

Q.1) Consider the following statements about Financial Stability and Development Council (FSDC)

1. The Chairman of the FSDC is the Finance Minister of India
2. Heads of SEBI, IRDA, RBI, and PFRDA are members of the FSDC

Select the correct statements

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

Q.1) Solution (c)

The Chairman of the FSDC is the Finance Minister of India and its members include the heads of the financial sector regulatory authorities (i.e, SEBI, IRDA, RBI, PFRDA) , Finance Secretary and/or Secretary, Department of Economic Affairs (Ministry of Finance), Secretary, (Department of Financial Services, Ministry of Finance) and the Chief Economic Adviser.

A sub-committee of FSDC has also been set up under the chairmanship of Governor RBI. The Sub-Committee discusses and decides on a range of issues relating to financial sector development and stability including substantive issues relating to inter-regulatory coordination.

Q.2) What is 'Salwa Judum'?

- a) A terrorist outfit in Nigeria
- b) Drug cartels of Medellin and Cali
- c) A militia that was mobilised and deployed as part of anti-insurgency operations in Chhattisgarh
- d) None of the above

Q.2) Solution (c)

Salwa Judum was mobilised in 2005 by the late Congress leader Mahendra Karma, who was assassinated by Naxals in 2013, and deployed in parts of Chhattisgarh. Those in favour of the idea claim that the Judum was a "spontaneous uprising" of tribal people against Maoist violence in Bastar, and helped in countering Naxals in the region. Yet, by the time the force

was banned by the Supreme Court in 2011, it had acquired a bloody and controversial reputation.

Q.3) 'Taiwan Strait' connects which of the following?

1. East China Sea
2. South China Sea
3. Philippines Sea
4. Yellow Sea

Select the correct code:

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

Q.3) Solution (a)



Q.4) Consider the following statements with respect to 'World Water Development Report (WWDR)'

- a) World Water Council
- b) UN-Water
- c) International Water Resource Association
- d) Water Aid

Q.4) Solution (b)

The United Nations World Water Development Report (WWDR) is a global report that provides an authoritative, comprehensive assessment of the world's freshwater resources. It is produced annually by the World Water Assessment Programme and released by UN-Water.

The United Nations World Water Assessment Programme (WWAP) hosted and led by UNESCO, is a Programme Office on Global Water Assessment. It was founded in 2000 in response to a call from the UN Commission on Sustainable Development (CSD) to produce a UN system-wide periodic global overview of the status (quantity and quality), use and management of freshwater resources. To meet this challenge, WWAP coordinates the work of 31 UN-Water members, and 38 international partners under the umbrella mechanism of UN-Water, in the production of the World Water Development Report (WWDR). The WWDR is the UN flagship report on water issues; it is a comprehensive review that gives an overall picture of the state, use and management of the world's freshwater resources and aims to provide decision-makers with tools to formulate and implement sustainable water policies. The WWDR is released every year with a different focus on different strategic water issues, and it is a comprehensive review that gives an overall picture of the state of freshwater resources around the world, with the aim of providing managers and key decisions-makers with the information, data, tools and skills necessary to enable them to effectively participate in the development of policies. Consequently, WWAP aims to equip water managers and policy- and decision-makers with knowledge, tools and skills necessary to formulate and implement sustainable water policies.

The United Nations World Water Development Report, Nature-based Solutions for Water, launched 19 March 2018 during the 8th World Water Forum, and in conjunction to the World Water Day, demonstrates how nature-based solutions (NBS) offer a vital means of moving beyond business-as-usual to address many of the world's water challenges while simultaneously delivering additional benefits vital to all aspects of sustainable development.

NBS use or mimic natural processes to enhance water availability (e.g., soil moisture retention, groundwater recharge), improve water quality (e.g., natural and constructed wetlands, riparian buffer strips), and reduce risks associated with water-related disasters and climate change (e.g., floodplain restoration, green roofs).

Currently, water management remains heavily dominated by traditional, human-built (i.e. 'grey') infrastructure and the enormous potential for NBS remains under-utilized. NBS include green infrastructure that can substitute, augment or work in parallel with grey infrastructure in a cost-effective manner. The goal is to find the most appropriate blend of green and grey investments to maximize benefits and system efficiency while minimizing costs and trade-offs.

Q.5) 'MILAN naval exercise' is associated with which of the following groupings?

- a) The Quad
- b) IOR-ARC
- c) BIMSTEC
- d) None of the above

Q.5) Solution (d)

Milan 2018

- It is a congregation of littoral navies conducted biennially by Indian Navy at the Andaman and Nicobar Islands
- It is being organised at the Andaman and Nicobar Islands
- The exercise is being hosted by the Indian Navy under the aegis of the Andaman and Nicobar Command.
- It was first held in 1995 and saw participation of four littoral navies
- Theme - 'Friendship Across the Seas'
- The theme of this year's MILAN International Maritime Seminar is 'In Pursuit of Maritime Good Order - Need for Comprehensive Information Sharing Apparatus'
- Participating countries - Australia, Malaysia, Maldives, Mauritius, Myanmar, New Zealand, Oman, Vietnam, Thailand, Tanzania, Sri Lanka, Singapore, Bangladesh, Indonesia, Kenya and Cambodia.

Q.6) The Report 'Air Pollution in Asia and the Pacific: Science-based solutions' is published by

1. Climate and Clean Air Coalition
2. United Nations Environment Programme
3. Asia Pacific Clean Air Partnership

Select the correct code:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.6) Solution (d)

This report identifies 25 clean air measures that can positively impact human health, crop yields, climate change and socio-economic development, as well as contribute to achieving the Sustainable Development Goals. Implementing these measures could help 1 billion people breathe cleaner air by 2030 and reduce global warming by a third of a degree Celsius by 2050.

Read More - <http://ccacoalition.org/en/resources/air-pollution-asia-and-pacific-science-based-solutions>

Q.7) Consider the following statements with respect to 'Climate and Clean Air Coalition'

1. It was launched by the United Nations Environment Programme (UNEP)
2. India is one of the founding partners of the CCAC

Select the correct statements

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

Q.7) Solution (a)

The Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC) was launched by the United Nations Environment Programme (UNEP) and six countries — Bangladesh, Canada, Ghana, Mexico, Sweden, and the United States — on 16 February 2012. The CCAC aims to catalyze rapid reductions in short-lived climate pollutants to protect human health, agriculture and the environment.

The program is managed out of the United Nations Environmental Programme through a Secretariat in Paris.

Q.8) Consider the following statements with respect to 'Utsonmobile' App

1. It enables booking and cancellation of unreserved air tickets
2. It is launched by the Ministry of Civil Aviation

Select the correct statements

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

Q.8) Solution (d)

Continuing towards digitalization and moving towards becoming a cashless economy, the initiative of faster and more techno-advanced transactions in Indian Railways is being taken up, the Centre for Railway Information System (CRIS) has developed a mobile based application 'utsonmobile'.

The 'utsonmobile' application enables booking and cancellation of unreserved tickets, issue and renewal of season and platform tickets, check and load R-wallet balance and helps maintain user profile management and booking history.

Q.9) Consider the following statements with respect to 'ReUnite' App

1. It is a post-disaster family reunification app that enables users to report and search for missing or found person information
2. It is developed by the Ministry of Earth Sciences aftermath of 2013 Uttarakhand Floods

Select the correct statements

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

Q.9) Solution (d)

A mobile application called ReUnite which helps to track and trace missing and abandoned children in India.

Non-government organisation Bachpan Bachao Andolan and Capgemini has developed this app.

The app is multiuser where parents and citizens can upload pictures of children, and provide detailed description like name, birth mark, address, report to the police station, search and identify missing kids.

Amazon Rekognition, web facial recognition service, is being used to identify missing kids.

Q.10) Consider the following statements about 'VAHAN'

1. It is the flagship e-Governance application under National Transport Project
2. The purpose of VAHAN was to automate the RTO operations related to Vehicle Registration, Permit, Taxation, and Enforcement in the whole country

Select the correct statements

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

Q.10) Solution (c)

Ministry of Road Transport & Highways has mandated that all new public service vehicles except auto rickshaws and e-Rickshaws, registered on and after 1st January 2019, will have to be equipped with Vehicle Location Tracking (VLT) with emergency buttons. The VLT device manufacturers would assist in providing the back end services for monitoring. This regulation is being brought in to ensure safety of passengers especially women.

The details of each VLT device will be uploaded on the VAHAN database by the VLT device manufacturer using its secured authenticated access. The VLT device manufacturers or their authorised dealers will install the VLT devices in public service vehicles and register the devices along with details of vehicle on the corresponding backend systems in real-time.

VAHAN is the flagship e-Governance application under National Transport Project, a Mission Mode Project initiated in year 2006. The purpose of the application was to automate the RTO operations related to Vehicle Registration, Permit, Taxation, and Enforcement in the whole country.

Source: <http://pib.nic.in/newsite/PrintRelease.aspx?relid=184510>

Q.11) Consider the following statements about 'Hydrazine'

1. It is a molecule of nitrogen atoms and hydrogen atoms
2. It is used as rocket fuel propellant
3. It acts as an oxygen scavenger

Select the correct statements

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.11) Solution (d)

News: Dawn spacecraft finally ran out of hydrazine, the fuel that enables the spacecraft to control its pointing, ending a historic 11-year mission.

Hydrazine is a molecule of two singly-bonded nitrogen atoms and four peripheral hydrogen atoms. In its anhydrous form, it is a colourless, toxic irritant and sensitiser, which damages the central nervous system, producing symptoms as extreme as tumours and seizures. The pungent smell of hydrazine is not unlike that of ammonia, and it is so powerful a reducing agent that it is highly explosive.

Hydrazine can even be found in fossil fuels and nuclear power stations. As a powerful reducing agent, it acts as an oxygen scavenger, reducing metal oxides back into metals, and literally turning the chemical clock back on corrosion processes.

The explosive nature of hydrazine has been put to good use, too. Sodium azide, the compound that activates car air bags, is manufactured directly from hydrazine and sodium nitrate. Sodium azide decomposes rapidly when it gets warm, creating huge volumes of nitrogen gas.

Hydrazine is also used as rocket fuel propellant. Mixing it with oxidising agent dinitrogen tetroxide, N_2O_4 , creates a hypergolic mixture – a mixture so explosive, no ignition is required. As the fuel burns, three reactions take place, decomposing hydrazine into ammonia, nitrogen and hydrogen gases. Within milliseconds, the reaction chamber can exceed 800°C due to these extremely exothermic reactions. Ammonia is also broken down –

this is endothermic and takes away some of the heat energy, but produces more nitrogen and hydrogen gases that are forced out of the rocket through a tight nozzle to create thrust.

Source: <https://www.thehindu.com/sci-tech/science/nasas-historic-dawn-mission-to-asteroid-belt-comes-to-end/article25403872.ece>

Q.12) Consider the following statements

1. Indian nationality law largely follows the 'jus sanguinis' as opposed to the 'jus soli'
2. In the U.S. children obtain their citizenship through the legal principle of 'jus soli'.

Select the correct statements

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

Q.12) Solution (c)

Indian nationality law largely follows the jus sanguinis (citizenship by right of blood) as opposed to the jus soli (citizenship by right of birth within the territory). The President of India is termed the First Citizen of India.

USA's president Trump has advocated of striking down jus soli, the right to citizenship by birth derived from the common law

The principle guarantees that a child born on US soil is automatically a full citizen, irrespective of the citizenship status of its parents

Q.13) Consider the following statements about 'Veer Surendra Sai'

1. He resisted the British and successfully protected most parts of Western Odisha region for some time
2. He died during the 1857 Sepoy Mutiny

Select the correct statements

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2

- d) Neither 1 nor 2

Q.13) Solution (a)

Surendra Sai was an Indian freedom fighter and tribal leader who sacrificed his life fighting against the British East India Company.[1] Surendra Sai and his associates Madho Singh, Kunjal Singh, Airi Singh, Bairi Singh, Uddant Sai, Ujjal Sai, Khageswar Dao, Salegram Bariha, Govind Singh, Pahar Singh, Rajee Ghasia, Kamal Singh, Hati Singh, Salik Ram Bariha, Loknath Panda/Gadtia, Mrutunjaya Panigrahi, Jagabandu Hota, Padmanave Guru, Trilochan Panigrahi and many others resisted the British and successfully protected most parts of Western Odisha region for some time from the British rule.[2] Most of them died unnoticed fighting for freedom from the British. Many of them were hanged by the British; a few died in the Cellular Jail in the Andamans. Surendra Sai died in Asirgarh Jail on 23 May 1884.

Q.14) _____ has launched the world's first sovereign blue bond.

- a) Seychelles
- b) Mauritius
- c) Maldives
- d) Haiti

Q.14) Solution (a)

Republic of Seychelles has launched the world's first sovereign blue bond—a pioneering financial instrument designed to support sustainable marine and fisheries projects.

The bond, which raised US\$15 million from international investors, demonstrates the potential for countries to harness capital markets for financing the sustainable use of marine resources. The World Bank assisted in developing the blue bond and reaching out to the three investors: Calvert Impact Capital, Nuveen, and U.S. Headquartered Prudential Financial, Inc.

The Blue Bond is a part of an initiative that combines public and private investment to mobilise resources for empowering local communities and businesses.

It is aimed to assist Seychelles in achieving a transition to sustainable fisheries and safeguarding oceans.

Source: <https://www.worldbank.org/en/news/press-release/2018/10/29/seychelles-launches-worlds-first-sovereign-blue-bond>

Q.15) Cyclical Unemployment is the:

- a) Unemployment that results when people become discouraged about their chances of finding a job so that they stop looking for work
- b) Unemployment that occurs during recessions and depressions.
- c) Portion of unemployment that is due to the normal working of the labour market.
- d) Portion of unemployment that is due to changes in the structure of the economy that results in a significant loss of jobs in certain industries.

Q.15) Solution (b)

Cyclical or demand deficient unemployment occurs when the economy is in need of low workforce. When there is an economy-wide decline in aggregate demand for goods and services, employment declines and unemployment correspondingly increases. Cyclical unemployment mainly occurs during recession or depression. This form of unemployment is most commonly known as cyclical unemployment since unemployment moves with the trade cycle. For instance, during the recent global slowdown in late 2008, many workers around the globe lost their jobs.

Q.16) Consider the following statements about 'Sinamalé Bridge'

- 1. It links the islands of Malé and Hulhulé in the Maldives.
- 2. It is funded by the Indian Government

Select the correct statements

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

Q.16) Solution (a)

The Sinamalé Bridge links the islands of Malé and Hulhulé in the Maldives. The 2.1 km long bridge will have two car lanes and separate lanes for bicycles, motorcycles, and pedestrians, and opened on 30 August 2018. It was originally called the China-Maldives Friendship Bridge due to funding received from the Chinese government. It is the first inter-island bridge in the Maldives.

Q.17) Which of the following countries are members of Paris Club?

1. China
2. Japan
3. South Korea
4. Israel

Select the correct code:

- a) 1, 3 and 4
- b) 2, 3 and 4
- c) 1, 2 and 4
- d) 1, 2 and 3

Q.17) Solution (b)

Paris Club

- An informal group of creditor nations whose objective is to find workable solutions to payment problems faced by debtor nations.
- The Paris Club has 19 permanent members, including most of the western European and Scandinavian nations, the United States of America, the United Kingdom and Japan.
- It is similar to the London club, which is a group of commercial bankers formed in 1976 to deal with the financial problems of Zaire, and is focussed on providing various forms of debt relief to countries that face financial distress due to their heavy debt load.
- The Paris Club stresses the informal nature of its existence and deems itself a "non-institution."
- As an informal group, it has no official statutes and no formal inception date, although its first meeting with a debtor nation was in 1956, with Argentina.

The following countries are permanent Paris Club members:

- Australia
- Austria
- Belgium
- Brazil
- Canada
- Denmark
- Finland
- France

- Germany
- Ireland
- Israel
- Italy
- Japan
- Korea
- Netherlands
- Norway
- Russian Federation
- Spain
- Sweden
- Switzerland
- United Kingdom
- United States Of America

Q.18) 'Agenda for Action 2020' is concerned with India and

- a) African Union
- b) BIMSTEC
- c) G-20
- d) European Union

Q.18) Solution (d)

India-EU Agenda for Action 2020 – the roadmap for bilateral cooperation endorsed during the 13th India-EU Summit.

EU-India Agenda for Action-2020 -

[http://www.mea.gov.in/Images/attach/EU India Agenda for Action post VC.pdf](http://www.mea.gov.in/Images/attach/EU_India_Agenda_for_Action_post_VC.pdf)

Q.19) Consider the following statements with respect to 'INS Arihant'

1. It belongs to Ship Submersible Ballistic Nuclear (SSBN) class
2. It will be armed with K-15 and K-4 missiles

Select the correct statements

- a) 1 Only

- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.19) Solution (c)

India has completed its nuclear triad by inducting the first indigenously built strategic nuclear submarine INS Arihant into service. INS Arihant successfully completed its "first deterrence patrol.

It is to be equipped with K 15 (or BO-5) shortrange missiles with a range of over 700 km and the K 4 ballistic missile with a range of 3,500 km.

INS Arihant is nuclear submarine capable of carrying nuclear tipped ballistic missiles. Thus it belongs to class referred to as Ship Submersible Ballistic Nuclear (SSBN).

Source: <https://timesofindia.indiatimes.com/india/as-nuclear-sub-arihant-returns-after-first-deterrence-patrol-indias-nuclear-triad-complete/articleshow/66515624.cms>

Q.20) Which of the following is/are correctly matched?

1. Operation Greens – Raising high yielding bamboo plantations on commercial basis in Forest as well as Non-Forest areas
2. KUSUM Scheme – Harnessing solar power for rural India

Select the correct statements

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

Q.20) Solution (b)

Operation Greens aims to promote farmer producers organisations, agri-logistics, processing facilities and professional management. The operation aims to aid farmers and help control and limit the erratic fluctuations in the prices of onions, potatoes and tomatoes. It is essentially a price fixation scheme that aims to ensure farmers are given the right price for their produce.

‘Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM)’ provides for

- installation of grid-connected solar power plants each of capacity up to 2 MW in the rural areas
- installation of standalone off-grid solar water pumps to fulfill irrigation needs of farmers not connected to grid
- solarization of existing grid-connected agriculture pumps to make farmers independent of grid supply and also enable them to sell surplus solar power generated to DISCOM and get extra income
- solarization of tube-wells and lift irrigation projects of Government sector

Q.21) ‘Aipan’ is a traditional terracotta and white motifs drawn on floors and walls on ceremonial occasions. It belongs to which state?

- a) Uttarakhand
- b) Karnataka
- c) Maharashtra
- d) Rajasthan

Q.21) Solution (a)

Aipan is a traditional folk art specifically made by women of Uttarakhand. This art is done on floor over brick red background with white paste made out of rice flour. The typical art is done on all special occasions and household ceremonies and rituals. It is believed that these motifs evoke divine power which brings good fortune and wards off evil.

Source: https://www.business-standard.com/article/current-affairs/cheli-aipan-a-unique-initiative-to-make-traditional-folk-art-lucrative-118110201699_1.html

Q.22) Consider the following statements with respect to ‘Kordylewski clouds’

1. They are large concentrations of dust that exist at the L4 and L5 Lagrangian points of the Earth–Moon system
2. They are exceptionally faint, which makes it very difficult to observe from Earth

Select the correct code:

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2

- d) Neither 1 nor 2

Q.22) Solution (c)

Kordylewski clouds are large concentrations of dust that exist at the L4 and L5 Lagrangian points of the Earth–Moon system. They were first reported by Polish astronomer Kazimierz Kordylewski in the 1960s, and confirmed to exist in October 2018.

The Kordylewski clouds are exceptionally faint, and whether one can see them with the naked eye or normal cameras depends heavily on the state of the weather.

It is very difficult to detect the Kordylewski clouds against the galactic light, star light, zodiacal light, and sky glow.

According to the new findings, each Kordylewski cloud is about 15 by 10 degrees wide, or equal to 30 by 20 lunar disks in the night sky. This translates to an area in space about 65,000 by 45,000 miles in actual size—nearly nine times wider than Earth.

The clouds themselves are enormous, but the individual particles that comprise them are estimated to measure just a micrometer across. Sunlight reflecting off these particles makes them glow ever so slightly—just like the pyramid-shaped glow of the zodiacal light that results from dust scattered between the orbits of the planets.

Source: <https://www.space.com/42293-earth-orbiting-dust-clouds-confirmed.html>

Q.23) Consider the following statements with respect to 'Border Area Development Programme (BADP)'

1. The funds under BADP are provided to the States for execution of projects relating to infrastructure, livelihood, education and health
2. It was initiated during the Second Five Year Plan period

Select the correct statements

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

Q.23) Solution (a)

It was initiated during the Seventh FYP.

Read More -

https://mha.gov.in/sites/default/files/BordDevel%28BADP%29_16022018.PDF

Q.24) Consider the following statements with respect to 'Shakti- India's first microprocessor'

1. It has been designed by researchers at Indian Institute of Technology Bombay (IIT-B)
2. It can work with various devices such as consumer electronic devices, mobile computing devices, embedded low-power wireless systems and networking systems

Select the correct statements

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

Q.24) Solution (b)

Shakti- India's first microprocessor has been designed and booted by researchers at Indian Institute of Technology Madras (IIT-M). The researchers say that the chip can be used for mobile computing and other devices. The chip can be used in low-power wireless systems and networking systems.

The researchers say that the chip can help reduce the reliance on imported chips in the communications and defence sector. The researchers also claim that the chip is on par with international standards.

Semi-Conductor Laboratory (SCL), Indian Space Research Organizations (ISRO) in Chandigarh fabricated the Shakti family of processors. This makes it the first 'RISC V Microprocessor' that is designed and manufactured in India completely.

The initial batch of 300 chips, named RISECREEK was produced under Project Shakti, in July 2018. The chips were fabricated at the Multinational Chip Manufacturer Intel's facility at Oregon, USA. The chips were used to successfully boot the Linux operating system. Now, the fabrication has been done in India.

Q.25) Which of the following states is converting 'INS Viraat' into a museum?

- a) Andhra Pradesh
- b) Maharashtra
- c) Tamil Nadu
- d) Gujarat

Q.25) Solution (b)

Maharashtra is converting Indian Navy's longest-serving aircraft carrier INS Viraat, into India's first-ever moored maritime museum-cum-marine adventure centre.

Source: <https://timesofindia.indiatimes.com/india/ins-viraat-to-be-turned-into-maritime-museum/articleshow/66469224.cms>

Q.26) Consider the following statements with respect to 'External Commercial Borrowings (ECBs)'

1. ECBs can be raised as Loans and Capital Market Instruments
2. ECBs cannot be used for investment in stock market
3. DEA (Department of Economic Affairs) along with RBI (Reserve Bank of India), monitors and regulates ECB guidelines and policies.

Select the correct statements

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.26) Solution (d)

External commercial borrowing (ECBs) are loans in India made by non-resident lenders in foreign currency to Indian borrowers. They are used widely in India to facilitate access to foreign money by Indian corporations and PSUs (public sector undertakings). ECBs include commercial bank loans, buyers' credit, suppliers' credit, securitised instruments such as floating rate notes and fixed rate bonds etc., credit from official export credit agencies and commercial borrowings from the private sector window of multilateral financial Institutions such as International Finance Corporation (Washington), ADB, AFIC, CDC, etc. ECBs cannot be used for investment in stock market or speculation in real estate. The DEA (Department

of Economic Affairs), Ministry of Finance, Government of India along with Reserve Bank of India, monitors and regulates ECB guidelines and policies.

Q.27) 'The Beyond Fake News project' was launched by

- a) Reuters
- b) British Broadcasting Corporation
- c) Cable News Network
- d) Al Jazeera

Q.27) Solution (b)

The British Broadcasting Corporation (BBC) has devised a new campaign that is aimed at fighting back against disinformation and fake news.

Source: <https://www.thehindu.com/news/international/bbc-launches-fake-news-fight-back-with-global-campaign/article25450930.ece>

Q.28) Consider the following statements with respect to 'Global IT Challenge for Youth with Disabilities (GITC)'

1. GITC 2018 is organised by the Department of Empowerment of Persons with Disabilities (DEPwD).
2. GITC 2018 is organised in collaboration with Government of Japan.

Select the correct statements

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

Q.28) Solution (a)

Global IT Challenge for Youth with Disabilities, 2018" is being organised by the Department of Empowerment of Persons with Disabilities (DEPwD) under Ministry of Social Justice and Empowerment here during 9-11 November, 2018.

This year, India is hosting the event in collaboration with Government of Korea and Rehabilitation International (RI).

The Global IT Challenge for disability is a capacity building project that helps youth with disabilities to overcome their limitations and challenges for a better future through access to ICT.

It will alleviate the digital divide and expand participation of youth with disabilities in the society. It propagates implementation of United Nations Convention on Rights of Persons with Disabilities (UNCRPD) - Article 21 relates to access to information.

GITC is being held every year in Asia- Pacific region and such events were held in the past in countries like Korea, China, Thailand, Vietnam etc.

Q.29) 'Palau' was in news recently. Where is it located?

- a) South China Sea
- b) Timor Sea
- c) Solomon Sea
- d) None of the above

Q.29) Solution (d)

Palau is an island country located in the western Pacific Ocean. The country contains approximately 340 islands, forming the western chain of the Caroline Islands in Micronesia.

The most populous island is Koror. The capital Ngerulmud is located on the nearby island of Babeldaob, in Melekeok State. Palau shares maritime boundaries with the Philippines, Indonesia, and the Federated States of Micronesia.

Palau has become the first country to ban many kinds of sunscreen, in a move to protect its coral reefs from chemicals that scientists say cause significant damage.

Source: <https://www.thehindu.com/todays-paper/tp-miscellaneous/tp-others/palau-becomes-first-country-to-ban-sunscreen-to-save-coral-reefs/article25416833.ece>

Q.30) Consider the following statements with respect to 'Belmont Forum'

1. It is an international partnership that mobilizes funding of environmental change research

2. Ministry of Earth Science (MoES), represents India in the Belmont Forum

Select the correct statements

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

Q.30) Solution (c)

The Belmont Forum is an international partnership that mobilizes funding of environmental change research and accelerates its delivery to remove critical barriers to sustainability.

India is a member of Belmont Forum, besides Australia, Brazil, Canada, European Commission, France, Germany, Japan, Netherland, South Africa, UK and USA etc. Ministry of Earth Science (MoES), represents India in the Belmont Forum since 2012.

Q.31) Which of the following is/are correct with respect to 'Neural Networks'?

- 1. They are artificial copy of the human brain
- 2. They have high computational rates than conventional computers
- 3. They learn by examples

Select the correct code:

- a) 1 and 2
- b) 2 Only
- c) 1 and 3
- d) All of the above

Q.31) Solution (d)

ANNs are processing devices (algorithms or actual hardware) that are loosely modeled after the neuronal structure of the mamalian cerebral cortex but on much smaller scales. A large ANN might have hundreds or thousands of processor units, whereas a mamalian brain has billions of neurons with a corresponding increase in magnitude of their overall interaction and emergent behavior. Although ANN researchers are generally not concerned with whether their networks accurately resemble biological systems, some have. For example,

researchers have accurately simulated the function of the retina and modeled the eye rather well.

By looking for common patterns in millions of bicycle photos, for instance, a neural network can learn to recognise a bike.

This is how Facebook identifies faces in online photos, how Android phones recognise commands spoken into phones, and how Microsoft Skype translates one language into another. But these complex systems can also create art.

In the 1990s, neural networks were used for cross-breeding sounds from very different instruments. Say, a bassoon and a clavichord. Creating instruments capable of producing sounds no one has ever heard.

Much as a neural network can learn to identify a cat by analysing hundreds of cat photos, it can learn the musical characteristics of a bassoon by analysing hundreds of notes.

How Do Neural Networks Differ From Conventional Computing?

To better understand artificial neural computing it is important to know first how a conventional 'serial' computer and its software process information. A serial computer has a central processor that can address an array of memory locations where data and instructions are stored. Computations are made by the processor reading an instruction as well as any data the instruction requires from memory addresses, the instruction is then executed and the results are saved in a specified memory location as required. In a serial system (and a standard parallel one as well) the computational steps are deterministic, sequential and logical, and the state of a given variable can be tracked from one operation to another.

In comparison, ANNs are not sequential or necessarily deterministic. There are no complex central processors, rather there are many simple ones which generally do nothing more than take the weighted sum of their inputs from other processors. ANNs do not execute programmed instructions; they respond in parallel (either simulated or actual) to the pattern of inputs presented to it. There are also no separate memory addresses for storing data. Instead, information is contained in the overall activation 'state' of the network. 'Knowledge' is thus represented by the network itself, which is quite literally more than the sum of its individual components.

What Applications Should Neural Networks Be Used For?

Neural networks are universal approximators, and they work best if the system you are using them to model has a high tolerance to error. One would therefore not be advised to use a neural network to balance one's cheque book! However they work very well for:

- capturing associations or discovering regularities within a set of patterns;
- where the volume, number of variables or diversity of the data is very great;
- the relationships between variables are vaguely understood; or,
- the relationships are difficult to describe adequately with conventional approaches.

Source: <https://indianexpress.com/article/technology/science/worlds-largest-brain-like-supercomputer-switched-on-for-first-time-5441398/>

Q.32) The term 'SpiNNaker' was recently in news. What is it?

- a) Unmanned Aerial Vehicle
- b) Anti-Ballistic Missile developed by Israel
- c) Microprocessor developed by IIT Madras
- d) Supercomputer

Q.32) Solution (d)

The world's largest supercomputer designed to work in the same way as the human brain has been switched on for the first time. The newly formed million-processor-core Spiking Neural Network Architecture (SpiNNaker) machine is capable of completing more than 200 million actions per second, with each of its chips having 100 million transistors.

The SpiNNaker machine, designed and built in The University of Manchester in the UK, can model more biological neurons in real time than any other machine on the planet. Biological neurons are basic brain cells present in the nervous system that communicate primarily by emitting 'spikes' of pure electro-chemical energy. Neuromorphic computing uses large scale computer systems containing electronic circuits to mimic these spikes in a machine.

SpiNNaker is unique because, unlike traditional computers, it does not communicate by sending large amounts of information from point A to B via a standard network.

Source: <https://indianexpress.com/article/technology/science/worlds-largest-brain-like-supercomputer-switched-on-for-first-time-5441398/>

Q.33) Where is 'Saqqara' located?

- a) Egypt
- b) Jordan
- c) Greece

d) Syria

Q.33) Solution (a)

Saqqara served as the necropolis for Memphis, the capital of ancient Egypt for more than two millennia.

Source: <https://www.hindustantimes.com/art-and-culture/mummified-cats-scarab-beetles-unearthed-in-egypt/story-uXrn0JXUllgbLglwX5brEL.html>

Q.34) Where is 'Point Calimere Wildlife Sanctuary' located?

- a) Tamil Nadu
- b) West Bengal
- c) Kerala
- d) Goa

Q.34) Solution (a)

It is a protected area in Tamil Nadu, South India along the Palk Strait where it meets the Bay of Bengal at Point Calimere.

The sanctuary was created in 1967 for conservation of the near threatened blackbuck antelope, an endemic mammal species of India. It is famous for large congregations of waterbirds, especially greater flamingos.

Source: <https://www.thehindu.com/sci-tech/is-point-calimere-wildlife-sanctuary-safe-for-migratory-birds/article25463648.ece>

Q.35) Consider the following statements about 'Atala Masjid' of Jaunpur

1. It was built by Sultan Sikandar Lodi
2. The style of Atala Masjid's architecture is known as Sharqi Style

Select the correct statements

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2

- d) Neither 1 nor 2

Q.35) Solution (b)

Atala Masjid or Atala Mosque is a 15th-century mosque in Jaunpur, Uttar Pradesh, India. It is one of the chief tourist attractions in Jaunpur.

It is located 2.2 km north-northeast of Jaunpur, 7.3 km northwest of Zafarābād, 16.8 km north-northeast of Mariāhū, 26.3 km west-northwest of Kirākat.

The architecture inside still shows old Atala Devi Temple, which was built by Raja Vijaya Chandra, father-in-law of King Prithviraj Chauhan.

The Jaunpur Atala Masjid was built by Sultan Ibrahim (1402–1436), Sharqi Sultan of Jaunpur on foundations laid during the reign of Tughluq Sultan Firuz Shah III (1351–1388). Construction started in 1377 and was completed in 1408. A Madarsa named Madarsa Din Dunia is housed in central courtyard of the mosque.

The style of Atala Masjid's architecture is known as Sharqi Style. The use of minars has been avoided in Atala Masjid. A unique feature of this building is use of bold and forceful characters painted on the huge screen in the centre and side bays of the prayer hall.

Q.36) 'Surabaya' is a port city of

- a) Java
- b) Borneo
- c) Sulawesi
- d) Flores

Q.36) Solution (a)

Surabaya is a port city on the Indonesian island of Java. It is the capital of East Java province in Indonesia.

Source: <http://pib.nic.in/PressReleaseDetail.aspx?PRID=1552528>

Q.37) Consider the following statements with respect to 'INS Rana'

1. It is a Rajput-class destroyer

2. It was built in the former Soviet Union after considerable Indian design modifications to the Akula design

Select the correct statements

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

Q.37) Solution (a)

INS Rana is a Rajput-class destroyer in active service with the Indian Navy. She was commissioned on 28 June 1982.

She is a redesigned Soviet Kashin-class guided missile destroyer.

The Rajput-class guided-missile destroyers built for the Indian Navy are modified versions of Soviet Kashin-class destroyers. They are also known as Kashin-II class. The ships were built in the former Soviet Union after considerable Indian design modifications to the Kashin design. These included the replacement of the helicopter pad in the original design with a flight elevator, as well as major changes to the electronics and combat systems. Five units were built for export to India in the 1980s. All units are currently attached to the Eastern Naval Command.

Source: <http://pib.nic.in/PressReleaseDetail.aspx?PRID=1552528>

Q.38) Consider the following statements with respect to 'Wellcome Trust'

1. It is an independent charity funding research to improve human and animal health
2. It is based out of United Kingdom

Select the correct statements

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

Q.38) Solution (c)

The Department of Biotechnology (DBT) under the Ministry of Science and Technology, in collaboration with the Wellcome Trust, to support a three-tier fellowship programme on biomedical research at post-doctoral level, celebrated 10 years of their joint partnership.

The Wellcome Trust is an independent charity funding research to improve human and animal health.

Established in 1936 and with an endowment of around £15 billion, it is the largest non-governmental source of funds for biomedical research in the United Kingdom.

The aim of setting up the fellowship jointly with Wellcome Trust was to create a system comparable to the best in the world, taking India on the path of becoming a leader in key areas of life sciences and biomedical research.

Source: <http://pib.nic.in/PressReleaseDetail.aspx?PRID=1552533>

Q.39) Consider the following statements with respect to 'Monogenic diabetes

1. It is a rare type of diabetes that's caused by a single gene mutation
2. Maturity Onset Diabetes of the Young (MODY) is one of the forms of the Monogenic Diabetes

Select the correct statements

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

Q.39) Solution (c)

A National Monogenic Diabetes Study Group has been formed to identify cases of monogenic diabetes across the country. Supported by the Indian Council of Medical Research (ICMR), the Madras Diabetes Research Foundation (MDRF) and Dr. Mohan's Diabetes Specialities Centre (DMDSC) will be the national coordinating centre for the study group.

Monogenic diabetes is a group of disorders where mutation of a single gene causes diabetes; the three commonest forms being - Maturity Onset Diabetes of the Young (MODY), Neonatal Diabetes Mellitus (NDM) and Congenital Hypoglycaemia.

ICMR already has a young diabetics registry. As an off-shoot, a National Monogenic Diabetes Study Group has been formed with MDRF as the nodal centre. As of now, 33 doctors from across the country are ready to collaborate for this initiative.

Under this initiative, MDRF would provide guidelines to the collaborators for identifying monogenic diabetes.

Source: <https://www.thehindu.com/sci-tech/health/national-body-set-up-to-study-rare-form-of-diabetes/article25464656.ece>

Q.40) Consider the following statements with respect to 'Kyaukpyu'

1. It is a major town in Rakhine State
2. India signed an agreement with Myanmar on building a deep-water port at Kyaukpyu

Select the correct statements

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

Q.40) Solution (a)

It is a major town in Rakhine State, in western Myanmar. It is located on the north western corner of Yanbye Island on Combermere Bay, and is 250 miles (400 km) north-west of Yangon. It is the principal town of Kyaukpyu Township and Kyaukpyu District. The town is situated on a superb natural harbor which connects the rice trade between Kolkata and Yangon.

Beijing signed an agreement with Naypyidaw on building a deep-water port at Kyaukpyu on Myanmar's Arakan coast in the Bay of Bengal. The port will form an important part of the China-Myanmar Economic Corridor, which would connect Kyaukpyu to the Yunnan province in southwestern China via rail and highways.

China has already built an oil and gas pipeline system that moves hydrocarbons from Kyaukpyu to inland China. The Kyaukpyu port has been under discussion for many years between China and Burma. Fear of being driven into a debt trap compelled Naypyidaw to scale down the project from an ambitious one priced at \$7.2 billion to \$1.3 billion.

Source: <https://indianexpress.com/article/opinion/columns/narendra-modi-singapore-visit-look-east-policy-shangri-la-dialogue-andaman-sea-5443200/>

Q.41) Consider the following statements with respect to 'Biodiversity hotspot'

1. It is a biogeographic region that is both a significant reservoir of biodiversity and is threatened with destruction.
2. The 'Biodiversity hotspot' Status is designated by the International Union for Conservation of Nature

Select the correct statements

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

Q.41) Solution (c)

A biodiversity hotspot is a biogeographic region with significant levels of biodiversity that is threatened with destruction. For example forests are considered as biodiversity hotspots. The Status is designated by International Union for Conservation of Nature (IUCN).

Norman Myers wrote about the concept in two articles in "The Environmentalist" (1988), & 1990 revised after thorough analysis by Myers and others in "Hotspots: Earth's Biologically Richest and Most Endangered Terrestrial Ecoregions" and a paper published in the journal Nature.

To qualify as a biodiversity hotspot on Myers 2000 edition of the hotspot-map, a region must meet two strict criteria: it must contain at least 0.5% or 1,500 species of vascular plants as endemics, and it has to have lost at least 70% of its primary vegetation. Around the world, 36 areas qualify under this definition. These sites support nearly 60% of the world's plant, bird, mammal, reptile, and amphibian species, with a very high share of those species as endemics.

Q.42) Which of the following is NOT a 'Tiger Range Country'?

- a) Russia
- b) Thailand
- c) Indonesia
- d) Japan

Q.42) Solution (d)

13 tiger range countries include Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand, and Vietnam.

Q.43) Which of the following are founding partners of the 'Global Tiger Initiative (GTI)'?

1. World Bank
2. Global Environment Facility (GEF)
3. Smithsonian Institution

Select the correct code:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.43) Solution (d)

The Global Tiger Initiative (GTI) was launched in 2008 as a global alliance of governments, international organizations, civil society, the conservation and scientific communities and the private sector, with the aim of working together to save wild tigers from extinction. In 2013, the scope was broadened to include Snow Leopards.

The GTI's founding partners included the World Bank, the Global Environment Facility (GEF), the Smithsonian Institution, Save the Tiger Fund, and International Tiger Coalition (representing more than 40 non-government organizations). The initiative is led by the 13 tiger range countries (TRCs).

Q.44) Which of the following countries are members of 'East Asia Summit (EAS)'?

1. United States of America
2. Russia
3. New Zealand
4. Australia

Select the correct code:

- a) 1 and 2

- b) 2 and 4
- c) All of the above
- d) None of the above

Q.4) Solution (c)

The EAS has 18 members - the ten ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam) along with Australia, China, India, Japan, New Zealand, the Republic of Korea, the United States and Russia.

13th EAS (2018) is being held in Singapore.

Q.45) Consider the following statements with respect to 'Global Digital Content Market (GDCM)'

1. It is organised by World Intellectual Property Organization (WIPO)
2. The inaugural GDCM was held in Geneva 2016

Select the correct statements

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

Q.45) Solution (c)

The World Intellectual Property Organization (WIPO) organises a conference on digital markets and their rapid evolution within the frame of intellectual property rights.

The event aims to feature several sessions on music, film, broadcasting and publishing, as well as collective management and emerging models and markets by hosting distinguished key note speakers and panellists.

The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, is hosting a conference on Global Digital Content Market (GDCM) 2018.

India has been chosen as a host nation for the conference by World Intellectual Property Organization (WIPO) due to the strong creative industry in the country in films, music and media. The focus for this year's conference is the Asia Pacific region. The GDCM 2018 will

see participation of professionals from various creative fields, the digital industry around the world and delegates of the diplomatic community from Missions to the United Nations.

GDCM 2018 is the second edition of the conference. The first conference was held in Geneva 2016.

Q.46) Consider the following statements with respect to 'ExoMars'

1. The NASA and Russia's Federal Space Agency have teamed up on ExoMars
2. It comprises of two missions, which includes a trace gas research and communication satellite and a rover.

Select the correct statements

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

Q.46) Solution (b)

ExoMars (Exobiology on Mars) is a two-part astrobiology project to search for evidence of life on Mars, a joint mission of the European Space Agency (ESA) and the Russian space agency Roscosmos. The first part, launched in 2016, placed a trace gas research and communication satellite into Mars orbit and released a stationary experimental lander (which crashed). The second part is planned to launch in 2020, and to land the ExoMars rover on the surface, supporting a science mission that is expected to last into 2022 or beyond.

Source: <https://indianexpress.com/article/technology/science/esa-roscosmos-mars-rovers-landing-spot-revealed-5444319/>

Q.47) The terms 'Mawrth Vallis' and 'Oxia Planum' is associated with

- a) Cryptocurrency
- b) Ransomware
- c) Onion Websites
- d) None of the above

Q.47) Solution (d)

Mawrth Vallis literally means “a valley on Mars”.

Oxia Planum is Mars's equator.

Source: <https://indianexpress.com/article/technology/science/esa-roscosmos-mars-rovers-landing-spot-revealed-5444319/>

Q.48) 'Energy Efficiency Revolving Fund (EERF)' was recently in news. Consider the following statements with respect to EERF

1. It aims to expand and sustain investments in the energy efficiency market, build market diversification, and scale up existing technologies.
2. Asian Development Bank (ADB) and Energy Efficiency Services (EESL) signed a USD 13 million grant to set up the fund.

Select the correct statements

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

Q.48) Solution (c)

The Asian Development Bank (ADB) would grant \$13 million to the government-owned Energy Efficiency Services Ltd (EESL) to set up an energy efficiency revolving fund (EERF).

Towards supporting investments in new, innovative and scalable business models, EESL and ADB signed an agreement for a Global Environment Facility (GEF) grant of USD 13 million to establish an Energy Efficiency Revolving Fund.

The fund aims to expand and sustain investments in the energy efficiency market in India, build market diversification, and scale up existing technologies.

The tie-up was announced at the “International Symposium to Promote Innovation and Research in Energy Efficiency 2018”.

Source: https://www.business-standard.com/article/news-ians/adb-to-grant-eesl-13-mn-for-energy-efficiency-revolving-fund-118111100548_1.html

Q.49) Consider the following statements with respect to 'India Trade Promotion Organisation (ITPO)'

1. It is a public sector company that provides services to promote Indian exports, by organising trade fairs, buyer-seller meets, and providing information on produce and market.
2. It is under the aegis of the Ministry of Commerce and Industry

Select the correct statements

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

Q.49) Solution (c)

India Trade Promotion Organisation (ITPO) is the premier trade promotion agency of India, provides a broad spectrum of services to trade and industry and acts as a catalyst for growth of India's trade.

ITPO is a Mini-Ratna Category-1 Central Public Sector Enterprise (CPSE) with 100 percent shareholding of Government of India.

The main corporate objectives of ITPO are:

- To promote external and domestic trade of India in cost effective manner by organizing and participating in international trade fairs in India and abroad; organizing buyer-seller meets and contact promotion programmes abroad; conducting overseas market surveys, exchanging and contact promotion programmes abroad; conducting overseas market surveys, exchanging and coordinating visits of business delegations, and undertake need based research to facilitate trade in specific sectors/markets;
- To support and assist small and medium enterprises to access markets both in India and abroad;
- To disseminate trade information and facilitate E-commerce/trade;
- To develop quality physical infrastructure, services and management so as to enable holding of trade promotion events such as conventions and trade exhibitions of international standard; and
- To enlist the involvement and support of the State Governments, other government trade promotion agencies, trade and industry associations in trade promotion of India's external and domestic trade.

With its Headquarters at Pragati Maidan, New Delhi and regional offices at Bangalore, Chennai, Kolkata and Mumbai; ITPO ensures representative participation of trade and industry from different regions of the country in its events in India and abroad.

Source: https://www.business-standard.com/article/news-ani/iitf-a-platform-for-all-kinds-of-businesses-tourism-minister-118111401344_1.html

Q.50) Consider the following statements with respect to 'Indian Strategic Petroleum Reserves Limited (ISPRL)'

1. It is a Special Purpose Vehicle which looks into the construction and management of the Strategic Crude Oil Storage facilities
2. It is a wholly owned subsidiary of Oil and Natural Gas Corporation (ONGC)

Select the correct statements

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

Q.50) Solution (a)

The construction of the Strategic Crude Oil Storage facilities is being managed by Indian Strategic Petroleum Reserves Limited (ISPRL), a Special Purpose Vehicle, which is a wholly owned subsidiary of Oil Industry Development Board (OIDB) under the Ministry of Petroleum & Natural Gas.

Source: <https://www.thehindubusinessline.com/markets/commodities/india-to-lease-out-half-of-padur-strategic-oil-storage-to-adnoc/article25473075.ece>

Q.51) Consider the following statements with respect to 'Revised Kyoto Convention (RKC)'

1. It is the legal instrument of the World Customs Organization (WCO)
2. It aims to simplify and harmonize international customs procedures globally, in order to achieve faster, more predictable and efficient customs clearances

Select the correct statements

- a) 1 Only

- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.51) Solution (c)

The World Customs Organization (WCO) is an intergovernmental organization headquartered in Brussels, Belgium. The WCO is noted for its work in areas covering the development of international conventions, instruments, and tools on topics such as commodity classification, valuation, rules of origin, collection of customs revenue, supply chain security, international trade facilitation, customs enforcement activities, combating counterfeiting in support of Intellectual Property Rights (IPR), drugs enforcement, illegal weapons trading, integrity promotion, and delivering sustainable capacity building to assist with customs reforms and modernization. The WCO maintains the international Harmonized System (HS) goods nomenclature, and administers the technical aspects of the World Trade Organization (WTO) Agreements on Customs Valuation and Rules of Origin.

The International Convention on the Simplification and Harmonization of Customs procedures (revised Kyoto Convention or RKC) was originally adopted in 1974 and was subsequently revised in 1999; the revised Kyoto Convention came into force in 2006. The RKC comprises several key governing principles: transparency and predictability of customs controls; standardization and simplification of the goods declaration and supporting documents; simplified procedures for authorized persons; maximum use of information technology; minimum necessary customs control to ensure compliance with regulations; use of risk management and audit based controls; coordinated interventions with other border agencies; and a partnership with the trade. It promotes trade facilitation and effective controls through its legal provisions that detail the application of simple yet efficient procedures and also contains new and obligatory rules for its application. The WCO revised Kyoto Convention is sometimes confused with the Kyoto Protocol, which is a protocol to the United Nations Framework Convention on Climate Change (UNFCCC or FCCC).

India became the member on 15th Feb 1971.

Q.52) Consider the following statements about World Customs Organization (WCO)

1. It is an intergovernmental organisation based in Geneva
2. The Harmonized Commodity Description and Coding System is developed and maintained by the WCO

Select the correct statements

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

Q.52) Solution (b)

The World Customs Organization (WCO) is an intergovernmental organization headquartered in Brussels, Belgium. The WCO is noted for its work in areas covering the development of international conventions, instruments, and tools on topics such as commodity classification, valuation, rules of origin, collection of customs revenue, supply chain security, international trade facilitation, customs enforcement activities, combating counterfeiting in support of Intellectual Property Rights (IPR), drugs enforcement, illegal weapons trading, integrity promotion, and delivering sustainable capacity building to assist with customs reforms and modernization. The WCO maintains the international Harmonized System (HS) goods nomenclature, and administers the technical aspects of the World Trade Organization (WTO) Agreements on Customs Valuation and Rules of Origin.

The Harmonized System (HS) nomenclature was developed by the WCO and entered into force on 1 January 1988 through a Convention. Although Article II of the GATT (Schedules of Concessions) does not establish a specific nomenclature to be used by Members in this respect, and despite the fact that other nomenclatures such as the BTN and CCCN were used in the past, the HS has become the de facto standard for Members in this respect. The HS has also been used by WTO Members as a tool to define the products which are covered by certain agreements, the most important of which is probably Annex 1 of the Agreement on Agriculture. This Annex defines, in terms of Chapters, headings and subheadings of the 1992 version of the HS, which are the agricultural products. Therefore, changes in the HS have important legal implications for WTO Members, in particular with respect to their schedules.

The Harmonized System Committee of the WCO undertakes a periodic review of the HS to take account of changes in technology and patterns in international trade, and recommends amendments to the HS.

Read More - https://www.wto.org/english/thewto_e/coher_e/wto_wco_e.htm

<http://www.wcoomd.org/en/about-us/what-is-the-wco.aspx>

Q.53) 'Nalaban Bird Sanctuary' is located in

- a) Odisha
- b) Arunachal Pradesh
- c) West Bengal
- d) Mizoram

Q.53) Solution (a)

Chilika is the largest brackish water lagoon in Asia and the second-largest in the world. The lake is also the largest wintering ground for migratory waterfowl found anywhere on the Indian sub-continent. Some rare, and endangered species listed in the IUCN Red List inhabit the lagoon for at least part of their life cycle, making the lake one of the hotspots for biodiversity in the country. A number of islands are located in the lagoon, some with and a few without habitation. Prominent among those are Krushnaprasad, Nalaban, Kalijai, Somolo, Honeymoon, Breakfast and Birds Island.

Nalaban Bird Sanctuary or Nalaban Island is the core area of the Ramsar designated wetlands of Chilika Lake, which was declared a bird sanctuary under the Wildlife Protection Act in 1973.

Q.54) Consider the following statements with respect to 'National Cooperative Development Corporation (NCDC)'

- 1. It is a statutory Corporation under the Ministry of Agriculture & Farmers Welfare
- 2. It raises funds from Central Government, Internal Accruals, and market borrowings

Select the correct statements

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

Q.54) Solution (c)

The National Cooperative Development Corporation (NCDC) was established by an Act of Parliament in 1963 as a statutory Corporation under the Ministry of Agriculture & Farmers Welfare.

Functions

- Planning, promoting and financing programmes for production, processing, marketing, storage, export and import of agricultural produce, food stuffs, certain other notified commodities e.g. fertilisers, insecticides, agricultural machinery, lac, soap, kerosene oil, textile, rubber etc., supply of consumer goods and collection, processing, marketing, storage and export of minor forest produce through cooperatives, besides income generating stream of activities such as poultry, dairy, fishery, sericulture, handloom etc.
- NCDC Act has been further amended which will broad base the area of operation of the Corporation to assist different types of cooperatives and to expand its financial base. NCDC will now be able to finance projects in the rural industrial cooperative sectors and for certain notified services in rural areas like water conservation, irrigation and micro irrigation, agri-insurance, agro-credit, rural sanitation, animal health, etc.
- Loans and grants are advanced to State Governments for financing primary and secondary level cooperative societies and direct to the national level and other societies having objects extending beyond one State. Now, the Corporation can also go in for direct funding of projects under its various schemes of assistance on fulfilment of stipulated conditions.

NCDC raises funds from Central Govt. (DOAC&FW, SDF), Internal Accruals, market borrowings, funding from multinational organisations like World Bank, EEC etc.

Q.55) Consider the following statements with respect to 'Tall Ship Sail-Together' Expedition

1. It will retrace the trade links that existed between the erstwhile Malabar Coast and the Persian Gulf.
2. It is held as part of the 10th anniversary celebrations of the Indian Ocean Naval Symposium (IONS).

Select the correct code:

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

Q.55) Solution (c)

The 'Tall Ship Sail-together' expedition was flagged off from naval base, Kochi on 14 Nov 18. The event which was organised by the the Indian Navy as part of the 10th Anniversary celebrations of IONS, was attended by chiefs from navies and delegates from 26 countries participating in the 10th anniversary commemorative activities besides a large gathering of Indian naval personnel.

The Royal Omani Vessel Zinat-al-Bihaar along with two Indian Naval Sailing Ships Sudharshini, Tarangini, with one each "Sea Rider" from Sri-Lanka, China, United Kingdom, Australia, Bangladesh and Maldives are participating in this 'Sail Together' which is planned over a distance of 1200 nm to Muscat and back. It seeks to retrace the maritime trade route of yesteryears between the Malabar Coast and the Persian Gulf.

Source: <https://www.thehindu.com/news/cities/Kochi/tall-ships-sail-together-expedition-today/article25488265.ece>

Q.56) Which of the following countries do not have a coast on the Adriatic Sea?

- a) Italy
- b) Albania
- c) Croatia
- d) Austria

Q.56) Solution (d)



Source: <https://www.pressreader.com/india/the-hindu/20181119/282690458230685>

Q.57) Where is 'Ranganathittu Bird Sanctuary' located?

- a) Kerala
- b) Odisha
- c) Karnataka
- d) Tamil Nadu

Q.57) Solution (c)

It is a bird sanctuary in the Mandya District of the state of Karnataka. It is the largest bird sanctuary in the state.

Source: <https://www.thehindu.com/news/national/karnataka/bamboo-clumps-and-dried-branches-get-the-axe-at-ranganathittu/article25470245.ece>

Q.58) 'Hiawatha Glacier' was recently in news. Where is it located?

- a) Greenland
- b) Argentina
- c) Iceland
- d) New Zealand

Q.58) Solution (a)

A study revealed the existence of a large impact crater beneath Greenland's ice sheet in the Hiawatha Glacier region—a 31-kilometre-wide (19 mi) circular bedrock depression up to a kilometre below the surface of the ice.

This is the first time that a crater of any size has been found under one of Earth's continental ice sheets.

Source: <https://www.thehindu.com/sci-tech/science/ice-age-crater-discovered-beneath-greenland-glacier/article25509556.ece>

Q.59) Consider the following statements with respect to 'Tissue Chips in Space' initiative

1. It is an initiative by European Space Agency (ESA) and Japan Aerospace Exploration Agency (JAXA)
2. It seeks to better understand the role of microgravity on human health and disease

Select the correct statements

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

Q.59) Solution (b)

A series of investigations to test tissue chips in microgravity aboard the International Space Station is planned through a collaboration between the National Center for Advancing Translational Sciences (NCATS) at the National Institutes for Health (NIH) and the Center for the Advancement of Science in Space (CASIS) in partnership with NASA.

The Tissue Chips in Space initiative seeks to better understand the role of microgravity on human health and disease and to translate that understanding to improved human health on Earth.

Source: <https://www.thehindu.com/sci-tech/science/nasa-to-send-organs-on-chips-to-space/article25464638.ece>

Q.60) Consider the following statements with respect to 'GROWTH-India'

1. It is a part of the international Global Relay of Observatories Watching Transients Happen) network.
2. It is India's first robotic telescope jointly constructed by Indian Institute of Astrophysics (IIA), Bengaluru, and IIT Bombay
3. It is located at the Indian Astronomical Observatory (IAO) at Hanle in Ladakh

Select the correct statements

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.60) Solution (d)

GROWTH-India telescope located at the Indian Astronomical Observatory (IAO) at Hanle in Ladakh is the country's first robotic telescope and the first one designed to observe dynamic or transient events in the universe.

It is part of the Global Relay of Observatories Watching Transients Happen. Its goals are threefold: (1) Search for explosions in the optical regime whenever LIGO group detects a Binary Neutron Star merger (2) study nearby young supernova explosions. (3) Study nearby asteroids.

It is jointly constructed by Indian Institute of Astrophysics (IIA), Bengaluru, and IIT Bombay.

Source: <https://www.thehindu.com/sci-tech/growth-india-telescopes-first-science-observation/article25526385.ece>

Q.61) Consider the following statements with respect to 'Bacteriophage'

1. It is a type of virus that infects bacteria.
2. It is composed of a nucleic acid molecule that is surrounded by a protein structure.

Select the correct code:

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

Q.61) Solution (c)

It is a virus that infects and replicates within Bacteria and Archaea. Bacteriophages are composed of proteins that encapsulate a DNA or RNA genome, and may have relatively simple or elaborate structures. Their genomes may encode as few as four genes and as many as hundreds of genes. Phages replicate within the bacterium following the injection of their genome into its cytoplasm. Bacteriophages are among the most common and diverse entities in the biosphere. Bacteriophages are ubiquitous viruses, found wherever bacteria exist.

Source: <https://www.thehindu.com/sci-tech/novel-strategy-to-treat-diabetic-wound-infection/article25526263.ece>

Q.62) The terms 'Letter of comfort' and 'Sovereign Guarantee' were in news recently in the context of

- a) Infrastructure Leasing & Financial Services Crisis
- b) Punjab National Bank Scam
- c) Extradition Treaty between India and Indonesia
- d) Rafale Deal

Q.62) Solution (d)

A sovereign guarantee is given by a sovereign government (France) to another sovereign government (India), guaranteeing enforcement of the terms and conditions of the contract signed under their auspices. A 'letter of comfort' is definitely not on a par with a sovereign guarantee

Source: <https://economictimes.indiatimes.com/news/defence/letter-of-comfort-gives-little-comfort-no-guarantee-future-govt-will-honour-it-sudhanshu-mohanty/articleshow/66628444.cms>

Q.63) 'Banihal Qazigund Tunnel' is a tunnel in which of the following ranges?

- a) Karakoram Range
- b) Pir Panjal Range
- c) Ladakh Range
- d) Zaskar Range

Q.63) Solution (b)

Banihal Qazigund Road Tunnel is a 8.5 km road tunnel at elevation of 1,790 m in the Pir Panjal range in the Indian state of Jammu and Kashmir connecting Banihal and Qazigund. It is a double tube tunnel consisting of two parallel tunnels - one for each direction of travel.

Source: https://www.business-standard.com/article/pti-stories/jammu-srinagar-national-highway-reopens-for-one-way-traffic-after-heavy-snowfall-118110400232_1.html

Q.64) In economics parlance the term, 'Side Pocket' refers to

- a) Back Series GDP Data

- b) Headline Inflation
- c) Core Inflation
- d) None of the above

Q.64) Solution (d)

A 'side pocket' is a way to segregate quality debt instruments in a debt portfolio, from those that have defaulted on interest or repayments, or are faced with a rating downgrade because of deteriorating financials. So, a fund house carves out the bad bonds from its main portfolio into a 'side pocket'.

Source: <https://www.livemint.com/Opinion/PP0G1odqiTAuROeRGwxd0O/Mutual-fund-The-concept-of-sidepocketing-how-it-matters.html>

Q.65) 'Mitakshara' and 'Dayabhaga' is associated with

- a) A work on astronomy
- b) A treatise on ancient Hindu law of inheritance
- c) An Agamic text
- d) A compendium on medicine

Q.65) Solution (b)

The Mitākṣarā is a vivṛti (legal commentary) on the Yajñavalkya Smṛiti best known for its theory of "inheritance by birth." It was written by Vijñāneśvara, a scholar in the Western Chalukya court in the late eleventh and early twelfth century. Along with the Dāyabhāga, it was considered one of the main authorities on Hindu Law from the time the British began administering laws in India. The entire Mitākṣarā, along with the text of the Yājñavalkya-smṛiti, is approximately 492 closely printed pages.

The Dāyabhāga is a Hindu law treatise written by Jīmūtavāhana which primarily focuses on inheritance procedure. The Dāyabhāga was the strongest authority in Modern British Indian courts in the Bengal region of India, although this has changed due to the passage of the Hindu Succession Act of 1956 and subsequent revisions to the act. Based on Jīmūtavāhana's criticisms of the Mitākṣarā, it is thought that his work is precluded by the Mitākṣarā. This has led many scholars to conclude that the Mitākṣarā represents the orthodox doctrine of Hindu law, while the Dāyabhāga represents the reformed version.

The central difference between the texts is based upon when one becomes the owner of property. The Dāyabhāga does not give the sons a right to their father's ancestral property until after his death, unlike Mitākṣarā, which gives the sons the right to ancestral property upon their birth. The digest has been commented on more than a dozen times.

Q.66) Consider the following statements with respect to 'Ease of Doing Business Grand Challenge'

1. The objective of this challenge is to invite innovative ideas based on cutting edge technology to reform Government processes.
2. The platform for the Grand Challenge is the Startup India Portal.

Select the correct statements

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

Q.66) Solution (c)

The Prime Minister of India launched a Grand Challenge on resolving seven identified Ease of Doing Business problems with the use of cutting edge technologies.

The objective of this challenge is to invite innovative ideas based on Artificial Intelligence, Internet of Things, Big Data Analytics, Blockchain and other cutting edge technology to reform Government processes. The platform for the Grand Challenge is the Startup India Portal.

Source: <http://pib.nic.in/newsite/PrintRelease.aspx?relid=185843>

Q.67) Consider the following statements with respect to a 'Decision Support System (DSS)'

1. It is a computer programme that helps in making sound rational decisions using mathematical programming and operation research techniques.
2. It can be used for effective implementation of government schemes

Select the correct statements

- a) 1 Only

- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.67) Solution (c)

IIT Kharagpur has devised the 'Decision Support System' (DSS) focusing on the 'Pradhan Mantri Ujjwala Yojana' for maximising (optimizing) the number of LPG connections, particularly in below poverty level (BPL) households

A decision support system (DSS) is a computer programme that helps in making sound rational decisions using mathematical programming and operation research techniques.

The DSS mathematical model devised at IIT KGP has found the optimum number of total (BPL) connections required in a region and the number of dealerships that need to be commissioned in a region over the policy time frame

Source: <https://economictimes.indiatimes.com/news/science/iit-researchers-devise-programme-to-maximise-lpg-connections/articleshow/66637738.cms>

Q.68) Consider the following statements with respect to 'Capital Adequacy ratio (CAR)'

1. It measures a bank's capital in relation to its risk-weighted assets.
2. CAR of 9% is prescribed under the Basel III norms

Select the correct statements

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

Q.68) Solution (a)

Under Basel III, the minimum capital adequacy ratio that banks must maintain is 8%. The capital adequacy ratio measures a bank's capital in relation to its risk-weighted assets. The capital-to-risk-weighted-assets ratio promotes financial stability and efficiency in economic systems throughout the world.

Source: <https://economictimes.indiatimes.com/markets/stocks/news/paathshala-capital-adequacy-under-basel-iii/articleshow/62150112.cms>

Q.69) Which of the following are examples of 'slash and burn' agriculture?

1. Conuco
2. Roca
3. Masole

Select the correct code:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.69) Solution (d)

The 'slash and burn' agriculture is known as 'Milpa' in Mexico and Central America, 'Conuco' in Venezuela, 'Roca' in Brazil, 'Masole' in Central Africa, 'Ladang' in Indonesia, 'Ray' in Vietnam.

In India, this primitive form of cultivation is called 'Bewar' or 'Dahiya' in Madhya Pradesh, 'Podu' or 'Penda' in Andhra Pradesh, 'Pama Dabi' or 'Koman' or 'Bringa' in Odisha, 'Kumari' in Western Ghats, 'Valre' or 'Waltre' in South-eastern Rajasthan, 'Khil' in the Himalayan belt, 'Kuruwa' in Jharkhand, and 'Jhumming' in the North-eastern region.

Q.70) The term 'Economic Capital Framework (ECF)' was in news recently in the context of

- a) Reserve Bank of India (RBI)
- b) World Trade Organisation (WTO)
- c) Ease of Doing Business
- d) MSMEs

Q.70) Solution (a)

Source: <https://www.livemint.com/Politics/56LV5g5ikPhDHQFiW6LreO/Expert-panel-on-RBIs-capital-framework-to-be-set-up-soon-s.html>

Q.71) Consider the following statements

1. The epistemology of Vaiśeṣika school of Hinduism accepted only two reliable means to knowledge - perception and inference
2. Samkhya is the ancient school of Indian materialism

Select the correct statements

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

Q.71) Solution (a)

Statement 1 - The epistemology of Vaiśeṣika school of Hinduism, like Buddhism, accepted only two reliable means to knowledge: perception and inference.

Statement 2 – Charvaka deals with Materialism.

Q.72) 'Green Growth Equity Fund' is a joint fund between

- a) BRICS Countries
- b) Quad Countries
- c) Member of International Solar Alliance
- d) None of the above

Q.72) Solution (d)

Green Growth Equity Fund

- India and the UK announced the launch of an Early Market Engagement for the joint UK-India Fund, namely a Green Growth Equity Fund
- It aims to leverage private sector investment from the City of London to invest in green infrastructure projects in India
- Both governments will invest up to £120 million each (i.e. totally £ 240 million)
- The joint fund which will be established under the NIIF framework.

Q.73) Consider the following statements about Permanent Structured Cooperation (PESCO)

1. It is an intergovernmental, binding, permanent framework and a structured process to gradually deepen defence cooperation within European Union framework
2. It is formed to counter the North Atlantic Treaty Organization

Select the correct statements

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

Q.73) Solution (a)

Permanent Structured Cooperation (PESCO)

- It is the part of the European Union's (EU) Common Security and Defence Policy (CSDP) in which 25 national armed forces pursue structural integration
- It is an intergovernmental, binding, permanent framework and a structured process to gradually deepen defence cooperation within EU framework
- PESCO is also open to NATO members also who wish to take part in it.
- There is no provision about the inclusion of non-EU NATO member.
- Denmark, which has an opt out from EU defence matters, and Malta, were the only EU countries not to sign up, along with Brexiting Britain.
- The participating Member States are: Austria, Belgium, Bulgaria, Czech Republic, Croatia, Cyprus, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain and Sweden.

Q.74) 'Project C.A.T' is

- a) A trap-neuter-return initiative for community cats in Mumbai
- b) A project aimed at conserving the wild tiger population, by Discovery Communications and World Wildlife Fund (WWF)
- c) A concept for a unmanned single-stage reusable spaceplane capable of horizontal take-off and landing by HAL
- d) None of the above

Q.74) Solution (b)

In order to protect and increase wild tiger population, nearly one million acres of protected habitat in India and Bhutan will be covered under a new private conservation effort.

The 'Project C.A.T - Conserving acres for Tigers' by Discovery Communications and NGO World Wildlife Fund (WWF) aims to conserve the wild tiger population, which has dropped by 96 per cent in the last century alone to only 4,000 left in the wild due to habitat loss and pervasive poaching.

This transboundary partnership will allow rangers to more closely monitor tiger health and other key scientific data, take additional anti-poaching safeguards, and maintain land and corridors to improve movement of all wild animals.

Discovery will also leverage its formidable creative capabilities and global multiplatform distribution of channels to 3 billion cumulative worldwide viewers to support WWF's Tx2 effort, which began in 2010, to double the population of wild tigers across the world by 2022.

Q.75) 'Aghanashini Lion Tailed Macaque Conservation Reserve' is located in

- a) Kerala
- b) Karnataka
- c) Tamil Nadu
- d) Goa

Q.75) Solution (b)

An area of 299.52 sq kms has been declared as the Aghanashini Lion-tailed Macaque Conservation Reserve in Karnataka.

Q.76) 'Bhudhaar', an initiative launched by Andhra Pradesh is related to

- a) Medical Insurance
- b) Crop Insurance
- c) Land Registrations
- d) Subsidised Electricity

Q.76) Solution (c)

Andhra Pradesh government has recently launched “Bhudhaar” initiative. It is aimed at enabling easy identification of details of the land parcel. Under this, each land parcel will be given a Bhudhaar number, an 11-digit unique figure. It would put an end to irregularities in land registration and corruption in revenue department.

Source: <https://www.thehindu.com/news/national/andhra-pradesh/naidu-launches-bhudhaar/article25551979.ece>

Q.77) The place called ‘Lusaka’ was recently in news. Where is it located?

- a) South East Asia
- b) Central Asia
- c) Northern Africa
- d) None of the above

Q.77) Solution (d)

It is located in Zambia

**Q.78) ‘Battle of Aberdeen’ is associated with**

- a) Natives of the Andaman Islands
- b) Natives of the Lakshadweep Islands
- c) Rohingyas of Myanmar
- d) Matuas of Bengal

Q.78) Solution (a)

It was fought between the Andamanese and the British

The Battle of Aberdeen, on the Andaman Islands close to Port Blair, was an armed conflict that occurred on May 14, 1859 between the natives of the Andaman islands, armed with arrows and spears, and the gun-bearing officers and to some extent the convicts of the penal settlement. There had been skirmishes with the British right from 1857 when the penal settlement was established.

Q.79) 'Virtual Climate Summit', is the brainchild of

- a) Denmark
- b) Sweden
- c) Norway
- d) Marshall Islands

Q.79) Solution (d)

The Marshall Islands is convening an entirely online Virtual Summit of the Climate Vulnerable Forum on 22 November.

The Virtual Climate Summit is the brainchild of Marshall Islands President Hilda Heine.

Q.80) Consider the following statements with respect to 'Climate Vulnerable Forum (CVF)'

1. It was formed to increase the accountability of industrialized nations for the consequences of global climate change.
2. It was founded by the Maldives during the 2015 United Nations Climate Change Conference

Select the correct statements

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

Q.80) Solution (a)

The Climate Vulnerable Forum (CVF) is a global partnership of countries that are disproportionately affected by the consequences of global warming. The forum addresses the negative effects of global warming as a result of heightened socioeconomic and environmental vulnerabilities. These countries actively seek a firm and urgent resolution to the current intensification of climate change, domestically and internationally.

The CVF was formed to increase the accountability of industrialized nations for the consequences of global climate change. It also aims to exert additional pressure for action to tackle the challenge, which includes local action by countries considered susceptible. Political leaders involved in this partnership are "using their status as those most vulnerable to climate change to punch far above their weight at the negotiating table". The governments which founded the CVF agree to national commitments to pursue low-carbon development and carbon neutrality.

The CVF was founded by the Maldives government before the 2009 United Nations Climate Change Conference in Copenhagen, which sought to increase awareness of countries considered vulnerable. Eleven governments from Africa, Asia, the Americas and the Pacific, representing the countries most vulnerable to climate change, met near the Maldives capital of Malé in November 2009. The governments issued a declaration expressing alarm at the pace of change and damage as a result of global warming, stating that these conditions are "an existential threat to our nations, our cultures and to our way of life" and "undermine the internationally-protected human rights of our people".

Q.81) Consider the following statements with respect to 'Quadricycles'

1. It cannot be used for personal use according to the Motor Vehicles Act 1988
2. It is being promoted as a replacement to the three-wheeler auto-rickshaws

Select the correct statements

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

Q.81) Solution (d)

Quadricycles can now be bought for personal usage, with the Ministry of Road Transport and Highways notifying insertion of the item 'Quadricycle' as a 'non-transport' vehicle under the Motor Vehicles Act 1988.

A quadricycle is a vehicle of the size of a three-wheeler but with four-tyres and is fully covered like a car. It has an engine like that of a three-wheeler. This makes it a cheap and safe mode of transport for last-mile connectivity

Though the government permitted the use of quadricycles for commercial purpose in June, the latest notification opens the door for their use for personal purpose.

Source: <https://www.thehindubusinessline.com/economy/logistics/quadricycles-for-personal-useget-governments-green-signal/article25580432.ece>

Q.82) Consider the following statements with respect to 'Hansen's disease'

1. It is a bacterial disease
2. It affects the skin and nerves which can lead to physical deformity and disability if left untreated

Select the correct statements

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

Q.82) Solution (c)

Leprosy, also known as Hansen's disease, is a bacterial disease which affects the skin and nerves which can lead to physical deformity and disability if left untreated. Despite a centuries-long stigma, it is not hereditary, it is completely curable, and is only mildly infectious – more than 85% of cases are non-infectious and over 95% of the population has a natural immunity to the disease.

Q.83) Consider the following statements with respect to 'Apep', which was recently in news.

1. It is capable of producing a gamma-ray burst
2. It is named after the serpentine Egyptian god of chaos

Select the correct code:

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

Q.83) Solution (c)

Astronomers have identified a 'nearby' star system with the potential to produce a gamma-ray burst, one of the most extreme energetic events in the universe.

The rare star is only 8,000 light years from Earth and is on the brink of a massive supernova explosion, expected to produce a dangerous gamma-ray burst.

The star is a part of a system nicknamed Apep, after the serpentine Egyptian god of chaos. It was believed that Ra, the Sun god, would battle with Apep every night; prayer and worship ensured Ra's victory and the return of the Sun.

Apep comprises of two hot, luminous stars - known to astronomers as Wolf-Rayets. They orbit each other every hundred years or so, according to researchers from the University of Sydney in Australia.

These stars could explode into supernovae at any time and could result in a cataclysmic gamma-ray event combining with the system's extreme conditions.

Wolf-Rayet stars are extremely massive bluish stars, containing the mass of 10 to 15 suns.

The blue-white color of the star indicates that its surface temperature is approximately 50,000 C.

Gamma-ray bursts (GRBs) are short-lived bursts of gamma-ray light, the most energetic form of light. Lasting anywhere from a few milliseconds to several minutes, GRBs shine hundreds of times brighter than a typical supernova and about a million trillion times as bright as the Sun.

When a GRB erupts, it is briefly the brightest source of cosmic gamma-ray photons in the observable Universe.

When astronomers looked at the number of bursts versus how long they lasted, they found two different classes of bursts: long-duration and short-duration.

These two classes are likely created by different processes, but the end result in both cases is a brand new black hole.

Long-duration bursts last anywhere from two seconds to a few hundreds of seconds (several minutes), with an average time of about 30 seconds. They are associated with the deaths of massive stars in supernovas; though not every supernova produces a gamma-ray burst.

Short duration bursts are those that last less than two seconds; lasting anywhere from a few milliseconds to two seconds with an average duration of about 0.3 seconds (or 300 milliseconds).

These bursts appear to be associated with the merger of two neutron stars into a new black hole or a neutron star with a black hole to form a larger black hole.

Fortunately, Apep appears not to be aimed at Earth, because a strike by a gamma-ray burst from this proximity could strip ozone from the atmosphere, drastically increasing our exposure to UV light from the Sun.

Q.84) Consider the following statements with respect to 'Mountain gorilla'

1. It is native to South East Asia
2. It is listed as critically endangered under the IUCN Red list

Select the correct code:

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

Q.84) Solution (d)

The mountain gorilla (*Gorilla beringei beringei*) is one of the two subspecies of the eastern gorilla. The subspecies is listed as endangered by the IUCN, with only two surviving populations. One is found in the Virunga Mountains of East Africa in three bordering national parks: Mgahinga Gorilla National Park in Uganda, Volcanoes National Park in Rwanda, and Virunga National Park in the Democratic Republic of Congo (DRC). The other population is found in Uganda's Bwindi Impenetrable National Park. A count in 2018 put the mountain gorilla population at just over 1,000. The species was previously listed as critically endangered until 2018.

Q.85) 'Rothschild's giraffe' is listed as _____ under IUCN Red List

- a) Endangered
- b) Near Threatened
- c) Vulnerable
- d) Extinct

Q.85) Solution (b)

Rothschild's giraffe has gone from endangered to near threatened.

The International Union for Conservation of Nature (IUCN) Red List classifies species according to their extinction risks on a spectrum from "extinct" to "least concern."

Source: <https://www.the-scientist.com/news-opinion/iucn-red-list-update-signals-hope-for-gorillas-65105>

Q.86) 'Greenhouse Gas Bulletin' is published by

- a) World Meteorological Organization
- b) World Economic Forum
- c) UN Environment
- d) Climate Vulnerable Forum

Q.86) Solution (a)

The Atmospheric Environment and Research Division of WMO's Research Department publishes the WMO-GAW Annual Greenhouse Gas Bulletins. Each year, these bulletins will report the latest trends and atmospheric burdens of the most influential, long-lived greenhouse gases; carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), as well as a summary of the contributions of the lesser gases. The Bulletins represent the consensus of a consortium of networks operated since the mid 1980s. These three major gases alone contribute about 88% of the increase in radiative forcing of the atmosphere by changes in long-lived greenhouse gases occurring since the beginning of the industrial age (since 1750).

Source: <https://www.hindustantimes.com/editorials/climate-change-there-is-no-room-for-complacency/story-qygwkyBNA5lZuLdcL8jerL.html>

Q.87) Consider the following statements with respect to 'World Meteorological Organization (WMO)'

1. It is a specialized agency of the United Nations
2. It is headquartered in Geneva, Switzerland

Select the correct code:

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

Q.87) Solution (c)

The World Meteorological Organization (WMO) is an intergovernmental organization with a membership of 191 Member States and Territories. Its current Secretary-General is Petteri Taalas and the President of the World Meteorological Congress, its supreme body, is David Grimes. The Organization is headquartered in Geneva, Switzerland.

It followed on from the International Meteorological Organization, founded in 1873, a non-governmental organization. Reforms of status and structure were proposed from the 1930s, culminating in the World Meteorological Convention signed on 11 October 1947 which came into force on 23 March 1950. It formally became the World Meteorological Organization on 17 March 1951, and was designated as a specialized agency of the United Nations.

Q.88) Consider the following statements with respect to 'Stratospheric Aerosol Injection (SAI)'

1. It could limit the effect and impact of climate change due to rising levels of greenhouse gases
2. It involves injection of all the inert gases

Select the correct code:

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

Q.88) Solution (a)

The ability of stratospheric sulfate aerosols to create a global dimming effect has made them a possible candidate for use in solar radiation management climate engineering projects to limit the effect and impact of climate change due to rising levels of greenhouse gases. Delivery of precursor sulfide gases such as sulfuric acid, hydrogen sulfide (H₂S) or sulfur dioxide (SO₂) by artillery, aircraft and balloons has been proposed. It presently appears that this proposed method could counter most climatic changes, take effect rapidly, have very low direct implementation costs, and be reversible in its direct climatic effects.

It has been suggested that the direct delivery of precursors could be achieved using sulfide gases such as dimethyl sulfide, sulfur dioxide (SO₂), carbonyl sulfide, or hydrogen sulfide (H₂S). These compounds would be delivered using artillery, aircraft (such as the high-flying F-15C) or balloons, and result in the formation of compounds with the sulfate anion SO₄²⁻

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/scientists-mull-stratospheric-barrier-to-curb-warming/article25587354.ece>

Q.89) The 'Bo Tribe' was indigenous to

- a) Andamans
- b) Haiti
- c) Hawaii
- d) Papua New Guinea

Q.89) Solution (a)

The Bo were one of the ten indigenous tribes of the Great Andamanese people, originally living on the western coast of North Andaman Island in the Indian Ocean.

Source: <https://indianexpress.com/article/explained/north-sentinel-island-andaman-nicobar-tribe-american-killed-5460144/>

Q.90) 'Warsaw International Mechanism' is associated with

- a) Climate Change
- b) Disaster Risk Reduction
- c) Proliferation of missile and unmanned aerial vehicle technology
- d) Chemical and biological weapons

Q.90) Solution (a)

At COP19 (November 2013) in Warsaw, Poland, the COP established the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (Loss and Damage Mechanism), to address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change.

At the 19th Conference of the Parties meeting of the UNFCCC in 2013 in Warsaw, Poland, the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts was established. At the 20th Conference of the Parties in Lima, Peru (2014), the work plan of the executive committee of the Warsaw International Mechanism was approved.

Read More -

http://unfccc.int/adaptation/workstreams/loss_and_damage/items/8134.php

Q.91) Consider the following statements with respect to 'hantaviruses'

1. It is transmitted to humans who inhale the virus from the urine, faeces, or saliva of infected rodents
2. It causes severe and fatal respiratory infections

Select the correct statements

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

Q.91) Solution (c)

First identified in 1993, hantaviruses cause severe and sometimes fatal respiratory infections and are known to infect lung cells. Though relatively rare, infections caused by them are expected to increase in the coming decades as temperatures across the globe rise due to climate change. The danger is that we are totally unprepared for this possibility. Hantavirus is transmitted to humans who inhale the virus from the urine, faeces, or saliva of infected rodents. Infection with hantavirus can progress to Hantavirus Pulmonary Syndrome (HPS). Early HPS symptoms include fatigue, fever and muscle aches, followed after a week or so by coughing and shortness of breath. HPS has a mortality rate of around 40%. No treatments or vaccines are available.

Q.92) Consider the following statements with respect to 'Global Compact for Migration'

1. It addresses issues such as how to protect migrants and how to integrate them into new countries or how to return them to their original home countries.
2. It is a non-binding "intergovernmental negotiated agreement"
3. It is consistent with target 10.7 of the 2030 Agenda for Sustainable Development

Select the correct code:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.92) Solution (d)

The Global Compact for Safe, Orderly and Regular Migration is expected to be the first, intergovernmentally negotiated agreement, prepared under the auspices of the United Nations, to cover all dimensions of international migration in a holistic and comprehensive manner. It presents a significant opportunity to improve the governance on migration, to address the challenges associated with today's migration, and to strengthen the contribution of migrants and migration to sustainable development.

United Nations conference to adopt the compact will be held in Marrakech, Morocco, on 10–11 December 2018.

The Global Compact is framed consistent with target 10.7 of the 2030 Agenda for Sustainable Development in which Member States committed to cooperate internationally to facilitate safe, orderly and regular migration and its scope is defined in Annex II of the New York Declaration.

Q.93) The 'Data City Programme' was recently launched by which of the following states?

- a) Karnataka
- b) Maharashtra
- c) Andhra Pradesh
- d) Tamil Nadu

Q.93) Solution (a)

Data City project aims at solving burning issues of the city using innovative solutions developed by startups from a pool of applications. It is a seven month long programme where the corporates, startups, government agencies and citizens will work closely to find solutions to city's growing issues like mobility, water, waste management, energy, buildings, transparency and security. It is the first Data City programme launched in Asia.

Source: <https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/asias-first-data-city-programme-launched-in-bengaluru/articleshow/66770404.cms>

Q.94) Consider the following statements with respect to 'Peste des petits ruminants (PPR)'

1. It is a highly contagious viral disease that afflicts goats and sheep
2. It is completely eradicated in India

Select the correct statements

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

Q.94) Solution (a)

News: A smart vaccine has recently been developed for Goat Plague disease by the researchers from UK and India

Goat plague is a highly contagious viral disease that afflicts goats and sheep in many parts of the country. It is caused by a morbillivirus in the family of paramyxoviruses, that is related to rinderpest, measles and canine distemper. It kills small ruminants in large numbers unless they are vaccinated. Apart from India, goat plague is prevalent in many African countries, West Asia, China and Mongolia. It is listed in the OIE (World organization for Animal Health) Terrestrial Animal Health Code, and countries are obligated to report the disease to the OIE.

Source: <https://www.thehindubusinessline.com/economy/agri-business/india-uk-team-develops-a-smart-vaccine-for-goat-plague/article25579680.ece>

Q.95) Consider the following statements with respect to 'Logix India'

1. It is being organized by the Federation of Indian Export Organisations (FIEO)
2. It is aimed at improving logistics cost effectiveness and operational efficiencies for India's Global Trade

Select the correct code:

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

Q.95) Solution (c)

'Logix India 2019' will be held from January 31 to February 2, 2019, in New Delhi. The event is aimed at improving logistics cost effectiveness and operational efficiencies for India's Global Trade.

Federation of Indian Export Organisations, which is organising the event, will also focus on investment opportunities in infrastructure development, warehouse consolidation, technology integration and IT enablement, and killing of manpower.

Source: <http://pib.nic.in/newsite/PrintRelease.aspx?relid=185968>

Q.96) The effect of POPs on human and environmental health was discussed, with intention to eliminate or severely restrict their production, by the international community at the

- a) Montreal Protocol
- b) Kyoto Protocol
- c) Stockholm Convention
- d) Minamata Convention

Q.96) Solution (c)

The Stockholm Convention on POP was adopted at a Conference of Plenipotentiaries in Stockholm, Sweden (2001) and entered into force in 2004.

POPs

- They are organic chemical substances, that is, they are carbon-based.

- They possess a particular combination of physical and chemical properties such that, once released into the environment, they –
 - Remain intact for exceptionally long periods of time (many years).
 - Widely distributed in environment because of natural processes involving soil, water and, most notably, air.
 - Though not soluble in water, accumulate in the fatty tissue of living organisms including humans, and are found at higher concentrations at higher levels in the food chain.
- In addition, POPs concentrate in living organisms through another process called bioaccumulation.

Q.97) 'Gupta sculpture' was influenced by:

1. Mathura school
2. Amravati school
3. Gandhara school

Select the correct code:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Q.97) Solution (a)

With the Gupta period India entered upon the classical phase of sculpture. By the efforts of the centuries, techniques of art were perfected, definite types were evolved, and ideals of beauty were formulated with precision.

In the Gupta period all the trends and tendencies of the artistic pursuits of the proceeding phases reached their culmination in a unified plastic tradition of supreme importance in Indian History. Gupta sculpture thus is the logical outcome of the early classical sculpture of Amravati and Mathura. Its plasticity is derived from that of Mathura and its elegance from that of Amravati.

Q.98) 'World Energy Outlook' Report is given by

- a) Organization for Economic Cooperation and Development (OECD)

- b) UNFCCC
- c) International Energy Agency
- d) World Bank

Q.98) Solution (c)

The annual World Energy Outlook is the International Energy Agency's flagship publication, widely recognised as the most authoritative source for global energy projections and analysis. It represents the leading source for medium to long-term energy market projections, extensive statistics, analysis and advice for both governments and the energy business.

The IEA is an autonomous organisation which works to ensure reliable, affordable and clean energy for its 29 member countries and beyond. The IEA has four main areas of focus: energy security, economic development, environmental awareness and engagement worldwide.

Q.99) Keibul Lamjao is India's only floating National Park. Which of the following lakes hosts this park?

- a) Dal Lake
- b) Wular Lake
- c) Chilka Lake
- d) Loktak Lake

Q.99) Solution (d)

Loktak Lake is the largest fresh water lake in North-East India. It hosts only floating National Park in the World – Keibul Lamjao. Sangai, an antlered deer is endemic to it.

Q.100) 'Laffer curve' is related to

- a) Inflation
- b) Balance of Payment
- c) Taxation
- d) Employment

Q.100) Solution (c)

The Laffer Curve is a theory developed by supply-side economist Arthur Laffer to show the relationship between tax rates and the amount of tax revenue collected by governments. The curve is used to illustrate Laffer's main premise that the more an activity — such as production — is taxed, the less of it is generated.

Q.101) 'Inclusive Wealth Report 2018' report is published by

1. It evaluates the capacities and performance of the nations around the world to measure sustainability of economy and wellbeing of their people
2. It is a biennial report led by the UN Environment

Select the correct statements

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

Q.101) Solution (c)

The Inclusive Wealth Report (IWR) is a biennial effort led by the UN Environment to evaluate the capacities and performance of the nations around the world to measure sustainability of economy and wellbeing of their people.

The Inclusive Wealth Index provides important insights into long-term economic growth and human well-being. The Index measures the wealth of nations through a comprehensive analysis of a country's productive base and the country's wealth in terms of progress, well-being and long-term sustainability. It measures all assets which human well-being is based upon, in particular, produced, human and natural capital to create and maintain human well-being over time.

Q.102) Consider the following statements with respect to 'Water Security Indicator Model (WSIM)'

1. It identifies locations on Earth's terrestrial surface that are currently or forecast to be experiencing deficits or surpluses of fresh water
2. It is an open-source project developed by International Water Association

Select the correct code:

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

Q.102) Solution (a)

The Water Security Indicator Model (WSIM) is an open-source project developed by ISciences, LLC.

WSIM identifies locations on Earth's terrestrial surface that are currently or forecast to be experiencing deficits or surpluses of fresh water. It operates under the premise that populations are adapted to their local climate and can maintain their activities (agriculture, municipal services, etc.) within the anticipated variations of this climate.

Q.103) Consider the following statements with respect to 'Hog Deer'

- 1. It is an endangered species in the IUCN Red List
- 2. It is protected under Schedule I of the Indian Wild Life (Protection) Act, 1972

Select the correct code:

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

Q.103) Solution (c)

It is a small deer whose habitat ranges from Pakistan, through northern India, to mainland southeast Asia, which inhabits much of the Indo-Gangetic Plains of Pakistan, northern India, Nepal, Bangladesh, southwestern Yunnan Province in China, all the way to western Thailand. Introduced populations also exist in Australia and Sri Lanka.

The hog deer or Pada is an endangered species in the IUCN Red List and is protected under Schedule I of the Indian Wild Life (Protection) Act, 1972.

Source: <https://www.downtoearth.org.in/news/wildlife-biodiversity/genetic-study-reveals-presence-of-rare-sub-species-of-hog-deer-62261>

Q.104) Consider the following statements about 'Sea of Azov'

1. It is linked by the narrow Strait of Kerch to the Black Sea
2. It is bounded in the northwest by Ukraine, in the southeast by Russia

Select the correct code:

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

Q.104) Solution (c)

The Sea of Azov is a sea in Eastern Europe. To the south it is linked by the narrow (about 4 km or 2.5 mi) Strait of Kerch to the Black Sea, and it is sometimes regarded as a northern extension of the Black Sea. The sea is bounded in the northwest by Ukraine, in the southeast by Russia.

The Don and Kuban are the major rivers that flow into it. The Sea of Azov is the shallowest sea in the world.



Q.105) The term 'Domestic Content Requirement' is sometimes seen in the news with reference to

- a) Developing solar power production in our country
- b) Granting licences to foreign T.V. channels in our country
- c) Exporting our food products to other countries
- d) Permitting foreign educational institutions to set up their campuses in our country

Q.105) Solution (a)

India's Jawaharlal Nehru National Solar Mission (JNNSM) favours Indian manufacturers of solar panels and cells in government procurement. This is known as DCR.

The WTO's Appellate Body has declared domestic content requirement (DCRs) in JNNSM as illegal.