

- 37 C
- Ex.** • Recently, a study on biogenic methane hydrate in the Krishna-Godavari (KG) Basin was conducted by the researchers at the Agharkar Research Institute (ARI), an autonomous institute of the Department of Science and Technology, Government of India. • Biogenic Methane: It is the methane produced from the metabolic activities of living organisms. The research team has identified the methanogens that produced the biogenic methane trapped as methane hydrate, which can be a significant source of energy. • Methanogens: These are microorganisms that produce methane as a metabolic by-product in hypoxic (low levels of oxygen) conditions. • The ARI team has documented a predominance of genus Methanosarcina in the KG basin, followed by a few other genera Methanoculleus, Methanobacterium. • Methane hydrate is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures such as in oceans.
- 38 A
- Ex.** Disguised Unemployment is the type of a phenomenon wherein more people are employed than actually needed. This is why the marginal productivity of the workers is zero here.
- 39 C
- Ex.** • National lake conservation plan (NLCP) is implemented by the ministry of environment and forests since 2001. • NLCD - objective. It is to restore and conserve the urban and semi-urban lakes. And it is to conserve wetland also. Ministry of environment and forest has not adopted a clear distinction between lakes and wetland. So statements 1 or 3 are incorrect and statement 2 is correct.
- 40 B
- Ex.** • Chotanagpur plateau represents the north-eastern projection of the Indian Peninsula. • Mostly in Jharkhand, northern part of Chhattisgarh and Purulia district of West Bengal. • The Son river flows in the north-west of the plateau and joins the Ganga. • This plateau is composed mainly of Gondwana rocks. • The plateau is drained by numerous rivers and streams in different directions and presents a radial drainage pattern. • Rivers like the Damodar, the Subarnarekha, the North Koel, the South Koel and the Barkar have developed extensive drainage basins. • At places it is interrupted by monadnocks (an isolated hill or ridge of erosion-resistant rock rising above a plain. Ex: Ayers Rock in Australia) and conical hills.
- 41 A
- Ex.** UNDP has released the G20 People's Climate Vote 2021 report. The actions that G20 governments take to tackle the climate crisis will be critical to the future of the planet. In the run-up to the G20 Summit in Rome, and ahead of the UN Climate Change Conference (COP26) in Glasgow, the UN Development Programme and the University of Oxford are publishing the G20 Peoples' Climate Vote, a large G20 survey of public opinion on climate change.
- 42 A
- Ex.** Indian system is based on Parliamentary Democracy, not based upon the doctrine of Separation of Powers. In India, a separation of functions rather than of powers is followed. Unlike in the US, in India, the concept of separation of powers is not adhered to strictly. However, a system of checks and balances has been put in place in such a manner that the judiciary has the power to strike down any unconstitutional laws passed by the legislature.
- 43 B
- Ex.** In case the election of President is declared void by the Supreme Court, the acts performed by President before the date of such decision of the court do not get invalidated. It is the Constitutional provision under Article 71 of the Constitution.
- 44 C
- Ex.** The main form of political work by the early Communists was to organize peasants' and workers' parties and work through them. The first such organization was the Labour-Swaraj Party of the Indian National Congress organized by Muzaffar Ahmed, Qazi Nazrul Islam, Hemanta Kumar Sarkar, and others in Bengal in November 1925.
- 45 B
- Ex.** Purchasing Managers' Index™ (PMI™) data are compiled by IHS Markit for more than 40 economies worldwide. The monthly data are derived from surveys of senior executives at private sector companies and are available only via subscription. The PMI dataset features a headline number, which indicates the overall health of an economy, and sub-indices, which provide insights into other key economic drivers such as GDP, inflation, exports, capacity utilization, employment and inventories. The PMI data are used by financial and corporate professionals to better understand where economies and markets are headed, and to uncover opportunities.
- 46 D
- Ex.** • Social Forestry means making use of unused and fallow lands so that deeper forests are safeguarded from exploitation, by using fast-growing trees to meet the needs of fodder and fuelwood. • The National Commission on Forests used the term Social Forestry in 1976. • The main aim of the commission was to use land surrounding urban settlements, deforested due to human activities. • The Objectives of Social Forestry are: • Improve the environment for protecting agriculture from adverse climatic factors. • Increase the supply of fuelwood for domestic use, small timber for rural housing, fodder for livestock, and minor forest produce for local industries. • Increase the natural beauty of the landscape; create recreational forests for the benefit of rural and urban populations. • Provide jobs for unskilled workers. • Effect land rehabilitation • Raise the standard of living and quality of life of rural and urban people.
- 47 C
- Ex.** The Montreal Protocol on Substances that Deplete the Ozone Layer was an international treaty which was organized in 1987. The UN General Assembly celebrated 16th September in memory of the date in 1987 when nations inked the Montreal Protocol.

- 64 A
Ex. • Insects- it consists of 3 body parts and 6 legs and one antennae.
• Arachnids- e.g.- spiders, scorpions, ticks mites arachnids do not have antennae and it has 2 body parts and 4 pairs of legs.
So statement 1 and 2 are correct while statement 3 is not correct.
- 65 B
Ex. • Par Tapi Narmada Link proposes to transfer water from the water surplus regions of Western Ghats to the water deficit regions of Saurashtra and Kutch (Gujarat). • The link project includes seven reservoirs proposed in north Maharashtra and south Gujarat. • The Ken-Betwa is the first project under the government's National Perspective Plan for river interlinking. • The National River Linking Project (NRLP) formally known as the National Perspective Plan, envisages the transfer of water from water 'surplus' basins where there is flooding, to water 'deficit' basins where there is drought/scarcity, through inter-basin water transfer projects • Recently, some tribals have intensified their protest against the Par-Tapi-Narmada river linking project after it was mentioned in the budget speech (2022-23) of the finance minister.
- 66 D
Ex. Mastercard Inc. is an American multinational financial services corporation headquartered in the Mastercard International Global Headquarters in Purchase, New York. Mastercard is a leading global payments & technology company that connects consumers, businesses, merchants, issuers & governments around the world.
Mastercard is a leading global payments & technology company that connects consumers, businesses, merchants, issuers & governments around the world. Mir is a Russian payment system for electronic fund transfers established by the Central Bank of Russia under a law adopted on 1 May 2017.
- 67 D
Ex. Stagflation is a combination of two economic terms "Stagnation" and "Inflation". It implies an economic scenario which denotes simultaneous existence of low GDP growth rates, high rate of inflation and high rate of unemployment within an economy.
- 68 B
Ex. UN General Assembly adopted the resolution titled 'Aggression Against Ukraine', with support of 141 nations voting in favour and five against.
- 69 B
Ex.
- 70 B
Ex. • A recent exploration by Geological Survey of India (GSI) has found reserves of Vanadium in Arunachal Pradesh. • Vanadium is used primarily as an alloying element in the Iron & Steel Industry and to some extent as a stabiliser in titanium and aluminium alloys used in the aerospace Industry. • Modern applications of vanadium include its use as vanadium secondary batteries for power plants and rechargeable Vanadium Redox Battery (VRB) for commercial applications. • Vanadium alloys are used in nuclear reactors because of vanadium's low neutron-absorbing properties. • The largest deposits of Vanadium are in China, followed by Russia and South Africa respectively.
- 71 A
Ex. A greenback is a slang term for U.S. paper dollars. The term originated during the mid-1860s, when these notes were printed in green ink. Congress had limited taxing authority, and used paper currency to help finance the civil war. The word "greenback" was a negative term because these notes did not have secure financial backing and banks were reluctant to give customers the full value of the dollar.
- 72 A
Ex. The GDP data for the June quarter of FY21, reveals the extent of damage the coronavirus pandemic has caused the Indian economy. While India's economy had been slowing down well before the pandemic hit it, Asia's third largest economy is expected to fall into a recession in FY21 for the first time in 40 years.
- 73 B
Ex. The Indian hornbill is common hornbill found on the Indian subcontinent:
• It has grey feathers all over the body with a light grey or dull white belly.
• IUCN -LEAST CONCERN
• Hornbill has not been extinct in India .
So statement 1 is not correct while statement 2 and 3 are correct.
- 74 C
Ex. A food chain is a linear network of link in a food web starting from produced organisms and ending at an top carnivores.
• A food chain also shows how organisms are related to each other by the food they eat.
• A food chain represents only on part of the food or energy flow through an ecosystem.
• Food web- An ecosystem may consist of several interrelated food chains - more typically the same some food resources is part of more than one chain,
So statements 1 or 2 both are incorrect.
- 75 C
Ex. Tonga is a Polynesian kingdom of more than 170 South Pacific islands, many uninhabited, most lined in white beaches and coral reefs and covered with tropical rainforest. Recently, a volcanic eruption happened in Tonga, below the surface of the ocean and triggered tsunami waves around the Pacific. The US Geological Survey estimated the eruption caused the equivalent of a magnitude 5.8 earthquake.
- 76 C
Ex. • Ocean currents are the continuous, predictable, directional movement of seawater. It is a massive movement of ocean water that is caused and influenced by various forces. They are like river flows in oceans. • Ocean water moves in two directions: horizontally and vertically. • Horizontal movements are referred to as currents, while vertical changes are called upwellings or downwellings. • Ocean currents impact humankind and the biosphere due to their influence on climate. • Coriolis force. The Coriolis force intervenes and causes the water to move to the right in the northern hemisphere and to the left in the southern hemisphere. • These large accumulations of water and the flow around them are called Gyres. • These produce large circular currents in all the ocean basins.

- 77 C
Ex. Invertebrates do not have backbones. More than 98% animal species in the world are invertebrates. Eg- sea stars, jellyfish, spiders, snails, insects, earthworms etc. Fish, Amphibians are the vertebrates species. So option C is correct.
- 78 B
Ex. In the nineteenth century, the western-educated intellectuals like Dadabhai Naoroji (Drain Theory), Mahadev Govind Ranade, R.C. Dutt (The Economic History of India), G.V. Joshi, G. Subramaniya Iyer, G.K Gokhale, etc. clearly understood the predatory economic policies of the British and became stern critics. During his career, Syed repeatedly called upon Muslims to loyally serve the British Raj and criticized the Indian National Congress.
- 79 D
Ex. Only NBFC-MFI give out microfinance loans in India. NBFC-MFI microfinance loans are not backed by collateral. NBFC-MFIs are free to charge the interest rate on the microfinance loans based on market principle.
- 80 B
Ex.
- 81 B
Ex. • The continents bordering the Atlantic Ocean, for example, are believed to be moving away from the Mid-Atlantic Ridge at a rate of 1-2 cm (0.4-0.8 inch) per year, thus increasing the breadth of the ocean basin by twice that amount. • Volcanic eruptions are common all along the mid-oceanic ridges and they bring huge amounts of lava to the surface in this area. • Mid-Atlantic Ridge - A divergent tectonic plate boundary that in the North Atlantic separates the Eurasian and North American plates, and in the South Atlantic separates the African and South American plates. • Kolbeinsey Ridge - A segment of the Mid-Atlantic Ridge north of Iceland in the Arctic Ocean.
- 82 D
Ex. • Mitochondria - it is called power house of the cell. Found both in plant cell and animal cell. So statement 1 is correct
• Cell wall found in plant cell only do not in animal cell. So statement 2 is not correct.
Chloroplast- double membrane structure found in plant cell only. So statement 3 is correct.
- 83 B
Ex. Around 500 farmers across villages in Doda district in Jammu had their incomes quadrupled after shifting from maize to lavender cultivation which is being called purple revolution. It was possible due to initiatives taken under Aroma Mission.
- 84 A
Ex. Global Economic Prospects is a World Bank Group flagship report that examines global economic developments and prospects, with a special focus on emerging market and developing economies. It is issued twice a year, in January and June.
- 85 C
Ex. Free space optical communication (FSO) is an optical communication technology that uses light propagating in free space wirelessly transmit data for telecommunication or computer networking.
• In this technology data is transmitted through the air. It is a line of sight technology that uses lasers to provide optical bandwidth connections. So both statements are correct.
- 86 D
Ex. • The Indian Tsunami Early Warning System (ITEWS) was established in 2007 and is based at & operated by INCOIS, Hyderabad. • It is an integrated effort of different organisation including the Department of Space (DOS), Department of Science and Technology (DST), the Council of Scientific and Industrial Research (CSIR), Survey of India (SOI) and National Institute of Ocean Technology (NIOT). • ITEWS comprises a real-time network of seismic stations, tide gauges and a 24X7 operational tsunami warning centre to detect tsunamigenic earthquakes, to monitor tsunamis and to provide timely advisories to vulnerable communities.
- 87 D
Ex. Diaphragm-A diaphragm is a small, soft silicon dome. It forms a physical barrier between the man's sperm and the woman's egg, like a condom. Spermicide is a kind of birth control that has chemicals that stop sperm from reaching an egg. A spermicide is a substance that kills sperm. Spermicides are available as jelly, foam, cream, suppositories, and film. The active ingredient of most spermicides is a chemical called nonoxynol-9. Intrauterine Device (IUD). This small, T-shaped device is made from material containing progesterone hormone or plastic and copper and is fitted inside a woman's uterus by a trained healthcare provider. It's a long-acting and reversible method of contraception, which can stay in place for three to 10 years, depending on the type.
- 88 A
Ex. Automatic train protection (ATP) is a type of train protection system which continually checks that the speed of a train is compatible with the permitted speed allowed by signalling, including automatic stop at certain signal aspects Kavach is the indigenously developed 'Automatic Train Protection System', which was recently tested on South Central Railway. As per the Union Budget, the system is scheduled for complete rollout on 2,000 km in 2022-23. It is India's own automatic protection system in development since 2012, under the name Train Collision Avoidance System (TCAS), which got renamed to Kavach.
- 89 B
Ex. The order of precedence of the Republic of India is a list in which the functionaries, dignitaries and officials are listed for ceremonial purposes and has no legal standing and does not reflect the Indian presidential line of succession or the co-equal status of the separation of powers under The Constitution of India. The order is established by the President of India, through the President's Secretariat and is maintained by the Ministry of Home Affairs.
- 90 B
Ex. The Committee on Public Accounts is the oldest Parliamentary Committee and was first constituted in 1921. The Committee consists of 22 Members, 15 Members are elected by Lok Sabha and 7 Members of the Rajya Sabha are associated with it. The Speaker is empowered to appoint the Chairman of the Committee from amongst its members.

