



# EXCEL CIVILS ACADEMY

## DAILY CURRENT AFFAIRS

Date: 13-09-2021

### Explanation

1. Ans) (b)

The 6th BRICS summit was the sixth annual diplomatic meeting of the BRICS, a grouping of major emerging economies that includes Brazil, Russia, India, China and South Africa. It was hosted by Brazil, the host city was Fortaleza. The declaration held here was called as the Fortaleza Declaration.

2. Ans) (d)

- The Indian Ocean Rim Association for regional cooperation is an international organization comprising of 22 states in the Indian Ocean
- It's a regional forum in which representatives of government business, and academia promoting cooperation and a closer interaction
- It's headquarters is in Ebene, Mauritius.
- It was established in 1997 and formerly known as the Indian Ocean Rim initiative.
- It is known as the Indian Ocean Rim Association.
- It coordinates and monitors the implementation of policy decisions adopted by the members states.
- Indian Ocean Carries half of the world's container shipment, one third of the world's bulk cargo traffic, and around two thirds world oil shipments which makes it the lifeline of international trade..

3. Ans) (a)

The Precambrian rocks of India have been classified into two systems, namely the Dharwar system and the Archaean system. The rocks of the Dharwar system are mainly sedimentary in origin, and occur in narrow elongated synclines resting on the gneisses found in Bellary district, Mysore and the Aravalli's of Rajputana. These rocks are enriched in manganese and iron ore which represents a significant resource of these metals.

4. Ans) (d)

The release of energy occurs along a fault. A fault is a sharp break in the crustal rocks. Rocks along a fault tend to move in opposite directions. As the overlying rock strata press them, the friction locks them together. However, their tendency to move apart at some point of time overcomes the friction. As a result, the blocks get deformed and eventually, they slide past one another abruptly. This causes a

release of energy, and the energy waves travel in all directions. The point where the energy is released is called the focus of an earthquake, alternatively, it is called the hypocenter. The energy waves travelling in different directions reach the surface. The point on the surface, nearest to the focus, is called epicentre. It is the first one to experience the waves. It is a point directly above the focus.

5. Ans) (d)

Analysis of properties of matter indirectly provides information about the interior. We know through the mining activity that temperature and pressure increase with the increasing distance from the surface towards the interior in deeper depths. Moreover, it is also known that the density of the material also increases with depth. It is possible to find the rate of change of these characteristics. Knowing the total thickness of the earth, scientists have estimated the values of temperature, pressure and the density of materials at different depths. Another source of information are the meteors that at times reach the earth. However, it may be noted that the material that becomes available for analysis from meteors, is not from the interior of the earth. The material and the structure observed in the meteors are similar to that of the earth. They are solid bodies developed out of materials same as, or similar to, our planet. Hence, this becomes yet another source of information about the interior of the earth. The other indirect sources include gravitation, magnetic field, and seismic activity. Magnetic surveys also provide information about the distribution of magnetic materials in the crustal portion, and thus, provide information about the distribution of materials in this part. Seismic activity is one of the most important sources of information about the interior of the earth.

6. A) b

Methanol or Di Methyl Ether (DME) are creating a buzz as an alternative liquid fuel for transportation and to power ship engines. A low carbon, hydrogen carrier fuel – Methanol is on the path to meet the needs to generate clean power all over the world. It burns clean, it burns well and it is a complex derivative that is produced from high ash coal, agricultural residue, and natural gas. DME – a hydrated form of Methanol is nearly identical to diesel and could be used as alternative transportation fuel that is fuelled by exceptional burning characteristics and lower Green House Gas emission.

7. A) c

Indian Space research Organisation (ISRO) has yielded discovery-class findings from the Orbiter, the part of the mission that has been functioning properly. Earlier this week, ISRO released a wealth of new information that has been gathered by the scientific payloads to date, which has further added to the understanding about the Moon, Sun and the mysteries of their environment. Water on Moon: The presence of water on the Moon has already been discovered back in 2008 by Chandrayaan-1. But the instrument onboard the first mission to the moon was not sensitive enough to detect the difference

between hydroxyl radical (OH) and the water molecule (H<sub>2</sub>O, which also has OH). This time, Chandrayaan-2 had a far more sensitive instrument named the Imaging Infra-Red Spectrometer (IIRS) onboard which detected OH and H<sub>2</sub>O molecules separately and further found unique characteristics about both. Presence of precious elements: Thanks to a better detector, apart from major elements like magnesium, aluminum, silicon, calcium, titanium, iron etc., the Chandra's Large Area Soft X-ray Spectrometer (CLASS) examined and detected minor elements – chromium and manganese for the first time. How would the discovery of elements help? Well, the findings pave the path for adding knowledge about the magmatic evolution of the Moon, its nebular conditions and much more.

8. Exp....The Champaran Satyagrah Express is an Express train belonging to Northern Railway zone that runs between Bapudham Motihari and Anand Vihar Terminal in India. Bapudham Motihari Railway Station is a major railway station in Motihari, East Champaran district of Bihar
9. SardarIqbal Singh Lalpura took charge as the Chairman, National Commission for Minorities in the presence of Minority Affairs Minister Mukhtar Abbas Naqvi in New Delhi.In 1978, Government of India, vide an executive order, set up a “Minorities Commission” to safeguard the interests of minorities