

**Q: Consider the following statement regarding Flexi-Fuel Strong Hybrid Electric Vehicles (FFVSHEV):**

1. It has a flex-fuel engine.
2. Flex-fuel vehicles are available in Brazil, the USA and Canada.
3. Flex-fuel compatible cars can run on only one type of fuel.

Choose the correct option from the codes given below:

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

Ans: a

Explanation:

- An FFVSHEV has a flex-fuel engine and an electric powertrain, thus providing dual benefit of higher ethanol use and greater fuel efficiency, as it can run for a significant time period on its EV mode, wherein the engine is shut off.
- Flex-fuel compatible cars can run on more than one type of fuel and also a mixture. Typically, a blend of petrol and ethanol or methanol is used.
- Flex-fuel vehicles are available in Brazil, the USA and Canada.
- In Brazil, flex fuel-strong hybrid electric vehicle technology has been introduced by Toyota Brazil.
- Ethanol is a major alternate fuel used globally and Brazil has the highest average blending of 48 per cent.

**Q: Consider the following statement regarding Commitment to Reducing Inequality Index (CRII):**

1. IMF releases this index.
2. The three areas for preparing this index are public services, taxation and workers' rights.
3. Norway leads the CRII followed by Germany and Australia.

Choose the correct option from the codes given below:

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

Ans: b

Explanation:

- Recently, the Commitment to Reducing Inequality Index (CRII) was released.
- Norway leads the CRII followed by Germany and Australia.
- The Index which is prepared by Oxfam International and Development Finance International (DFI) measures governments policies and actions in three areas proven to have a major impact on reducing inequality.
- The three areas are public services (health, education, and social protection), taxation and workers' rights.
- The 2022 CRII looks at government policies and actions in 161 countries to fight inequality during the first two years of the COVID-19 pandemic.

**Q: Consider the following statement:**

1. China had successfully launched Kuafu-1 satellite.
2. The satellite had two major eruptive phenomenon, solar flares and coronal mass ejections.

Choose the correct option from the codes given below:

- a) 1 Only
- b) 2 Only
- c) 1 and 2
- d) None of the above

Ans: c

Explanation:

- After successfully integrating its under-construction Space Station and approving the next phase of its lunar missions, China has launched a new observatory that will look into the Sun.
- The Advanced Space-based Solar Observatory (ASO-S) was launched onboard a Long March-2D rocket from the Jiuquan Satellite Launch Center in northwest China.
- Nicknamed Kuafu-1, after a giant in Chinese mythology who chased the sun, the observatory has been placed in an orbit about 720 kilometers above the planet, higher than the orbit of the International Space Station.
- With the satellite now placed into orbit, a six-month-long commissioning phase will begin, after which science operations will commence.
- The spacecraft will study the causality between the solar magnetic field and two major eruptive phenomena: solar flares and coronal mass ejections.

**Q: Sila Sibiri pipeline will connect**

- a) Kazan to Beijing
- b) Omsk to Guangzhou
- c) Sochi to Shenzhen
- d) Siberia to Shanghai

Ans: d

Explanation:

- Russia's Energy Minister earlier in 2022 confirmed plans to will replace the damaged Nord Stream 2 gas link to Europe with its Asian project with China.
- Now, China and Russia are nearing the completion of a new pipeline that would send gas from Siberia to Shanghai. The pipeline on the Russian side is called Sila Sibiri or the Power of Siberia.

**Q: Consider the following observation in Commitment to Reducing Inequality Index (CRII):**

1. India has moved to sixth position.
2. Under ranking for minimum wage, India has fallen 73 places.
3. Report shows India making major decline when it comes to reducing inequality during the COVID-19 pandemic.

Choose the correct option from the codes given below:

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

Ans: a

Explanation:

- India has moved up six places to rank 123 out of 161 countries in Commitment to Reducing Inequality Index (CRII) for reducing inequality but continues to be among the lowest performers in health spending.
- India's overall rank has improved by six points from 129 in 2020 to 123 in 2022. It has moved up 12 places to rank 129 for reducing inequality through progressive spending.
- The country ranks 16 for progressive taxation, up by three.
- Under ranking for minimum wage, India has fallen 73 places due to the country being reclassified as not having a national minimum wage.
- Under the 'Impact of public spending on reducing inequality indicator', India has moved up 27 places and under 'Impact of tax on reducing inequality indicator', India has moved up 33 places.
- The 2022 CRII report shows India making marginal gains when it comes to reducing inequality during the COVID-19 pandemic.