

**Solution**  
**Weekly Quiz**  
**(14<sup>th</sup> Feb – 20<sup>th</sup> Feb)**

Answer 1      Solution(d)

One Ocean Summit is being organised by France from 9-11 February, in Brest, France, in cooperation with the United Nations and the World Bank. The objective of the Summit is to mobilise the international community to take tangible action towards preserving and supporting healthy and sustainable ocean ecosystems.

Answer 2      Solution(b)

Special Category Status for plan assistance was granted in the past by the National Development Council to the States that are characterized by a number of features necessitating special consideration. These features included:

1. hilly and difficult terrain
2. low population density and /or sizeable share of tribal population
3. strategic location along borders with neighbouring countries
4. economic and infrastructural backwardness and
5. non-viable nature of state finances.

Answer 3      Solution(b)

Statement 1 :Incorrect

Ministry of Health and Family Welfare (MoHFW) released India's first Patients' Rights Charter (PRC) with the recommendations from National Human Rights Commission (NHRC)

Statement 2 :correct

Health is a State subject, thus it is for the respective State/UT Government to adopt, implement and monitor the Charter of Patients' Rights. Further, it is also for the respective State/UT Government to display the Patients' Rights Charter in public and private healthcare facilities as

well as on their health department websites, allocate budget for promotion of Patients' Rights Charter, set up grievance redressal mechanism for patients as recommended by NHRC advisory.

Statement 3 : incorrect

The charter contains a list of 17 rights but does not include the right to dignified death

Answer 4      Solution: d)

Skeletal muscles normally brim with energy, yet they starve in the absence of Vitamin D, says recent research. This research demonstrates that glycogen stored in the skeletal muscles is not converted into a usable form of energy without Vitamin D.

Usually, the glucose absorbed from the food is converted into glycogen and stored in the skeletal muscle. This stored energy reserve is used by muscles to produce energy after the food consumed is digested. However, in the absence of vitamin D, the skeletal muscle is starved of energy, decreasing muscle mass.

We are becoming aware that vitamin D works more as a hormone than and is involved in a host of biochemical reactions. It is key to maintaining metabolic functions, immune system.

Answer 5      Solution: b)

For LIC, the listing of the shares means higher visibility and profile. Investors will be able to actively trade in its shares on the stock exchanges. It also means more transparency from the LIC side which was hitherto answerable only to the government. LIC will have to inform the investors and exchanges details about all price sensitive information after listing. In short, LIC will be accountable to the investors and meet their expectations. Investors are expected to demand high level of corporate governance from the corporation.

Answer 6      Solution: c)

Odisha reported the maximum fires among all states (51,968), followed by Madhya Pradesh (47,795) and Chhattisgarh (38,106).

SoFR, 2021 too acknowledged the link between climate change and forest fires, citing the global forest resources assessment 2020.

Forests are managed by the state forest departments.

The Union environment ministry supports the efforts of state / Union territory governments in preventing and controlling forest fire by providing financial assistance for various forest fire prevention and management measures under the centrally sponsored forest fire prevention and management scheme.

Answer 7      Solution: d)

The first Indian satellite, Aryabhata, launched in 1975, carried scientific experiments to investigate X-ray astronomy, solar neutrons and supra-thermal electron density.

Mars Orbiter Mission is ISRO's first interplanetary mission to planet Mars with an orbiter craft designed to orbit Mars in an elliptical orbit

Chandrayaan-1, India's first mission to Moon, was launched successfully on October 22, 2008.

The dry deciduous forests, which receive low rainfall, face 5-6 dry months and have nutrient poor soil, such as those in tropical and subtropical latitude, are more vulnerable to fire compared to others.

Answer 8      Solution: b)

Solar Radiation Modification (SRM), also known as Solar Radiation Management, Radiation Modification Measures or Solar Geoengineering, would aim to address a symptom of climate change by reflecting more sunlight back into space, or by allowing more infrared radiation from Earth to escape, in order to reduce the Earth's temperature. It includes numerous proposed methods which differ significantly. None are ready for deployment. Solar Radiation Modification could not be a substitute for reducing emissions, or removing atmospheric CO<sub>2</sub>.

Answer 9      Solution: c)

Article 44 of the Constitution says the state shall endeavour to secure for citizens a uniform civil code throughout the territory of India. The definition of 'State', as given in Article 12, includes the overnment and Parliament of India and the government and the legislature of each of the

states and all local or other authorities within the territory of India or under the control of the Government of India.

While Article 44 uses the phrase “state shall endeavour”, other Articles in the ‘Directive Principles’ chapter use expressions such as “in particular strive”; “shall take steps”; “shall promote with special care”; “shall in particular direct its policy”; “shall regard its primary duty”; “shall be obligation of the state” etc. All of these mean that the duty of the court is far greater in other directive principles than in Article 44.

While Article 43 mentions that the “state shall endeavour by suitable legislation”, the phrase “by suitable legislation” is absent in Article 44, which indicates that the framers did not intend enactment of uniform civil code by a single legislation.

Answer 10      Solution: b)

Russia is one of five permanent, veto-wielding powers on the council along with the United States, France, Britain and China. The Security Council is charged with maintaining international peace and security.

General Assembly resolutions carry political weight but are not legally binding. Unlike the Security Council, no country has veto power in the General Assembly.

Answer 11      Solution: a)

Since all eligible voters of the village can participate in the Gram Sabha, it is a channel to include the less privileged section of society and ensure their participation in the village level governance wherein they can advocate their developmental aspirations.

While connectivity of one village with another is beyond the jurisdiction of a GP, construction and maintenance of roads within the village is the responsibility of the GP.

Most of the GPs are found reluctant to raise own source of revenue (OSR) in the selected sample. However, some of the GPs are able to generate OSR in the form of tax or non-tax revenue by renting shops, house tax and clean water fee.

Answer 12      Solution: b)

While India ramps up its solar power installation, it does not yet have a firm policy on managing waste that results from used solar panels or from the manufacturing process.

India currently considers solar waste a part of electronic waste and does not account for it separately.

There was no commercial raw material recovery facility for solar e-waste operational in India, but a pilot facility for solar panel recycling and material recovery had been set up by a private company in Gummidipoondi, Chennai, Tamil Nadu.

Solar panels have an estimated life of 25 years, and given that India's solar manufacturing industry took off around 2010 most of the installed systems were new and early in their calendar life cycle and therefore unlikely to generate a large quantity of solar waste.

Answer 13     Solution: a)

The capital expenditure for 2022-23 has been pegged at Rs 7.5 lakh crore. This expenditure increase comes along with an increase in the state borrowing limit to 4 per cent of the GSDP. States have also been allowed to borrow up to Rs 1 lakh crore through 50-year interest-free loans to make capital investments. In 2021-22, the Centre had allowed states an additional Rs 15,000 crore for capital investment under a similar window.

Answer 14     Solution: d)

All current nuclear reactors are based on the fission process, in which the nucleus of a heavier atom is split into those of lighter elements in a controlled manner. This process is accompanied with the release of large amounts of energy. Fusion is the opposite process, in which nuclei of relatively lighter atoms, typically those of hydrogen, are fused to make the nucleus of a heavier atom.

Much more energy is released in the fusion process than in fission. The fusion of atoms of two heavier isotopes of hydrogen — deuterium and tritium — for example, to form a helium nucleus produces four times as much energy as is released during the fission of a uranium atom, the kind of which we see in our nuclear reactors.

Answer 15     Solution: c)

Afghanistan is bordered by Pakistan to the east and south; Iran to the west; Turkmenistan, Uzbekistan, and Tajikistan to the north; and China to the northeast.