance Dam:**

- The Nile has been at the center of a decade- long dispute involving several countries that depend on its waters.
- At the forefront of the dispute are Ethiopia and Egypt, with Sudan having found itself dragged into the issue.
- Spearheaded by Ethiopia, the Grand Renaissance Dam will be Africa's biggest at 145 meters tall.
- Construction began in 2011 on the Blue Nile tributary that runs across one part of Ethiopia.
- The main waterways of the Nile run through Uganda, South Sudan, Sudan and Egypt, and its drainage basin runs through several countries in East Africa, including Ethiopia where the dam is being built. Egypt, which is downstream, has consistently objected to the construction, saying it will impact water flow.

**Q9.** Project Preparation Special Fund', a multi-donor facility with the primary purpose of supporting eligible members and provides technical assistance grants for preparing bankable infrastructure projects, is a special arrangement of

- (a) Asian Development Bank
- (b) Asian Infrastructure and Investment Bank
- (c) The World Bank
- (d) IMF

- **ANS-B**

- **Explanation:**

- Project Preparation Special Fund is a multi-donor facility with the primary purpose of supporting eligible Asian Infrastructure Investment Bank (AIIB) members, especially low-income members—prepare bankable infrastructure projects AIIB may finance.
- It provides technical assistance grants for preparing bankable infrastructure projects.
- Through these grants, clients can hire experts and consultants to carry out the required preparation work. Project preparation activities supported by these grants are critical to improve project quality, ensure bankability in terms of economic, environmental and social sustainability and implementation readiness.

**Q10.** Arrange the following taxes in increasing order of their respective collection

(actuals) as per Budget 2020-21.

1. Union Excise Duties
2. Corporation Tax
3. Central Goods and Services Tax (CGST)
4. Securities Transaction Tax

Select the correct answer using the code given below.

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

- **ANS-D**



Лякбнуя Асядему®