

Q.1) When CRR is increased by Reserve Bank of India, it will result into

- a) Centre will have less money to lend
- b) Commercial banks will have more money to lend
- c) Reserve Bank of India will have less money to lend
- d) Commercial banks will have less money to lend

Q.1) Solution (d)

Cash Reserve Ratio refers to the fraction of the total Net Demand and Time Liabilities (NDTL) of a Scheduled Commercial Bank held in India, that it has to maintain as cash deposit with the Reserve Bank of India (RBI). The requirement applies uniformly to all banks in the country irrespective of an individual bank's financial situation or size. In contrast, certain countries e.g. China stipulates separate reserve requirements for 'large' and 'small' banks.

As per the RBI Act 1934, all Scheduled Commercial Banks (that includes public and private sector banks, foreign banks, regional rural banks and co-operative banks) are required to maintain a cash balance on average with the RBI on a fortnightly basis to cater to the CRR requirement. Non-Bank Financial Corporations (NBFCs) are outside the purview of this reserve requirement. Act also authorizes RBI to stipulate an additional or incremental CRR, which, however, has not been put in place by RBI.

Presently, banks are not paid any interest on behalf of the RBI for parking the required cash. If a bank fails to meet its required reserve requirements, the RBI is empowered to impose a penalty by charging a penal interest rate.

When banks source deposits from us, their primary objective is to lend to earn a 'spread'. Left to themselves, banks may like to maximise their lending and keep their idle cash at a minimum so that profits are higher. But if much of the funds are lent out and there's a sudden rush to withdraw, banks will struggle to meet the repayments.

Q.2) Consider the following statements about Taiga Biome

1. It is also known as Boreal forest
2. In taiga, the vegetation is composed of dwarf shrubs, sedges and grasses, mosses, and lichens

Select the correct statements

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

Q.2) Solution (a)

It is also known as boreal forest or snow forest, is a biome characterized by coniferous forests consisting mostly of pines, spruces and larches.

The taiga is the world's largest biome apart from the oceans. In North America it covers most of inland Canada and Alaska as well as parts of the extreme northern continental United States.

Taiga is the world's largest land biome, making up 29% of the world's forest cover.

Q.3) Consider the following statements about Green Climate Fund (GCF)

1. It is a fund established within the framework of the UNFCCC to assist developing countries in adaptation and mitigation practices to counter climate change.
2. It was established during the Cancun Summit

Select the correct statements

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

Q.3) Solution (c)

The Copenhagen Accord established during the 2009 United Nations Climate Change Conference (COP-15) in Copenhagen mentioned the "Copenhagen Green Climate Fund". The fund was formally established during the 2010 United Nations Climate Change Conference in Cancun as a fund within the UNFCCC framework. Its governing instrument was adopted at the 2011 United Nations Climate Change Conference (COP 17) in Durban, South Africa.

The Green Climate Fund (GCF) is a fund established within the framework of the UNFCCC to assist developing countries in adaptation and mitigation practices to counter climate change. The GCF is based in the new Songdo district of Incheon, South Korea. It is governed by a Board of 24 members and initially supported by a Secretariat.

The objective of the Green Climate Fund is to "support projects, programmes, policies and other activities in developing country Parties using thematic funding windows".

Q.4) What principle/law explains working of the hydraulic brakes in automobiles?

- a) Law of conservation of momentum
- b) Law of conservation of energy
- c) Pascal's law
- d) Bernoulli's principle

Q.4) Solution (c)

A hydraulic brake is an arrangement of braking mechanism which uses brake fluid, typically containing glycol ethers or diethylene glycol, to transfer pressure from the controlling mechanism to the braking mechanism.

Pascal's Law is a principle in fluid mechanics that states that a pressure change occurring anywhere in a confined incompressible fluid is transmitted throughout the fluid such that the same change occurs everywhere.

Q.5) Consider the following statements about Economic and Social Council (ECOSOC)

1. The UN Charter established ECOSOC in 1945 as one of the six main organs of the United Nations.
2. The Council has 54 member states, which are elected by the United Nations General Assembly for overlapping three-year terms.

Select the correct statements

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

Q.5) Solution (c)

The United Nations Economic and Social Council (ECOSOC) is one of the six principal organs of the United Nations, responsible for coordinating the economic, social, and related work of 15 UN specialised agencies, their functional commissions and five regional commissions. The ECOSOC has 54 members.

ECOSOC serves as the central forum for discussing international economic and social issues and formulating policy recommendations addressed to member states and the United Nations system. A number of non-governmental organisations have been granted consultative status to the Council to participate in the work of the United Nations.

The Council has 54 member states out of the 193 UN member states, which are elected by the United Nations General Assembly for overlapping three-year terms. Seats on the Council are based on geographical representation with 18 allocated to African states, 13 to Asian states, 8 to East European states, 13 to Latin American and Caribbean states and 13 to West European and other states.

Q.6) Which of the following is/are correctly matched?

Straits	Location
1. Strait of Hormuz	Iran and UAE
2. Strait of Malacca	Malaysia and Indonesia

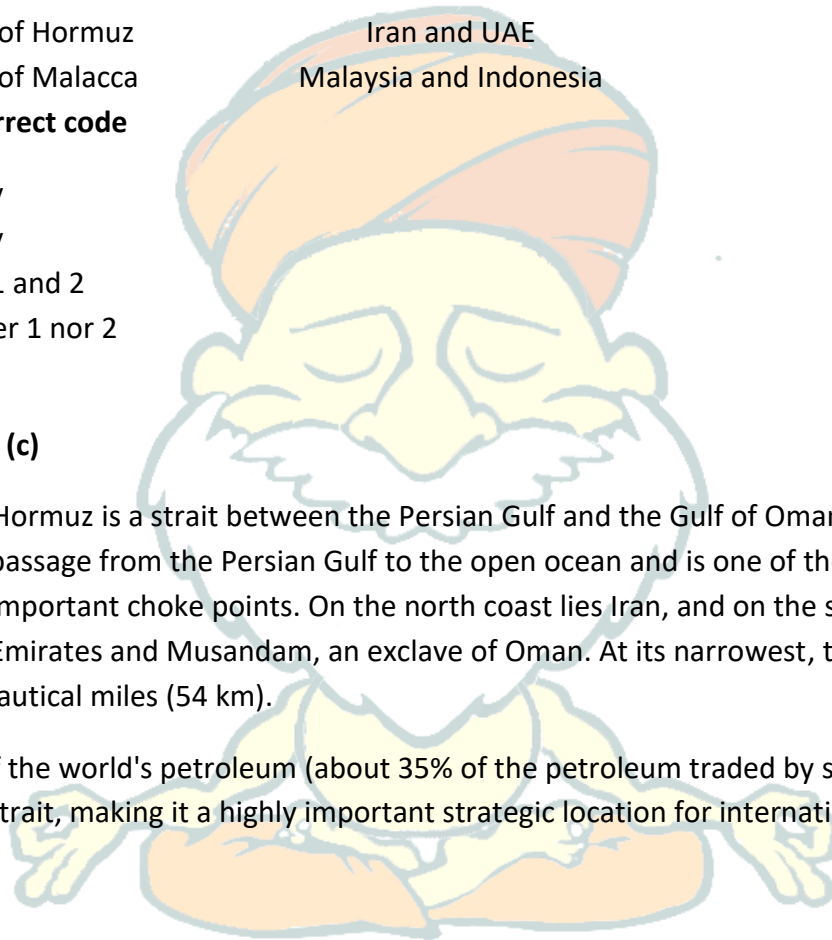
Select the correct code

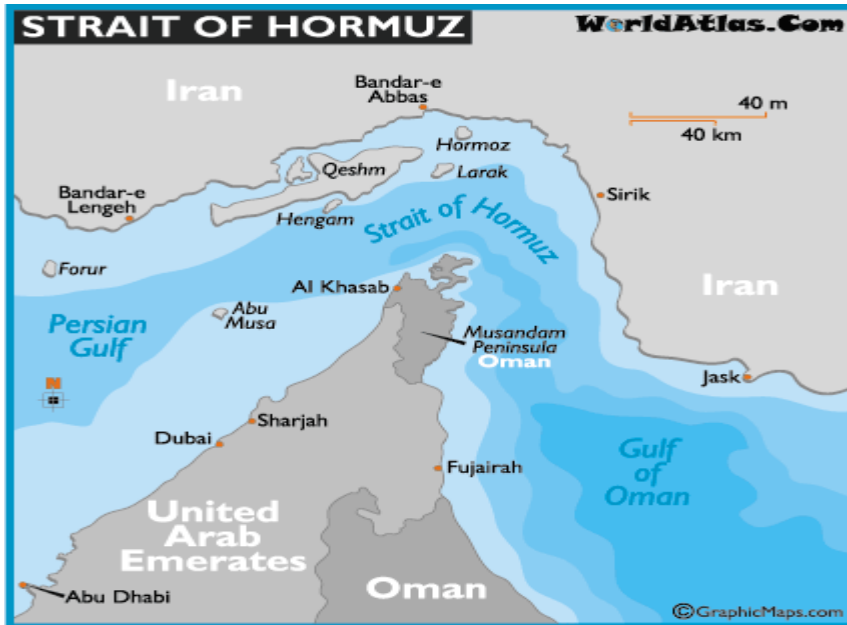
- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.6) Solution (c)

The Strait of Hormuz is a strait between the Persian Gulf and the Gulf of Oman. It provides the only sea passage from the Persian Gulf to the open ocean and is one of the world's most strategically important choke points. On the north coast lies Iran, and on the south coast the United Arab Emirates and Musandam, an exclave of Oman. At its narrowest, the strait has a width of 29 nautical miles (54 km).

About 20% of the world's petroleum (about 35% of the petroleum traded by sea) passes through the strait, making it a highly important strategic location for international trade.





The Strait of Malacca or Straits of Malacca is a narrow, 550 mi (890 km) stretch of water between the Malay Peninsula (Peninsular Malaysia) and the Indonesian island of Sumatra. It is named after the Malacca sultanate that ruled over the archipelago between 1400 and 1511.



Source: <http://indianexpress.com/article/opinion/columns/oil-indsutry-middle-east-america-crude-oil-prices-4924076/>

Q.7) Recently, the 'Quadrilateral' grouping was in news. Which of the following countries is not a part of it?

- India
- Australia

- c) Japan
- d) South Africa

Q.7) Solution (d)

Quadrilateral Circuit – USA, Japan, India and Australia

Source: <http://www.thehindu.com/opinion/lead/beyond-big-game-hunting/article19988330.ece>

Q.8) Consider the following statements about National Financial Reporting Authority (NFRA)

1. The Companies Act 2013 provides for setting up NFRA
2. NFRA will set accounting and auditing standards, monitor and enforce compliance with the standards, and oversee the accounting profession's record of ensuring compliance

Select the correct statements

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

Q.8) Solution (c)

The Companies Act 2013 provides for setting up a National Financial Reporting Authority (NFRA). The recent report of Parliament's standing committee on finance on the Companies (Amendment) Bill 2016 has reopened what appeared to be the settled position on auditor regulation.

NFRA has a larger remit than NACAS (National Advisory Committee on Accounting Standards), which it is meant to replace. NACAS only recommends accounting standards. NFRA will set accounting and auditing standards, monitor and enforce compliance with the standards, and oversee the accounting profession's record of ensuring compliance. It will take away significant regulatory powers from the Institute of Chartered Accountants of India (ICAI).

Source: <http://www.thehindu.com/business/Economy/note-ban-firms-put-drew-17000-cr/article19987926.ece>

Q.9) "InsuResilience" is associated with

- a) BRICS
- b) G7
- c) G4
- d) Climate Vulnerable Forum (CVF)

Q.9) Solution (b)

- The G7 Initiative on Climate Risk Insurance aims to increase access to direct or indirect insurance coverage against the impacts of climate change for up to 400 million of the most vulnerable people in developing countries by 2020.
- According to recent estimates, only about 100 million people in developing countries and emerging economies are currently covered by climate risk insurance.
- Also known as "InsuResilience", the initiative was adopted at the G7 Summit in Elmau/Germany in June 2015 and is to be implemented in close partnership between the G7 states, developing countries and emerging economies.
- The G7 recognizes that significant funding will be necessary and can leverage several billion USD of risk from the private insurance and re-insurance industry.
- The overall objective of the initiative is to stimulate the creation of effective climate risk insurance markets and the smart use of insurance-related schemes for people and risk-prone assets in developing countries.

Source: <https://www.theguardian.com/environment/2017/nov/05/the-cop23-climate-change-summit-in-bonn-and-why-it-matters>

Q.10) Consider the following statements about Conference of the Parties (COP)

1. The COP is the supreme decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC)
2. Germany is the designated nation to run the COP23

Select the correct statements

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

Q.10) Solution (a)

The COP is the supreme decision-making body of the Convention. All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements

A key task for the COP is to review the national communications and emission inventories submitted by Parties. Based on this information, the COP assesses the effects of the measures taken by Parties and the progress made in achieving the ultimate objective of the Convention.

The COP meets every year, unless the Parties decide otherwise. The first COP meeting was held in Berlin, Germany in March, 1995. The COP meets in Bonn, the seat of the secretariat, unless a Party offers to host the session. Just as the COP Presidency rotates among the five recognized UN regions - that is, Africa, Asia, Latin America and the Caribbean, Central and Eastern Europe and Western Europe and Others – there is a tendency for the venue of the COP to also shift among these groups.

COPs are always run by a designated nation and for the first time this will be one of the small island nations that are most at risk from the sea-level rise and extreme storms that climate change is bringing. Fiji's Prime Minister, Frank Bainimarama, is the COP president, though the summit is being held in Germany for practical reasons. Fiji suffered damages of well over \$1bn after Cyclone Winston struck in 2016, which is likely to focus attention on the contentious issue of compensation for climate damage and adapting to future threats, as much as cutting emissions.

Source: <http://www.thehindu.com/news/international/global-climate-talks-begin-in-germany-with-fiji-at-the-helm/article19991927.ece>

Q.11) Consider the following statements about 'Proxima Centauri'

1. It is the closest star to the Sun
2. It is orbited by the Earth-sized temperate world Proxima b, discovered in 2016 and the closest exoplanet to the solar system

Select the correct statements

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

Q.11) Solution (c)

Proxima Centauri or Alpha Centauri C, is a red dwarf, a small low-mass star, about 4.25 light-years (1.30 pc) from the Sun in the constellation of Centaurus.

It was discovered in 1915 by the Scottish astronomer Robert Innes, the Director of the Union Observatory in South Africa, and is the nearest-known star to the Sun.

With an apparent magnitude of 11.05, it is too faint to be seen with the naked eye. Proxima Centauri forms a third component of the Alpha Centauri binary star system, currently with a separation of about 12,950 AU (1.94 trillion km) and an orbital period of 550,000 years.

Because of Proxima Centauri's proximity to Earth, its angular diameter can be measured directly. The star is about one-seventh the actual diameter of the Sun. It has a mass about an eighth of the Sun's mass (M_{\odot}), and its average density is about 40 times that of the Sun. Although it has a very low average luminosity, Proxima is a flare star that undergoes random dramatic increases in brightness because of magnetic activity. The star's magnetic field is created by convection throughout the stellar body, and the resulting flare activity generates a total X-ray emission similar to that produced by the Sun. The mixing of the fuel at Proxima Centauri's core through convection and its relatively low energy-production rate mean that it will be a main-sequence star for another four trillion years, or nearly 300 times the current age of the universe.

In 2016, the European Southern Observatory announced the discovery of Proxima b, a planet orbiting the star at a distance of roughly 0.05 AU (7.5 million km) with an orbital period of approximately 11.2 Earth days. Its estimated mass is at least 1.3 times that of the Earth. The equilibrium temperature of Proxima b is estimated to be within the range of where water could exist as liquid on its surface, thus placing it within the habitable zone of Proxima Centauri, although because Proxima Centauri is a red dwarf and a flare star, whether it could support life is disputed. Previous searches for orbiting companions had ruled out the presence of brown dwarfs and supermassive planets.

Source: <http://www.thehindu.com/sci-tech/science/proxima-centauri-may-host-planetary-system/article19993333.ece>

Q.12) Consider the following statements about 'Tholpavakoothu'

1. It is a form of shadow puppetry practiced in Karnataka
2. The puppets used are made of leather

Select the correct statements

- a) 1 Only

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

Q.12) Solution (b)

Tholpavakoothu a form of shadow puppetry that is practiced in Kerala, India. It is performed using leather puppets as a ritual dedicated to Bhadrakali and is performed in Devi temples in specially built theatres called koothumadams. This art form is especially popular in the Palakkad, Thrissur and Malappuram districts of Kerala.

The puppets used in Tholpavakoothu used to be made out of deerskin but are now typically made from goatskin. The puppets are painted in vegetable dyes, as these dyes last long. Some puppets can be as tall as four feet. The puppets are controlled using two sticks; the puppeteer holds the puppet in one hand while its limbs are manipulated using a thinner stick held in the puppeteer's other hand.

Source: <http://www.thehindu.com/news/national/kerala/strings-attached/article19982142.ece>

Q.13) 'Blackbuck' is found in which of the following countries?

1. India
2. Nepal
3. Sri Lanka

Select the correct statements

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

Q.13) Solution (a)

The Blackbuck formerly occurred across almost the whole of the Indian subcontinent south of the Himalaya. Their range decreased during the 20th century and they are now extinct in Bangladesh and Pakistan. Blackbucks are still present in the terai zone of Nepal (Bashistha et al. 2012). The species has been introduced to the United States of America (Texas) and Argentina.

It is also known as Indian Antelope.

Native: India; Nepal

Regionally extinct: Bangladesh; Pakistan

Introduced: Argentina; United States

News: Uttar Pradesh Cabinet approves Blackbuck Conservation Reserve in the Trans-Yamuna region of Allahabad. The State Cabinet has approved a Blackbuck Conservation Reserve in the Meja Forest Division, in the Trans-Yamuna region of Allahabad near the Madhya Pradesh border, known for its rocky, undulating and arid terrain.

Source: <http://www.thehindu.com/news/national/other-states/ias-officer-throws-his-weight-behind-blackbuck/article19987987.ece>

Q.14) Parambikulam Tiger Reserve is located in which state?

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

Q.14) Solution (b)

Parambikulam Tiger Reserve, which also includes the erstwhile Parambikulam Wildlife Sanctuary, is a 391 square kilometres (151.0 sq mi) protected area in Chittur taluk in Palakkad district of Kerala state, South India. The wildlife sanctuary, which had an area of 285 square kilometres (110 sq mi) was established in 1973. It is in the Sungam range of hills between the Anaimalai Hills and Nelliampathy Hills.

Source: <http://www.thehindu.com/news/national/kerala/fluttering-about-gaily-in-tiger-reserve/article19884200.ece>

Q.15) Which of the following statements is/are correct?

1. The lotus leaf is a hydrophilic material
2. Hydrophobic surfaces are ones with a low surface energy that therefore do not attract water to them

Select the correct statements

- a) 1 Only
- b) 2 Only

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

Q.15) Solution (b)

In the case of a liquid resting on a solid surface in a gaseous environment, the contact angle can be defined as the angle formed by the liquid at the gas, liquid, solid boundary. Due to the high surface tension of water, it tends to form spherical droplets on surfaces, so as to reduce its area and thus energy. The contact angle is therefore generally large, although this depends on the surface material. Due to its high surface tension, water has a high capacity for bonding if the surface is right. Hydrophobic surfaces are ones with a low surface energy that therefore do not attract water to them. For these materials the contact angle is greater than 90° . Hydrophilic surfaces, such as glass, have a high surface energy and water spreads out over them. For these materials the contact angle is less than 90° .

Two excellent examples of natural superhydrophobic materials are the lotus leaf and the gecko foot. In fact, the superhydrophobic property is sometimes referred to as the lotus effect. The leaves of the lotus consist of micro- and nano-scale papillae that are coated in a hydrophobic wax. This double structure makes the leaves superhydrophobic and water makes a contact angle of up to 170° . The resulting selfcleaning effect means that lotus leaves are free from dirt and bacteria, despite growing in dirty ponds. Similarly, the way geckos can walk quickly while upside down fascinates lay people and scientists alike. The pads of a gecko's feet are covered with tiny fibres made of the protein keratin. These enable the gecko to adhere strongly to a surface but at the same time allow it to lift its feet quickly so that it can walk along a surface at speed without falling off. If these fibres become dirty, the function would be lost. In recent years, it has been discovered that the gecko secretes an oil that imparts superhydrophobic functionality to keep the toe fibres clean and therefore in good working order.

News: Superhydrophobic medical cotton has been developed by a team of researchers at IIT Guwahati. It removed up to 95% of oil-spill of different densities i.e both light and heavy oils repetitively at least 100 times.

Source: <http://www.thehindu.com/sci-tech/science/iit-guwahati-uses-superhydrophobic-cotton-to-remove-oil-spill/article19981565.ece>

Q.16) The Emissions Gap Report is released by

- a) United Nations Environment Programme
- b) World Economic Forum
- c) Greenpeace

d) Conservation International

Q.16) Solution (a)

Published by the United Nations Environment Programme (UNEP)

Source: <http://www.thehindu.com/sci-tech/energy-and-environment/un-predicts-3c-temperature-rise-by-end-of-the-century/article19961730.ece>

Q.17) Recently, a species of wild banana named '*Musa paramjitiana*' was discovered that grows to a height of nine metres and bears an edible, sweet-and-sour tasting fruit that is boat-shaped and has numerous bulb-shaped seeds. Where was it discovered?

- a) Andaman and Nicobar Islands
- b) Lakshadweep
- c) Sundarbans
- d) Western Ghats

Q.17) Solution (a)

The latest discovery, published in the Nordic Journal of Botany, is of a species of wild banana named *Musa paramjitiana*, in honour of Paramjit Singh, who happens to be the director of the Botanical Survey of India (BSI). The species was found in North Andaman's Krishnapuri forest, 6 kilometres from any human habitation.

The plant grows to a height of nine metres and bears an edible, sweet-and-sour tasting fruit that is boat-shaped and has numerous bulb-shaped seeds. Its conservation status has been declared as 'Critically Endangered' as it has so far been spotted in only two locations on the islands, each with 6 to 18 plants in a clump.

In 2014, he discovered *Musa indandamanensis*, another wild banana, in a remote tropical rain forest on the Little Andaman island. It has dark green cylindrical flower buds.

Source: <http://www.thehindu.com/sci-tech/science/andamans-new-taste-is-sweet-and-sour/article20000504.ece>

Q.18) 'Spot-billed pelican' is found in which of the following countries?

- 1. India
- 2. Pakistan

3. Indonesia
4. Nepal

Select the correct code:

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

Q.18) Solution (c)



Native: Cambodia; India; Indonesia; Lao People's Democratic Republic; Myanmar; Nepal; Sri Lanka; Thailand; Viet Nam

Regionally extinct: Bangladesh; Philippines

Vagrant: Korea, Republic of; Malaysia

Source: <http://www.thehindu.com/news/cities/Vijayawada/winged-visitors-call-in-early/article19865176.ece>

Q.19) Consider the following statements

1. The Foreigner's Act, 1946 penalises entry into the country without valid documents thus permitting deportation of refugees.

2. Central Government had decided to allow minority refugees from Bangladesh and Pakistan to stay in the country even after expiry of their visas on humanitarian grounds under Passport (Entry into India) Act, 1920 and Foreigners Act, 1946

Which of the following statements is/are correct?

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

Q.19) Solution (c)

The Foreigners Act, 1946 is an Act of the Central Legislative Assembly enacted to grant the certain powers to Indian government in matters of foreigners in India. The Act was enacted before India became independent.

Under the Foreigners Act, 1946 and Passport (Entry into India) Act, 1920, the illegal migrants can be imprisoned or deported. These acts empower the central government to regulate the entry, exit and residence of foreigners within India.

In 2015 and 2016, the central government had issued notifications to exempt certain communities including Hindus, Sikhs, Jains, Buddhists, Parsis and Christians from Afghanistan, Bangladesh and Pakistan who arrived in India on or before 31-12-2014. The government decided to not to deport or imprison them for being in India without valid documents.

Source: <http://www.thehansindia.com/posts/index/News-Analysis/2017-10-20/Rohingya-crisis-can-turn-serious-threat/334263>

Q.20) Consider the following statements about 'Principle of Non-refoulement'

1. It is a fundamental principle of international law which forbids a country receiving asylum seekers from returning them to a country in which they would be in likely danger of persecution based on "race, religion, nationality, membership of a particular social group or political opinion".
2. The principle of non-refoulement is incorporated in 1951 UN Refugee Convention

Select the correct statements

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

Q.20) Solution (c)

The word non-refoulement derives from the French refouler, which means to drive back or to repel. Non-refoulement is a principle of customary international law prohibiting the expulsion, deportation, return or extradition of an alien to his state of origin or another state where there is a risk that his life or freedom would be threatened for discriminatory reasons. This law institute is often regarded as one of the most important principles of refugee and immigration law.

The 1951 UN Refugee Convention in its Article 33 incorporated the principle of non-refoulement and states: "No Contracting State shall expel or return (refouler) a refugee in any manner whatsoever to the frontier of territories where his life or freedom would be threatened on account of race, religion, nationality, membership of a particular social group or political opinion."

India is not a signatory to the Refugee Convention of 1951 or the Protocol of 1967, it is not bound by the principle of 'non-refoulement' or not sending back refugees to a place where they face danger.

Source: <http://www.thehindu.com/todays-paper/tp-national/tp-kerala/dyfi-files-plea-in-sc-on-rohingya/article19831604.ece>

Q.21) Consider the following statements about 'Kambala'

1. It is prevalent in all the Southern States
2. It is similar to Spanish-style bullfighting

Select the correct statements

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

Q.21) Solution (d)

News: The Supreme Court has refused to stay a plea filed by People for the Ethical Treatment of Animals to ban a legislation in Karnataka that permits the annual buffalo race known as Kambala.

The sport is similar to the other controversial traditional game called Jallikattu. The Kambala season begins in November and goes on till March.

Kambala is a contest where two pairs of buffaloes tied ploughs are made to race on slush-filled tracks with a jockey guiding them while they run.

The buffaloes are made to run at a speed that they time close to 12 to 13 seconds while covering a distance of 140 to 160 metres.

The farmers use a whip to nudge the buffalo ahead and try and make them a medal winner.

The Kambala season generally starts in November and lasts till March | the following year.

The winning pair of buffaloes were awarded coconuts as part of this centuries-old tradition but these days the race is for a gold medal or a trophy. Kambala races are nowadays conducted day and night under floodlights.

Animal rights activists have opposed the sport saying that tying the noses of the buffaloes with a rope and using a whip amounts to cruelty.

Supreme Court in 2014 had banned Kambala and Jallikattu based on a petition filed by various animal rights organisations.

Kambala supporters have been protesting since the ordinance on jallikattu was moved by the Tamil Nadu government lifting the ban.

Massive protests and processions are being taken around with buffaloes to put pressure on the Karnataka government to move a similar ordinance.

Kambala is a traditional bull sport similar to Jallikattu

Source: <http://www.thehindu.com/news/national/karnataka/kambala-season-to-begin-on-saturday/article19999765.ece>

Q.22) Consider the following statements about Anemia

1. It is a condition when blood lacks enough haemoglobin
2. It caused by decreased or faulty red blood cell production & destruction of red blood cells

Select the correct statements

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

Q.22) Solution (c)

Anemia is a decrease in the total amount of red blood cells (RBCs) or hemoglobin in the blood, or a lowered ability of the blood to carry oxygen. When anemia comes on slowly, the symptoms are often vague and may include feeling tired, weakness, shortness of breath or a poor ability to exercise. Anemia that comes on quickly often has greater symptoms, which may include confusion, feeling like one is going to pass out, loss of consciousness, or increased thirst. Anemia must be significant before a person becomes noticeably pale. Additional symptoms may occur depending on the underlying cause.

The three main types of anemia are due to blood loss, decreased red blood cell production, and increased red blood cell breakdown.

In India, more than half (51%) of all women of reproductive age have anaemia according to findings of the new Global Nutrition Report 2017

Source: <https://timesofindia.indiatimes.com/india/51-of-indian-women-aged-15-49-anaemic-most-in-world-study/articleshow/61538152.cms>

Q.23) The WTO was born out of negotiations in which round of the GATT?

- a) Geneva Round
- b) Torquay Round
- c) Uruguay Round
- d) Tokyo Round

Q.23) Solution (c)

The World Trade Organization (WTO) is an intergovernmental organization that regulates international trade. The WTO officially commenced on 1 January 1995 under the Marrakesh Agreement, signed by 123 nations on 15 April 1994, replacing the General Agreement on Tariffs and Trade (GATT), which commenced in 1948. It is the largest international economic organization in the world. The WTO deals with regulation of trade in goods, services and intellectual property between participating countries by providing a framework for negotiating trade agreements and a dispute resolution process aimed at enforcing participants' adherence to WTO agreements, which are signed by representatives of member governments.^{9–10} and ratified by their parliaments. Most of the issues that the WTO focuses on derive from previous trade negotiations, especially from the Uruguay Round (1986–1994).

Q.24) A trade bloc is a

- a) Non-tariff barrier
- b) Tariff barrier
- c) Reason for protectionism
- d) Group of countries that have agreed to remove all trade barriers among themselves

Q.24) Solution (d)

A trade bloc is a type of intergovernmental agreement, often part of a regional intergovernmental organization, where barriers to trade (tariffs and others) are reduced or eliminated among the participating states.

Advantages

- **Increased foreign direct investment:** An increase in foreign direct investment may result from the creation of trade blocs. This can benefit the economies of participating nations by creating jobs in new or expanded businesses.
- **Economies of scale:** The larger markets created by trade blocs permit companies to take advantage of economies of scale. Since the average cost of each good produced tends to fall as production increases, this results in lower prices for consumers.
- **Competition:** Trade blocs force the manufacturers in participating countries to compete with each other. Increased competition creates pressures for greater efficiency within firms, which results in lower prices for consumers.
- **Trade Effects:** Trade blocs eliminate tariffs, which drives down the cost of imports. As a result, consumers can save money by buying imported goods when cheaper than locally produced ones—they can then spend those savings on other goods. Reducing the cost of imports also reduces the cost of locally produced goods that use imported parts or components.
- **Improved Market Efficiency:** Increased competition and the removal of tariffs, which may act as a price floor, drive down prices and allow for increased consumption. This reduces deadweight loss and hence improves market efficiency.

Q.25) Mansabdari System introduced by Akbar was borrowed from the system followed in

- a) Papal States
- b) Afghanistan
- c) Turkey
- d) Mongolia

Q.25) Solution (d)

Mansabdar implies the generic term for the military-kind grading of all royal functionaries of the Mughal Empire. The Mansabdari system introduced by Akbar was borrowed from the system followed in Mongolia.

Q.26) Acid rain leads to

1. Damaged automotive coatings
2. Release of aluminium in the soil
3. Nitrogen Pollution

Select the correct code:

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

Q.26) Solution (d)

Acid rain and the dry deposition of acidic particles contribute to the corrosion of metals (such as bronze) and the deterioration of paint and stone (such as marble and limestone). These effects seriously reduce the value to society of buildings, bridges, cultural objects (such as statues, monuments, and tombstones), and cars.

Acid rain also damages forests, especially those at higher elevations. It robs the soil of essential nutrients and releases aluminum in the soil, which makes it hard for trees to take up water. Trees' leaves and needles are also harmed by acids.

It's not just the acidity of acid rain that can cause problems. Acid rain also contains nitrogen, and this can have an impact on some ecosystems. For example, nitrogen pollution in our coastal waters is partially responsible for declining fish and shellfish populations in some areas. In addition to agriculture and wastewater, much of the nitrogen produced by human activity that reaches coastal waters comes from the atmosphere.

Source: <https://timesofindia.indiatimes.com/city/goa/nio-rainwater-in-india-affected-by-arabian-dust/articleshow/61376856.cms>

Q.27) Through the 42nd Amendment Act of 1976 which subjects were transferred from State to Concurrent List?

1. Forests
2. Education
3. Electricity

Select the correct code:

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

Q.27) Solution (a)

Five subjects were transferred through the 42nd Amendment Act of 1976

- Education
- Forests
- Weights & Measures
- Protection of Wild Animals and Birds
- Administration of Justice

Q.28) Organization of the Petroleum Exporting Countries (OPEC) is an example of

- a) Monopoly
- b) Oligopoly
- c) Perfect Competition
- d) None of the above

Q.28) Solution (b)

An oligopoly refers to an economic market where there are a small number of players, be they government or corporations, which dominate the industry. While in some industries this is sufficient to still keep a competitive environment, where each is seeking to beat the others, there is a risk that the limited number of players will collude.

Historically a prime example of an oligopoly has been the Organization of the Petroleum Exporting Countries (OPEC) where a limited number of countries have dictated oil production and prices to the global economy. This has changed significantly over time as more and more countries become oil producers, but OPEC still has a major role on the global economy. OPEC's oil embargo of 1973 was a key example of what can happen when producers collude on pricing, where oil prices globally increased over 300% in a few short months.

Q.29) Which of the following consumer rights are categorized in India?

1. Right to seek redressal
2. Right to free choice
3. Right to Consumer Education

Select the correct code:

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

Q.29) Solution (d)

Right to Safety

- Means right to be protected against the marketing of goods and services, which are hazardous to life and property. The purchased goods and services availed of should not only meet their immediate needs, but also fulfil long term interests.
- Before purchasing, consumers should insist on the quality of the products as well as on the guarantee of the products and services. They should preferably purchase quality marked products such as ISI, AGMARK, etc

Right to be Informed

- Means right to be informed about the quality, quantity, potency, purity, standard and price of goods so as to protect the consumer against unfair trade practices.
- Consumer should insist on getting all the information about the product or service before making a choice or a decision. This will enable him to act wisely and responsibly and also enable him to desist from falling prey to high pressure selling techniques.

Right to Choose

- Means right to be assured, wherever possible of access to variety of goods and services at competitive price. In case of monopolies, it means right to be assured of satisfactory quality and service at a fair price. It also includes right to basic goods and services. This is because unrestricted right of the minority to choose can mean a denial for the majority of its fair share. This right can be better exercised in a competitive market where a variety of goods are available at competitive prices

Right to be Heard

- Means that consumer's interests will receive due consideration at appropriate forums. It also includes right to be represented in various forums formed to consider the consumer's welfare.
- The Consumers should form non-political and non-commercial consumer organizations which can be given representation in various committees formed by the Government and other bodies in matters relating to consumers.

Right to Seek redressal

- Means right to seek redressal against unfair trade practices or unscrupulous exploitation of consumers. It also includes right to fair settlement of the genuine grievances of the consumer.
- Consumers must make complaint for their genuine grievances. Many a times their complaint may be of small value but its impact on the society as a whole may be very large. They can also take the help of consumer organisations in seeking redressal of their grievances.

Right to Consumer Education

- Means the right to acquire the knowledge and skill to be an informed consumer throughout life. Ignorance of consumers, particularly of rural consumers, is mainly responsible for their exploitation. They should know their rights and must exercise them. Only then real consumer protection can be achieved with success.

Q.30) Rivers originating on the Eastern Ghats include:

1. Rushikulya
2. Tungabhadra
3. Vamsadhara

Select the correct code

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

Q.30) Solution (c)**River Vamsadhara**

- It is an important east flowing river between Rushikulya and Godavari, in Odisha and Andhra Pradesh states in India.

- The river originates in the border of Thuamul Rampur in the Kalahandi district and Kalyansinghpur in Rayagada district of Odisha and runs for a distance of about 254 kilometers, where it joins the Bay of Bengal at Kalingapatnam, Andhra Pradesh. The total catchment area of the river basin is about 10,830 square kilometers.

Tungabhadra

- The Tungabhadra River is a river in India that starts and flows through the state of Karnataka during most of its course, before flowing along the border between Karnataka and Andhra Pradesh and ultimately joining the Krishna River along the border of Andhra Pradesh and Telangana. In the epic Ramayana, the Tungabhadra River was known by the name of Pampa.

Rushikulya

- The Rushikulya River is one of the major rivers in the state of Odisha and covers entire catchment area in the districts of Kandhamal and Ganjam district of Odisha. The Rushikulya originates at an elevation of about 1000 metres from Daringbadi hills of the Eastern Ghats range. The place from where the river originates, Daringbadi is called the ' Kashmir of Odisha '. It meets the Bay of Bengal at Puruna Bandha in Ganjam. Its tributaries are the Baghua, the Dhanei, the Badanadi etc. It has no delta as such at its mouth.

Q.31) Consider the following statements about Aflatoxins

1. They are carcinogenic
2. They cause frameshift mutations
3. They are sometimes found in beer

Select the correct statements

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

Q.31) Solution (d)

Aflatoxins are poisonous carcinogens that are produced by certain molds (*Aspergillus flavus* and *Aspergillus parasiticus*) which grow in soil, decaying vegetation, hay, and grains. They are regularly found in improperly stored staple commodities such as cassava, chili peppers, corn, cotton seed, millet, peanuts, rice, sesame seeds, sorghum, sunflower seeds, tree nuts, wheat, and a variety of spices.

Chronic exposure increases the risk of developing liver and gallbladder cancer, as aflatoxin metabolites may intercalate into DNA and alkylate the bases through epoxide moiety. This is thought to cause mutations in the p53 gene, an important gene in preventing cell cycle progression when there are DNA mutations, or signaling apoptosis (programmed cell death). These mutations seem to affect some base pair locations more than others, for example, the third base of codon 249 of the p53 gene appears to be more susceptible to aflatoxin-mediated mutations than nearby bases.

Aflatoxins B1, B2, G1, and G2 were determined at parts-per-trillion levels in beer.

Source: <http://www.thehindu.com/sci-tech/agriculture/icrisat-researchers-make-peanuts-free-of-aflatoxin/article20048362.ece>

Q.32) Consider the following statements

1. DNA methylation is a method for gene silencing through short RNAs.
2. The process of RNA inactivation by siRNAs is termed as RNA disfunction.

Select the correct statements

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

Q.32) Solution (a)

Gene silencing is the regulation of gene expression in a cell to prevent the expression of a certain gene. Gene silencing can occur during either transcription or translation and is often used in research. In particular, methods used to silence genes are being increasingly used to produce therapeutics to combat cancer and diseases, such as infectious diseases and neurodegenerative disorders.

Gene silencing is often considered the same as gene knockdown. When genes are silenced, their expression is reduced. In contrast, when genes are knocked out, they are completely erased from the organism's genome and, thus, have no expression. Gene silencing is considered a gene knockdown mechanism since the methods used to silence genes, such as RNAi, CRISPR, or siRNA, generally reduce the expression of a gene by at least 70% but do not completely eliminate it. Methods using gene silencing are often considered better than gene knockouts since they allow researchers to study essential genes that are required for the animal models to survive and cannot be removed. In addition, they provide a more

complete view on the development of diseases since diseases are generally associated with genes that have a reduced expression.

Short RNAs can lead to gene silencing via DNA methylation.

siRNAs are short interfering RNAs. The process of RNA inactivation by use of these is called as RNA interference (RNAi).

Source: <http://www.thehindu.com/sci-tech/agriculture/icrisat-researchers-make-peanuts-free-of-aflatoxin/article20048362.ece>

Q.33) Union Cabinet has recently approved creation of National Testing Agency (NTA). Consider the following statements

1. It will be registered as a society under the Indian Societies Registration Act
2. It will conduct those entrance examinations which are currently being conducted by the CBSE

Select the correct statements

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

Q.33) Solution (c)

The Union Cabinet approved the creation of a National Testing Agency (NTA) to conduct entrance examinations for higher educational institutions.

Its creation will relieve the Central Board of Secondary Education (CBSE) – which conducts exams like the National Eligibility-cum-Entrance Test – and the All India Council for Technical Education of the burden of conducting entrance tests.

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the creation of a National Testing Agency (NTA) as a Society registered under the Indian Society Registration Act, 1860, and as an autonomous and self-sustained premier testing organization to conduct entrance examinations for higher educational institutions.

The NTA will begin by conducting exams managed by the CBSE and gradually conduct other examinations too.

The NTA will be chaired by an eminent educationist appointed by the Ministry of Human Resource Development. There will be a Board of Governors comprising members from user institutions.

Source: <http://www.thehindu.com/news/national/other-states/centre-approves-creation-of-national-testing-agency/article20109658.ece>

Q.34) EcAMSat mission is associated with

- a) Jupiter
- b) Saturn
- c) Mars
- d) None of the above

Q.34) Solution (d)

E. coli AntiMicrobial Satellite (EcAMSat)

The E. coli AntiMicrobial Satellite (EcAMSat) mission will investigate space microgravity effects on the antibiotic resistance of E. coli, a bacterial pathogen responsible for urinary tract infection in humans and animals.

EcAMSat will investigate spaceflight effects on bacterial antibiotic resistance and its genetic basis. Bacterial antibiotic resistance may pose a danger to astronauts in microgravity, where the immune response is weakened. Scientists believe that the results of this experiment could help design effective countermeasures to protect astronauts' health during long-duration human space missions.

Source: <http://www.thehindu.com/todays-paper/tp-miscellaneous/tp-others/scientists-to-send-e-coli-to-space/article20259627.ece>

Q.35) Consider the following statements about Bonnet macaque

1. This species occurs in peninsular India
2. It is found only in evergreen and deciduous forest

Select the correct statements

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

Q.35) Solution (a)

This species occurs in peninsular India (Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra and Tamil Nadu). It is found from the southern tip of India up to the southern banks of Tapti River in the north, and to the Krishna River in the northeast.

Two subspecies of bonnet macaques have been identified: *M. r. radiata* and *M. r. diluta*

M. r. radiata

- It occurs in peninsular India (Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra and Tamil Nadu). It is found in the major portion of the species' range south to the Palni Hills and southeast as far as Timbale, inland of Pondicherry.

M. r. diluta

- It occurs in southeastern coastal India (Kerala and Tamil Nadu). It is found from the south tip and southeastern coast of India, north to Kambam in the Western Ghats, at the southwestern foot of the Palni Hills in the centre and Pondicherry in the east.

This species is both arboreal and terrestrial. It is found in all forest types from scrub to evergreen and deciduous forest, plantations, agricultural lands, and urban areas, and is tolerant of disturbed habitats.

Source: <http://www.thehindu.com/sci-tech/energy-and-environment/bonnet-macaques-losing-their-ground-in-south-india/article20217588.ece>

Q.36) Consider the following statements about Clouded Leopard

1. It is only found in Asia
2. It is the state animal of Meghalaya
3. Clouded leopard is the mascot for 2017 FIFA U-17 World Cup

Select the correct statements

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

Q.36) Solution (d)

Clouded Leopard is a wild cat occurring from the Himalayan foothills through mainland Southeast Asia into China. Since 2008, it is listed as Vulnerable on the IUCN Red List. Its total

population is suspected to be fewer than 10,000 mature individuals, with a decreasing population trend, and no single population numbering more than 1,000 adults.

Native: Bangladesh; Bhutan; Cambodia; China; India; Lao People's Democratic Republic; Malaysia (Peninsular Malaysia); Myanmar; Nepal; Thailand; Viet Nam

Regionally extinct: Taiwan, Province of China

The clouded leopard is the state animal of the Indian state of Meghalaya.

Clouded leopard (Kheleo) is the mascot for 2017 FIFA U-17 World Cup.

IUCN Status – Vulnerable

Source: <http://indianexpress.com/article/india/mizoram-has-highest-number-of-clouded-leopards-in-southeast-asia-4876139/>

Q.37) Consider the following statements about 'Coriolis Force'

1. It is invisible force that appears to deflect the wind is the Coriolis force
2. It is zero at the Equator
3. Coriolis Effect cause storms in the north swing counter-clockwise

Select the correct statements

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

Q.37) Solution (d)

Coriolis Force

The invisible force that appears to deflect the wind is the Coriolis force. The Coriolis force applies to movement on rotating objects. It is determined by the mass of the object and the object's rate of rotation. The Coriolis force is perpendicular to the object's axis. The Earth spins on its axis from west to east. The Coriolis force, therefore, acts in a north-south direction. The Coriolis force is zero at the Equator.

Though the Coriolis force is useful in mathematical equations, there is actually no physical force involved. Instead, it is just the ground moving at a different speed than an object in the air.

Storms in the north swing counter-clockwise: the Coriolis effect. Storms in the south swing with the clock, and winds tend to pass to the left!

Winds blow across the Earth from high-pressure systems to low-pressure systems. However, winds don't travel in a straight line. The actual paths of winds—and of ocean currents, which are pushed by wind—are partly a result of the Coriolis effect. The Coriolis effect is named after Gustave Coriolis, the 19th-century French mathematician who first explained it.

The key to the Coriolis effect lies in the Earth's rotation. The Earth rotates faster at the Equator than it does at the poles. This is because the Earth is wider at the Equator. A point on the Equator has farther to travel in a day.

In the Northern Hemisphere, wind from high-pressure systems pass low-pressure systems on the right. This causes the system to swirl counter-clockwise. Low-pressure systems usually bring storms. This means that hurricanes and other storms swirl counter-clockwise in the Northern Hemisphere. In the Southern Hemisphere, storms swirl clockwise.

Source: <http://www.tribuneindia.com/news/spectrum/travel/at-the-centre-of-earth/487067.html>

Q.38) Consider the following statements about Kakatiya dynasty

1. Sri Kasi Visweswara Temple belongs to the Kakatiya period
2. Rudradeva II was the last ruler of the Kakatiya dynasty

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 800 year old Sri Kasi Visweswara Temple, belongs to the kakatiya period. For, apart from locals, pilgrims from neighbouring States of Maharashtra and Karnataka frequent the place to worship the presiding deity, Lord Shiva.

The Kakatiya dynasty was a South Indian dynasty whose capital was Orugallu, now known as Warangal. It was eventually conquered by the Delhi Sultanate.

The demise of Kakatiya dynasty resulted in confusion and anarchy under alien rulers for some time, before the Musunuri Nayaks brought stability to the region.

Pratāparudra (r. c. 1289-1323), also known as Rudradeva II, was the last ruler of the Kakatiya dynasty of India. He ruled the eastern part of Deccan, with his capital at Warangal.

Prataparudra succeeded his grandmother Rudramadevi as the Kakatiya monarch. In the first half of his reign, he subjugated the insubordinate chiefs who had asserted their independence during his predecessor's reign. He also achieved successes against the neighbouring Hindu kingdoms of the Yadavas (Seunas), the Pandyas and Kampili.

In 1310, he faced an invasion from the Muslim Delhi Sultanate, and agreed to become a tributary of the Delhi Sultan Alauddin Khalji. After Alauddin's death, he stopped making tribute payments, but a 1318 invasion forced him to pay tribute to Alauddin's son Mubarak Shah. After the end of the Khalji dynasty, he again withheld the tribute payments to Delhi. This prompted the new Sultan Ghiyath al-Din Tughluq to order a 1323 invasion that ended the Kakatiya dynasty and resulted in annexation of their kingdom to the Delhi Sultanate.

Source: <http://www.thehindu.com/news/cities/Hyderabad/excavation-reveals-hidden-glory-of-kakatiya-era-temple/article20242659.ece>

Q.39) Global Financial Development Report is released by

- a) World Bank
- b) WEF
- c) WTO
- d) IMF

Q.39) Solution (a)

Source: <http://indianexpress.com/article/explained/global-financial-crisis-indian-economy-world-bank-bankers-without-borders-rbi-4934594/>

Q.40) Vedic Literature deals with

1. Music
2. Mysticism

Select the correct statements

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

Q.40) Solution (c)

The Brahmanas explain the hymns of the Vedas. They act as the appendices to the Vedas. They are written in prose and they elaborately describe the various sacrifices and rituals, along with their mystic meanings.

The Aranyakas deal with mysticism and symbolism.

Sam Veda

- It is a collection of melodies. It contains stanzas taken from Rig Veda and set to the tune for the purpose of singing.
- The Jha Samaveda is important in tracing the history of Indian music.

Source: <http://indianexpress.com/article/india/vice-president-venkaiah-naidu-stresses-importance-of-mastering-ones-mother-tongue-4895274/>

Q.41) Louisiana Purchase is associated with USA and

- a) Russia
- b) Japan
- c) France
- d) United Kingdom

Q.41) Solution (c)

This refers to a historic land deal signed between the U.S. and France in 1803, wherein France agreed to sell its large North American territory of Louisiana to the U.S. government. After the successful execution of the deal, the land territory under the sovereign control of the U.S. government doubled in size. The deal was struck between U.S. President Thomas Jefferson and Emperor Napoleon in France. The Louisiana Purchase is considered to be a distress sale by Napoleon who urgently needed money to fund his war efforts in Europe.

Source: <http://www.thehindu.com/opinion/op-ed/what-does-louisiana-purchase-mean/article20393771.ece>

Q.42) Consider the following statements about 'Project Saksham of Indian Railways'

1. It is a mass skilling exercise
2. Only employees associated with Railway Safety will undergo this exercise

Select the correct statements

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

Q.42) Solution (a)

The Indian Railways will launch the country's largest time-bound "upskilling" exercise for government employees to upgrade the skillsets of its 13 lakh-strong workforce with a single drive spanning nine months. Named Project Saksham, the exercise will start in January 2018 and go on till September, putting through training courses and specially designed skill-upgrade modules. Employees from the rank of a peon to the Railway Board Members and everyone in between will undergo the training.

The nature of the short-duration training will range from refresher courses, with an eye on evolved global practices in the respective areas, to skills in the existing lining of functioning.

Source: <http://indianexpress.com/article/india/railways-to-start-9-month-upskilling-exercise-for-employees-in-january-4933419/>

Q.43) The term 'White Helmets' which is often in news, is a

- a) Volunteer organisation that operates in parts of rebel-controlled Syria
- b) NGO known for its projects in war-torn regions and developing countries affected by endemic diseases
- c) Humanitarian organization that promotes road travel safety through education and advocacy
- d) Global Plan for the Decade of Action for Road Safety 2011-2020

Q.43) Solution (a)

White Helmets officially known as Syria Civil Defence is a volunteer organisation that operates in parts of rebel-controlled Syria and in Turkey. The bulk of their activity in Syria consists of urban search and rescue in response to bombing, medical evacuation, evacuation of civilians from danger areas, and essential service delivery. 159 White Helmets have been killed since the organization's inception.

Source: <http://indianexpress.com/article/world/seven-white-helmets-members-shot-dead-in-northwestern-syria-4793530/>

Q.44) Consider the following statements about 'Mahabalipuram Stone Sculpture'

1. It is characterised by art and architecture that flourished in period of the Pallavas.
2. Geographical Indication (GI) Registry and Intellectual Property India presented the Geographical Indication Tag status to Mahabalipuram stone sculptures

Select the correct statements

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

Q.44) Solution (c)

Tamil Nadu in its application stated that sculptures from Mamallapuram are known to be carved in stone with characteristics of intricate designing chiselled finely, keeping with the spirit of the surrounding Pallava art and architecture. Idols from mythology or of deities depict divinity. The description includes cave architecture, rock architecture, structural temples, open sculptures, relief sculptures and painting/portrait sculptures.

News: <http://www.thehindu.com/news/national/banglar-rasogolla-mamallapuram-stone-sculptures-get-gi-tag/article20444856.ece>

Q.45) Cayman Islands, an overseas territory of the

- a) United Kingdom
- b) France
- c) Netherlands
- d) Spain

Q.45) Solution (a)

The Cayman is an autonomous British Overseas Territory in the western Caribbean Sea. The 264-square-kilometre territory comprises the three islands of Grand Cayman, Cayman Brac and Little Cayman located south of Cuba, northeast of Costa Rica, north of Panama, east of Mexico and northwest of Jamaica. Its capital is George Town.

The Cayman Islands is considered to be part of the geographic Western Caribbean Zone as well as the Greater Antilles. The territory is often considered a major world offshore financial haven for many wealthy individuals.

Source: <http://www.thehindu.com/news/international/paradise-papers-leaks-show-us-commerce-chief-uk-queens-offshore-investments/article19990720.ece>

Q.46) Consider the following statements about the Ocean Energy Systems Technology Collaboration Programme (OES)

1. It is established by the International Energy Agency
2. India was one of the inaugural signatories to the OES

Select the correct statements

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

Q.46) Solution (a)

The Ocean Energy Systems Technology Collaboration Programme (OES) is an intergovernmental collaboration between countries, which operates under framework established by the International Energy Agency in Paris.

The Ocean Energy Systems Energy Technology Collaboration Programme (OES) was launched in 2001. The need for technology cooperation was identified in response to increased activity in the development of ocean wave and tidal current energy in the latter part of the 1990's and the beginning of this decade, primarily in Denmark, Portugal and the United Kingdom. These three countries were the inaugural signatories to the OES.

The OES brings together countries to advance research, development and demonstration of conversion technologies to harness energy from all forms of ocean renewable resources, such as tides, waves, currents, temperature gradient (ocean thermal energy conversion and submarine geothermal energy) and salinity gradient for electricity generation, as well as for other uses, such as desalination, through international cooperation and information exchange.

The OES completed its second five-year mandate on 28 February 2012. Thus, a request for a new 5-year term, including the End-of-Term Report and a new Strategic Plan, had been submitted to the CERT in July 2011, and was approved on 1 February 2012. The ExCo prepared a 5-year Strategic Plan to the IEA to secure this third 5-year mandate. A key

component of this Plan is a Communications Plan, which will raise the profile of OES and of its efforts "to realize cost-competitive, environmentally sound ocean energy on a sustainable basis to provide a significant contribution to meeting future energy demands".

OES consists of 20 member countries (as of Feb. 2013). Each country is represented by contracting parties - who nominates participants in the OES Executive Committee. Participants in the OES are specialists from government departments, national energy agencies, research or scientific bodies and academia, nominated by the Contracting Parties.

India is one of them. The National Institute of Ocean Technology (NIOT) represents India in the OES.

Source: <http://www.newindianexpress.com/cities/chennai/2017/nov/13/indias-first-wave-powered-navigational-buoy-launched-in-chennai-1700392.html>

Q.47) Which of the following countries is not a part of BASIC countries?

- a) South Africa
- b) South Korea
- c) China
- d) Brazil

Q.47) Solution (b)

The BASIC countries (also Basic countries or BASIC) are a bloc of four large newly industrialized countries – Brazil, South Africa, India and China – formed by an agreement on 28 November 2009. The four committed to act jointly at the Copenhagen climate summit, including a possible united walk-out if their common minimum position was not met by the developed nations.

Source: <https://economictimes.indiatimes.com/news/politics-and-nation/basic-countries-reiterate-commitment-to-implementation-of-climate-treaties/articleshow/61647557.cms>

Q.48) Rashtriya Garima Abhiyaan' is a national campaign to

- a) rehabilitate the homeless and destitute persons and provide them with suitable sources of livelihood
- b) release the sex workers from their practice and provide them with alternative sources of livelihood
- c) eradicate the practice of manual scavenging and rehabilitate the manual scavengers

- d) release the bonded labourers from their bondage and rehabilitate them

Q.48) Solution (c)

Rashtriya Garima Abhiyan (National Campaign for Dignity and Eradication of Manual Scavenging)

Ministry of Social Justice and Empowerment is responsible for rehabilitation of manual scavengers and it implements the 'Self Employment Scheme for Rehabilitation of Manual Scavengers' (SRMS). Ministry of Social Justice and Empowerment has associated reputed NGOs like Safai Karamchari Andolan, Rashtriya Garima Abhiyan, Sulabh International etc. for identification of manual scavengers and their rehabilitation.

Source: <http://indianexpress.com/article/india/manual-scavenging-law-to-be-amended-to-hike-compensation-for-deaths-4937937/>

Q.49) Consider the following statements about Disability-Adjusted Life Year (DALY)

1. It is the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.
2. It was originally developed by Harvard University for the World Bank in 1990

Select the correct statements

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

Q.49) Solution (c)

The disability-adjusted life year (DALY) is a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death. It was developed in the 1990s as a way of comparing the overall health and life expectancy of different countries.

The DALY is becoming increasingly common in the field of public health and health impact assessment (HIA). It "extends the concept of potential years of life lost due to premature death...to include equivalent years of 'healthy' life lost by virtue of being in states of poor health or disability." In so doing, mortality and morbidity are combined into a single, common metric.

Originally developed by Harvard University for the World Bank in 1990, the World Health Organization subsequently adopted the method in 1996 as part of the Ad hoc Committee on Health Research "Investing in Health Research & Development" report. The DALY was first conceptualized by Murray and Lopez in work carried out with the World Health Organization and the World Bank known as the Global Burden of Disease Study, which was published in 1990. It is now a key measure employed by the United Nations World Health Organization in such publications as its Global Burden of Disease.

Read More - http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/

Source: http://www.business-standard.com/article/current-affairs/health-crisis-from-lifestyle-disease-to-malnutrition-117111500044_1.html

Q.50) Which of the following are sexually transmitted diseases?

1. Syphilis
2. Gonorrhoea
3. Chlamydia

Select the correct statements

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

Q.50) Solution (d)

Chlamydia - A common sexually transmitted infection that may not cause symptoms.

Gonorrhoea - A sexually transmitted bacterial infection that, if untreated, may cause infertility.

Syphilis - A bacterial infection usually spread by sexual contact that starts as a painless sore.

Q.51) Réunion, an island in Indian Ocean is an

- a) French Territory
- b) British Territory
- c) Spanish Territory
- d) Dutch Territory

Q.51) Solution (a)

It is an island and region of France in the Indian Ocean, east of Madagascar and 175 kilometres (109 mi) southwest of Mauritius.

The island has been inhabited since the 17th century when people from France, Madagascar and Africa settled there. Slavery was abolished on 20 December 1848 (a date celebrated yearly on the island), after which indentured workers were brought from Tamil Nadu, Southern India, among other places. The island became an overseas department of France in 1946.

As elsewhere in France, the official language is French. In addition, the majority of the region's population speaks Réunion Creole.

Administratively, Réunion is one of the overseas departments of France. Like the other four overseas departments, it is also one of the 18 regions of France, with the modified status of overseas region, and an integral part of the Republic with the same status as Metropolitan France. Réunion is an outermost region of the European Union and, as an overseas department of France, part of the Eurozone.

Source: <http://www.thehindu.com/news/national/france-wants-to-work-with-india-in-indo-pacific/article20460960.ece>

Q.52) What does virtual water (VW) imply?

- a) Volume of heavy water required to replace ordinary water
- b) Volume of water required to produce a commodity
- c) Volume of water saved by using rainwater harvesting
- d) Volume of water utilized by an effective flood control

Q.52) Solution (b)

Virtual water trade (also known as trade in embedded or embodied water) refers to the hidden flow of water if food or other commodities are traded from one place to another. For instance, it takes 1,340 cubic meters of water (based on the world average) to produce one metric tonne of wheat.

Source: <http://www.thehindu.com/todays-paper/tp-opinion/a-flood-of-questions/article19892691.ece>

Q.53) Consider the following statements

1. The Headquarters of the International Organisation for Standardization are located in Rome.
2. ISO 9001 is related to the quality management system and standards.
3. ISO 14000 relates to environmental management system standards.

Which of the statements is/are correct?

- a) 1, 2 and 3
- b) 3 only
- c) 2 and 3
- d) None

Q.53) Solution (c)

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from various national standards organizations. Founded on 23 February 1947, the organization promotes worldwide proprietary, industrial and commercial standards. It is headquartered in Geneva, Switzerland, and as of March 2017 works in 162 countries.

It was one of the first organizations granted general consultative status with the United Nations Economic and Social Council.

Source: http://www.business-standard.com/article/government-press-release/department-of-consumer-affairs-working-on-bringing-hallmarking-regulations-under-the-117110301041_1.html

ISO 14000 is a family of standards related to environmental management that exists to help organizations (a) minimize how their operations (processes, etc.) negatively affect the environment (i.e., cause adverse changes to air, water, or land); (b) comply with applicable laws, regulations, and other environmentally oriented requirements; and (c) continually improve in the above.

Source: <http://www.thehindu.com/todays-paper/tp-national/tp-telangana/four-decades-in-power-generation/article20377413.ece>

The ISO 9001 family of quality management systems standards is designed to help organizations ensure that they meet the needs of customers and other stakeholders while meeting statutory and regulatory requirements related to a product or program.

Source: <http://www.firstpost.com/india/keralas-kavanur-adopts-e-literacy-to-become-countrys-first-iso-9001-certified-village-4175657.html>

Q.54) Who among the following repealed the Vernacular Press Act?

- a) Lord Dufferin
- b) Lord Ripon
- c) Lord Curzon
- d) Lord Hardinge

Q.54) Solution (b)

In British India, the Vernacular Press Act (Act of 1878) was enacted to curtail the freedom of the Indian press and prevent the expression of criticism toward British policies—notably, the opposition that had grown with the outset of the Second Anglo-Afghan War (1878–80). The act was proposed by Lord Lytton, then Viceroy of India, and was unanimously passed by the Viceroy's Council on March 14, 1878. The act excluded English-language publications as it was meant to control seditious writing in 'publications in Oriental languages' everywhere in the country, except for the South. But the British totally discriminated the Indian Press.

The act empowered the government to impose restrictions on the press in the following ways:

- Modelled on the Irish press act, this act provided the government with extensive rights to censor reports and editorials in the Vernacular press.
- From now on the government kept regular track of Vernacular newspapers.
- When a report published in the newspaper was judged as seditious, the newspaper was warned.

All the native associations irrespective of religion, caste and creed denounced the measure and kept their protests alive. All the prominent leaders of Bengal and India condemned the Act as unwarranted and unjustified, and demanded its immediate withdrawal. The newspapers themselves kept criticizing the measure without end. The succeeding administration of Lord Ripon reviewed the developments consequent upon the Act and finally withdrew it. However, the resentment it produced among Indians helped fuel India's growing independence movement. The Indian Association, which is generally considered to be one of the precursors of the Indian National Congress, was one of the Act's biggest critics.

Source: <http://www.thehindu.com/news/national/tamil-nadu/takeaways-from-modis-address-at-dina-thanthi-event/article19991496.ece>

Q.55) Universal Product Code (UPC) is associated with?

- a) Against adulteration eatables

- b) Earthquake-resistant building code
- c) Fire safety code in buildings
- d) Bar code

Q.55) Solution (d)

A UPC, short for universal product code, is a type of code printed on retail product packaging to aid in identifying a particular item. It consists of two parts – the machine-readable barcode, which is a series of unique black bars, and the unique 12-digit number beneath it.

Q.56) The Konyaks are found in

1. Nagaland
2. Arunachal Pradesh
3. Mizoram

Select the correct code:

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

Q.56) Solution (a)

The Konyak are a Naga people, and are recognised among other Naga by their tattoos, which they have all over their face and hands, chest, arms, calves. Facial tattoos were earned for taking an enemy's head. Mon district in Nagaland is called the 'Land of Angh's'. They have the largest population among the Nagas.

The Konyak's festival "Aoleang" falls in the month of April from 1 to 6. Aoleang is the biggest festival for the Konyak. They wear their traditional attire and sing folk song to celebrate the Aoleang festival. 'Lao Ong Mo' is the traditional harvest festival celebrated in the months of August/September.

The Konyaks can be found in Myanmar, in the Tirap and Changlang districts of Arunachal, and in the Mon district of Nagaland, India. They are known in Arunachal as Wancho Konyak.

The Konyak language belongs to the Northern Naga sub branch of the Sal subfamily of Sino-Tibetan.

The Konyaks were headhunters and this was prevalent till the early 1900's. In the recent past, they were known as war loving and often attacked nearby villages of other tribes taking the heads of opposing warriors as trophies to hang in the 'Paan' (a communal house). The number of heads indicated the power of a warrior and the tribe and becomes a collective totem. With the exception of these behaviors, the tribal members maintain a very disciplined community life with strict duties and responsibilities for every individual. Konyak culture is one among the richest culture among the Naga tribes.

Source: <http://www.thehindu.com/sci-tech/science/scientists-discover-new-parasitic-plant-in-nagaland/article20551737.ece>

Q.57) Which of the following judgement laid that, “freedom of expression cannot be suppressed on account of threat of demonstration and processions or threats of violence”?

- a) S. Rangarajan v. Jagjivan Ram
- b) Hamdard Dawakhana v. Union of India
- c) Abbas v. Union of India
- d) Bennet Coleman and Co. v. Union of India

Q.57) Solution (a)

Supreme Court has clearly laid down, in the 1989 judgment in the case of S. Rangarajan v. Jagjivan Ram involving the film Ore Oru Gramathile (which dealt with the issue of reservation), that “freedom of expression cannot be suppressed on account of threat of demonstration and processions or threats of violence.” That, the court noted, would be tantamount to “negation of the rule of law and surrender to blackmail and intimidation.”

Source: <http://www.thehindu.com/opinion/editorial/an-absurd-canvas/article20539604.ece>

Q.58) Consider the following statements about Carbapenems

1. They are a class of last-resort antibiotics
2. Patients hospitalized with an invasive, ESBL infection are usually treated with a medicine from the carbapenem class

Select the correct statements

- a) 1 Only
- b) 2 Only

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

Q.58) Solution (c)

Carbapenems are antibiotics used for the treatment of infections known or suspected to be caused by multidrug-resistant (MDR) bacteria. Their use is primarily in people who are hospitalized.

Like the penicillins and cephalosporins, they are members of the beta lactam class of antibiotics, which kill bacteria by binding to penicillin-binding proteins and inhibiting cell wall synthesis. They exhibit a broader spectrum of activity compared to cephalosporins and penicillins. Their effectiveness is less affected by many common mechanisms of antibiotic resistance than other beta lactams.

Patients hospitalized with an invasive, ESBL infection are usually treated with a medicine from the carbapenem class, though even those high-powered antibiotics are failing now that bacteria are increasingly harboring carbapenemase enzymes that neutralize these drugs. In many cases, that leaves just one antibiotic: colistin.

One study from Delhi's Ganga Ram hospital found that between 2002 and 2009, among patients infected by *Klebsiella pneumoniae* (a pneumonia-causing bacterium), the percentage of these pathogens that were resistant to carbapenems grew from 2% to 52%. Carbapenems are a class of last-resort antibiotics which doctors use only when others have failed.

Source: <http://www.thehindu.com/opinion/op-ed/the-superbugs-of-hyderabad/article20536685.ece>

Q.59) Consider the following statements about Petcoke

1. It emits less carbon dioxide than coal on a per-unit-of-energy basis when it is burned
2. Fuel grade petcoke is high in sulphur and metals

Select the correct statements

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

Q.59) Solution (b)

Petroleum coke, abbreviated coke or petcoke, is a final carbon-rich solid material that derives from oil refining, and is one type of the group of fuels referred to as cokes. Petcoke is the coke that, in particular, derives from a final cracking process—a thermo-based chemical engineering process that splits long chain hydrocarbons of petroleum into shorter chains—that takes place in units termed coker units.

In petroleum coker units, residual oils from other distillation processes used in petroleum refining are treated at a high temperature and pressure leaving the petcoke after driving off gases and volatiles, and separating off remaining light and heavy oils. These processes are termed "coking processes," and most typically employ chemical engineering plant operations for the specific process of delayed coking.

This coke can either be fuel grade (high in sulfur and metals) or anode grade (low in sulfur and metals). The raw coke directly out of the coker is often referred to as green coke. In this context, "green" means unprocessed. The further processing of green coke by calcining in a rotary kiln removes residual volatile hydrocarbons from the coke. The calcined petroleum coke can be further processed in an anode baking oven in order to produce anode coke of the desired shape and physical properties. The anodes are mainly used in the aluminium and steel industry.

Petcoke is over 90 percent carbon and emits 5 to 10 percent more carbon dioxide (CO₂) than coal on a per-unit-of-energy basis when it is burned. As petcoke has a higher energy content, petcoke emits between 30 and 80 percent more CO₂ than coal per unit of weight. The difference between coal and coke in CO₂ production per unit energy produced depends upon the moisture in the coal (increases the CO₂ per unit energy – heat of combustion) and volatile hydrocarbon in coal and coke (decrease the CO₂ per unit energy).

Source: <http://www.thehindu.com/news/national/sc-for-nationwide-ban-on-furnace-oil-pet-coke/article20534514.ece>

Q.60) SAFAR System is concerned with

- a) Tourism
- b) Air Quality
- c) Mines Allocation
- d) Connecting tier 2 & tier 3 cities through airways

Q.60) Solution (b)

SAFAR envisages a research based management system where strategies of air pollution mitigation go hand in hand with nation's economic development to target a win-win scenario.

Through SAFAR know the City Air Quality- Over all city pollution and Location specific Air Quality- A relative contribution of different environments in a city

Under the plan scheme "Metropolitan Advisories for Cities for Sports, Tourism (Metropolitan Air Quality and Weather Services), Ministry of Earth Sciences (MoES), Govt. of India, has introduced a major national initiative, "System of Air Quality and Weather Forecasting and Research" known as "SAFAR" for greater metropolitan cities of India to provide location specific information on air quality in near real time and its forecast 1-3 days in advance for the first time in India.

It has been combined with the early warning system on weather parameters. The SAFAR system is developed by Indian Institute of Tropical Meteorology, Pune, along with ESSO partner institutions namely India Meteorological Department (IMD) and National Centre for Medium Range Weather Forecasting (NCMRWF).

The implementation of SAFAR is made possible with an active collaboration with local municipal corporations and various local educational institutions and governmental agencies in that Metro city.

The ultimate objective of the project is to increase awareness among general public regarding the air quality in their city well in advance so that appropriate mitigation measures and systematic action can be taken up for betterment of air quality and related health issues. It engineers awareness drive by educating public, prompting self-mitigation and also to help develop mitigation strategies for policy makers.

Source: <https://timesofindia.indiatimes.com/city/delhi/40-of-smog-was-dust-from-gulf-safar/articleshow/61679352.cms>

Q.61) Consider the following statements about Gandaki River

1. It is a left bank tributary of the Ganga in India
2. Dhaulagiri is the highest point of the Gandaki basin

Select the correct statements

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

Q.61) Solution (c)

The Gandaki River (also known as the Narayani in southern Nepal and the Gandak in India) is one of the major rivers of Nepal and a left bank tributary of the Ganges in India. In Nepal the river is notable for its deep gorge through the Himalayas and its enormous hydroelectric potential. It has a total catchment area of 46,300 square kilometers (17,900 sq mi), most of it in Nepal. The basin also contains three of the world's 14 mountains over 8,000 metres (26,000 ft), Dhaulagiri, Manaslu and Annapurna I. Dhaulagiri is the highest point of the Gandaki basin. It lies between the similar Kosi system to the east and the Karnali (Ghaghara) system to the west.

Source: <https://economictimes.indiatimes.com/news/international/world-news/nepal-cancels-budhi-gandaki-agreement-with-chinese-company/articleshow/61628904.cms>

Q.62) Consider the following statements about crassulacean acid metabolism (CAM)

1. It is an enhanced form of photosynthesis
2. It is not found in aquatic plants

Select the correct statements

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

Q.62) Solution (a)

Crassulacean acid metabolism, also known as CAM photosynthesis, is a carbon fixation pathway that evolved in some plants as an adaptation to arid conditions. In a plant using full CAM, the stomata in the leaves remain shut during the day to reduce evapotranspiration, but open at night to collect carbon dioxide (CO₂). The CO₂ is stored as the four-carbon acid malate in vacuoles at night, and then in the daytime, the malate is transported to chloroplasts where it is converted back to CO₂, which is then used during photosynthesis. The pre-collected CO₂ is concentrated around the enzyme RuBisCO, increasing photosynthetic efficiency. This metabolism was first studied in plants of the family Crassulaceae. These mainly include succulents.

CAM is an adaptation for increased efficiency in the use of water, and so is typically found in plants growing in arid conditions.

The most important benefit of CAM to the plant is the ability to leave most leaf stomata closed during the day. Plants employing CAM are most common in arid environments,

where water comes at a premium. Being able to keep stomata closed during the hottest and driest part of the day reduces the loss of water through evapotranspiration, allowing such plants to grow in environments that would otherwise be far too dry. Plants using only C3 carbon fixation, for example, lose 97% of the water they uptake through the roots to transpiration - a high cost avoided by plants able to employ CAM.

CAM photosynthesis is also found in aquatic species in at least 4 genera, including: Isoetes, Crassula, Littorella, Sagittaria, and possibly Vallisneria,[8] being found in a variety of species e.g. Isoetes howellii, Crassula aquatica.

These plants follow the same nocturnal acid accumulation and daytime deacidification as terrestrial CAM species. However, the reason for CAM in aquatic plants is not due to a lack of available water, but a limited supply of CO₂. CO₂ is limited due to slow diffusion in water, 10000x slower than in air. The problem is especially acute under acid pH, where the only inorganic carbon species present is CO₂, with no available bicarbonate or carbonate supply.

Aquatic CAM plants capture carbon at night when it is abundant due to a lack of competition from other photosynthetic organisms. This also results in lowered photorespiration due to less photosynthetically generated oxygen.

Aquatic CAM is most marked in the summer months when there is increased competition for CO₂, compared to the winter months. However, in the winter months CAM still has a significant role.

Source: <http://www.thehindu.com/sci-tech/energy-and-environment/how-succulents-survive-without-water-decoded/article20556392.ece>

Q.63) 'World Economic Outlook' is released by

- a) IMF
- b) WTO
- c) World Bank
- d) WEF

Q.63) Solution (a)

Source: <http://www.livemint.com/Money/5MFOB8LIF5NMPYcGAnTZpl/India-up-one-place-on-Per-Capita-GDP-terms-to-126-Qatar-No.html>

Q.64) Aligarh Movement is associated with

- a) Caste Reforms
- b) Religious Reforms
- c) Education Reforms
- d) None of the above

Q.64) Solution (c)

The Aligarh Movement was the push to establish a modern system of education for the Muslim population of British India, during the later decades of the 19th century. The movement's name derives from the fact that its core and origins lay in the city of Aligarh in Northern India and, in particular, with the foundation of: the Muhammadan Anglo Oriental Collegiate School. The founder of the original college, and the other educational institutions that developed from it, was Sir Syed Ahmad Khan. He became the leading light of the wider Aligarh Movement.

The educational reform established a base, and an impetus, for the wider Movement: an Indian Muslim renaissance that had a profound implications for the religion, the politics, the culture and society of the Indian sub-continent.

One of indirect consequences of the awakening is the notion that without this revival of a Muslim self-consciousness and self-confidence, directly attributable to the Movement, there could or would have been no Pakistan Movement in the run up to Indian Independence.

Source: <http://indianexpress.com/article/opinion/indian-muslims-must-re-read-syed-ahmad-khan-4932572/>

Q.65) Which of the following are correctly matched?

1. Himba Tribe – Namibia
2. Chukchi Tribe – Iceland
3. Rabari – India

Select the correct code:

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

Q.65) Solution (c)

The Himba are indigenous peoples with an estimated population of about 50,000 people living in northern Namibia, in the Kunene Region (formerly Kaokoland) and on the other side of the Kunene River in Angola. There are also a few groups left of the OvaTwa, who are also OvaHimba, but are hunter-gatherers. The OvaHimba are a semi-nomadic, pastoralist people, culturally distinguishable from the Herero people in northern Namibia and southern Angola, and speak OtjiHimba, a variety of Herero, which belongs to the Bantu family within Niger–Congo. The OvaHimba are considered the last (semi-) nomadic people of Namibia.

The Chukchi, or Chukchee are an indigenous people inhabiting the Chukchi Peninsula and the shores of the Chukchi Sea and the Bering Sea region of the Arctic Ocean within the Russian Federation. They speak the Chukchi language. The Chukchi originated from the people living around the Okhotsk Sea.

For almost 1,000 years, the Rabari have roamed the deserts and plains of what is today western India. It is believed that this tribe, with a peculiar Persian physiognomy, migrated from the Iranian plateau more than a millennium ago. The Rabari are now found largely in Gujarat and Rajasthan.

Q.66) The Barak River flows through

1. Assam
2. Manipur
3. Nagaland

Select the correct code:

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

Q.66) Solution (a)

The Barak River is one of the major rivers of South Assam and is a part of the Surma-Meghna River System. It rises in the hill country of Manipur State, where it is the biggest and the most important of the hill country rivers. After Manipur it flows through Mizoram State and into Assam, ending after 564 kilometres (350 mi) just after it enters Bangladesh where it forks into the Surma and Kushiya rivers.

The Barak Valley is located in the southern region of the Indian state of Assam. The main city of the valley is Silchar. The region is named after the Barak river. The Barak valley mainly consists of three administrative districts of Assam State - namely Cachar, Karimganj, and

Hailakandi. Among these three districts, North Cachar belonged to the Kachari Kingdom before the British Raj now Dima Hasao rules here, whereas Karimganj and Hailakandi belonged to the Sylhet district of then Bangladesh. Karimganj was separated from Sylhet after the 1947 referendum; with the rest of Sylhet falling under East Pakistan (now Bangladesh) and Karimganj under India.

Source: <https://economictimes.indiatimes.com/news/politics-and-nation/assams-barak-valley-can-be-hub-for-international-trade-ram-nath-kovind/articleshow/61727003.cms>

Q.67) Consider the following statements about International Court of Justice (ICJ)

1. It is the judicial arm of the United Nations.
2. The UN Security Council is authorised by to enforce Court (ICJ) rulings.
3. The ICJ has a total strength of 15 judges who are elected to nine-year terms of office.

Select the correct statements

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

Q.67) Solution (d)

The International Court of Justice (ICJ) started work in 1946, after half a century of international conflict in the form of two World Wars.

The ICJ has its seat at The Hague, the Netherlands, and has the jurisdiction to settle disputes between countries and examine cases pertaining to violation of human rights according to the tenets of international law. It is the judicial arm of the United Nations.

However, this was not the first effort at instituting a multilateral forum to settle trans-national disputes. The ICJ was established in 1945 by the UN Charter following its precursor, the Permanent Court of International Justice, falling into desuetude owing to the inability to enforce its mandate, especially during the intervening war years.

Subsequently, the ICJ has passed many landmark judgements, but the execution of its verdicts have often been hindered by the skewed balance of power in the United Nations. The UN Security Council is authorised by Chapter XIV of the United Nations Charter to enforce Court rulings, but enforcement is subject to veto by permanent members of the Security Council.

The ICJ has a total strength of 15 judges who are elected to nine-year terms of office. They are elected by members of the United Nations General Assembly and the Security Council, where polling takes place simultaneously but independent of each other. In order to be elected, a candidate must have an absolute majority in both bodies, which often leads to much lobbying, and a number of rounds of voting.

In order to ensure a sense of continuity, especially in pending cases, elections are conducted triennially for a third of the 15-member Court. Judges are eligible to stand for re-election. Elections are held in New York during the autumn session of the United Nations General Assembly, and the elected judges enter office on February 6 of the subsequent year. After the Court is in session, a President and Vice-President are elected by secret ballot to hold office for three years. If a judge were to die in office, resign, or be incapacitated to perform the duties expected of her, a special election is held as soon as possible to fill the vacancy for the unexpired duration of her tenure.

The Court also adheres to a rigid ethno-cultural matrix to ensure that it is representative of the 'main forms of civilization and the principal legal systems of the world.' This internal arithmetic is maintained at every election to the ICJ. Of the 15 judges, it is mandated that three should be from Africa, two from Latin America and the Caribbean, three from Asia, five from Western Europe and other states, and two from Eastern Europe.

Source: <http://www.thehindu.com/news/international/how-are-judges-elected-to-the-international-court-of-justice/article20619816.ece>

Q.68) Consider the following statements about World Congress on Information Technology (WCIT)

1. It was first held in 1978 by WITSA (World Information Technology & Services Alliance)
2. WCIT was held in India for the first time in 2017

Select the correct statement

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

Q.68) Solution (a)

First held in 1978 by WITSA (World Information Technology & Services Alliance), the World Congress on Information Technology (WCIT) has become the premier international IT forum.

Bringing together over 2,500 visionaries, captains of industry, government leaders and academics from more than 80 countries, it is an event of unparalleled scope and scale. Discussion topics range from emerging markets and technologies to legal and policy issues, user perspectives, new business opportunities and developing political and economic trends. The WCIT consistently attracts high level, internationally recognized leaders from government, industry and academia.

The World Information Technology and Services Alliance (WITSA) is a consortium of associations from the information and communications technology (ICT) industry around the world. The group claims that it represents over 90% of the world ICT market through its global membership, and has a goal of advancing the growth and development of the ICT industry. WITSA was founded in 1978 as the World Computing Services Industry Association, and participates in advocacy in international public policy that affects the "global information infrastructure". It voices the concerns of the international IT industry in organisations such as the World Trade Organization, the Organisation for Economic Co-operation and Development, and the G8.

WITSA represents IT industry associations in over 80 countries or economies. WITSA's motto is "Fulfilling the Promise of the Digital Age".

The World Congress on Information Technology (WCIT), a premier global forum that is to be held for the first time in India, at Hyderabad in February 2018, will focus on the technology-led disruption taking place in the industry.

With 'Amplify Digital: Disrupt the Core' as the theme, the 22nd edition of the conference would showcase latest trends, technologies, use cases and strategic discussions on building the digital future.

Source: <http://www.thehindu.com/business/global-meet-tech-disruption-to-be-focus/article20599832.ece>

Q.69) Advanced Supersonic Parachute Inflation Research Experiment (ASPIRE) is associated with

- a) NASA's Mars 2020 mission
- b) JUNO Spacecraft
- c) ExoMars
- d) Falcon 9

Q.69) Solution (a)

NASA has completed the first test of its Mars 2020 mission's parachute-testing series, the Advanced Supersonic Parachute Inflation Research Experiment (ASPIRE).

The Mars rover mission set to launch in 2020 will seek signs of ancient Martian life by investigating evidence in place and by catching drilled samples of Martian rocks for potential future return to Earth.

The mission will rely on a special parachute to slow the spacecraft down as it enters the Martian atmosphere at over 5.4 km per second.

Source: <http://indianexpress.com/article/technology/science/mars-2020-rover-mission-completes-first-supersonic-parachute-test-nasa-4947760/>

Q.70) A vasectomy is performed for

- a) Birth control
- b) Correction of sexual dysfunction
- c) Increased hormone production
- d) Hair growth

Q.70) Solution (a)

Vasectomy — also called male sterilization — is a surgical procedure. It is meant to protect against pregnancy permanently.

A vasectomy is a simple surgery done by a doctor in an office, hospital, or clinic. The small tubes in the scrotum that carry sperm are cut or blocked off, so sperm can't leave your body and cause pregnancy.

Vasectomies are meant to be permanent — so they usually can't be reversed.

Source: <http://pib.nic.in/newsite/mbErel.aspx?relid=173581>

Q.71) Consider the following statements about Global Conference on Cyber Space (GCCS)

1. The first edition of GCCS was held in London in 2011
2. The theme for 5th edition of GCCS is 'Cyber4All: An Inclusive, Sustainable, Developmental, Safe and Secure Cyberspace'

Select the correct statements

- a) 1 Only
- b) 2 Only

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

Q.71) Solution (c)

Global Conference on Cyber Space (GCCS) is a prestigious global event where international leaders, policymakers, industry experts, think tanks, cyber wizards etc gather to deliberate on issues and challenges for optimally using cyber space. GCCS was launched with a view to establish internationally agreed 'rules of the road' for behavior in cyberspace, and create a more focused and inclusive dialogue between all those with a stake in the internet (governments, civil society and industry) on how to implement them.

The GCCS is taking place outside OECD nations for the first time

The theme for the GCCS 2017 is 'Cyber4All: An Inclusive, Sustainable, Developmental, Safe and Secure Cyberspace'

The conference to take place on 23rd & 24th of November 2017 in New Delhi

The first edition of GCCS was held in London in 2011.

The second conference was held in 2012 in Budapest.

The third edition of GCCS was held in 2013 in Seoul.

The fourth version- GCCS 2015 was held in The Hague, Netherlands.

Source: <https://www.ndtv.com/india-news/pm-narendra-modi-inaugurates-largest-ever-global-conference-on-cyber-space-1778945>

Q.72) Consider the following statements about European Bank for Reconstruction and Development (EBRD)

1. It is the European Union's lending institution established under the Treaty of Rome
2. It is a publicly owned international financial institution and its shareholders are the EU member states

Select the correct statements

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

Q.72) Solution (d)

The European Bank for Reconstruction and Development (EBRD) is an international financial institution founded in 1991. As a multilateral developmental investment bank, the EBRD uses investment as a tool to build market economies. Initially focused on the countries of the former Eastern Bloc it expanded to support development in more than 30 countries from central Europe to central Asia. Besides Europe, member countries of the EBRD are from five continents (North America, Africa, Asia and Australia, see below), with the biggest shareholder being the United States, so the name is somewhat of a misnomer.

Headquartered in London, the EBRD is owned by 65 countries and two EU institutions. Despite its public sector shareholders, it invests mainly in private enterprises, together with commercial partners.

The EBRD is not to be confused with the European Investment Bank (EIB), which is owned by EU member states and is used to support EU policy. EBRD is also distinct from the Council of Europe Development Bank (CEB).

Source: <http://www.firstpost.com/business/cabinet-approves-indias-membership-for-european-bank-for-reconstruction-and-development-4222917.html>

Q.73) The Union cabinet has approved constitution of the Fifteenth Finance Commission. Consider the following statements

1. Article 280 of the Constitution of India requires setting up of a finance commission within two years from the commencement of this Constitution
2. The Chairman of the Finance Commission is the Finance Minister of India

Select the correct statements

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

Q.73) Solution (a)

The Union cabinet has approved constitution of the Fifteenth Finance Commission that will decide the formula for sharing of taxes between the Centre and states for five years starting April 1, 2020.

Article 280 of the Constitution requires setting up of a finance commission within two years from the commencement of this Constitution and thereafter at the expiration of every fifth year.

The Finance Commission was established by the President of India in 1951 under Article 280 of the Indian Constitution. It was formed to define the financial relations between the central government of India and the individual state governments. The Finance Commission (Miscellaneous Provisions) Act of 1951 additionally defines the terms of qualification, appointment and disqualification, the term, eligibility and powers of the Finance Commission. As per the Constitution, the Commission is appointed every five years and consists of a chairman and four other members..

The Chairman of the Finance Commission is selected from people with experience of public affairs. The other four members are selected from people who:

- Are, or have been, or are qualified, as judges of High Court,
- Have knowledge of Government finances or accounts, or
- Have had experience in administration and financial expertise; or
- Have special knowledge of economics

Up for Review

15th Finance Commission to decide revenue sharing between Centre & state

Recommendation for April 1, 2020 to March 31, 2025

First finance commission after rollout of GST

It may suggest changes in the devolution formula based on GST experience

Terms of reference and members to be announced soon

Commission expected to give its report in two years

The 14th Finance Commission was set up on January 2, 2013. Headed by former Reserve Bank of India governor YV Reddy, its recommendations cover the period from April 1, 2015 to March 31, 2020.

The Fourteenth Finance Commission had stepped up the share of states in net central taxes to 42% from 32%.

Source: <https://www.ndtv.com/business/cabinet-nod-for-15th-finance-commission-1778728>

Q.74) "World Development Report" is an annual publication of

- a) United Nations Development Programme
- b) International Bank of Reconstruction and Development
- c) World Trade Organisation
- d) International Monetary Fund

Q.74) Solution (b)

The World Development Report (WDR) is an annual report published since 1978 by the International Bank for Reconstruction and Development (IBRD) or World Bank. Each WDR provides in-depth analysis of a specific aspect of economic development. Past reports have considered such topics as agriculture, youth, equity, public services delivery, the role of the state, transition economies, labour, infrastructure, health, the environment, risk management, and poverty. The reports are the Bank's best-known contribution to thinking about development.

Source: <http://www.thehindu.com/opinion/op-ed/going-back-to-the-basics/article19919715.ece>

Q.75) The salaries and allowances of the Judges of the High Court are charged do the

- a) Consolidated Fund of India
- b) Consolidated Fund of the State
- c) Contingency Fund of India
- d) Contingency Fund of the State

Q.75) Solution (b)

The salary and allowances of the Judges, the salaries, allowances and pensions of the staff as well as the administrative expenses of a high court are charged on the consolidated fund of the state. The pension of a high court judge is charged on the Consolidated Fund of India and not the state.

Source: <https://economictimes.indiatimes.com/news/politics-and-nation/supreme-court-and-high-court-judges-to-get-salary-hike/articleshow/61753636.cms>

Q.76) Nalbana Island and Mangalajodi are known for

- a) Olive Ridley Turtles

- b) Migratory birds
- c) Vaquita
- d) Kemp's Ridley Turtle

Q.76) Solution (b)

Mangalajodi is an olden village under Tangi, Orissa block in Khordha district of Orissa at the northern edge of Chilika Lake. Its vast wetlands attract thousands of migratory birds, journey from as far different places of the world. Its wetland now host more than 1.5 lakhs of birds in the peak season. November to March is a good time to visit for enjoying an amazing experience. Its importance as a significant global wetland habitat and declared as an International Bird Conservation Area.

Nalbana Bird Sanctuary or Nalbana Island is the core area of the Ramsar designated wetlands of Chilika Lake. It was declared a bird sanctuary under the Wildlife Protection Act in 1973. In the heart of the park, one can see thousands of birds descending during the migratory season. The island disappears during monsoon season due to inundation only to emerge again in post-monsoon.

Source: <http://www.thehindu.com/news/national/other-states/migratory-birds-start-arriving-in-chilika/article20670274.ece>

Q.77) Consider the following statements about

1. International Clinical Trials Registry Platform (ICTRP) is a network of Primary Registers, which has been developed by the WHO
2. Trials registered in the Clinical Trials Registry - India (CTRI) are freely searchable from ICTRP

Select the correct statements

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

Q.77) Solution (c)

The Clinical Trials Registry - India (CTRI), set up at the National Institute of Medical Statistics, ICMR, New Delhi is a free and online system for registration all clinical trials being conducted in India (www.ctri.nic.in). Registration of clinical trials in the CTRI is now mandatory, as per notification of the Drugs Controller General (India). Trials registered in

the CTRI are freely searchable, both from the CTRI site as well as the International Clinical Trials Registry Platform (ICTRP).

The ICTRP is a network of Primary Registers, which has been developed by the WHO. The mission of the WHO's ICTRP is to ensure that a complete view of research is accessible to all those involved in health care decision making. The ICTRP in itself is not a Registry, but collects data (details of registered trials) from its Primary Registers and displays them from a single search portal. Thus the ICTRP serves as a one-stop search portal for clinical trials that may be registered in diverse Primary Registers of the world.

A Primary Registry in the WHO Registry Network is a clinical trial registry with at least a national remit that meets WHO Registry Criteria for content, quality and validity, accessibility, unique identification, technical capacity and governance and administration (<http://www.who.int/ictcp/en/>). Primary Registries have the support of the ICMJE. There are currently 11 Primary Registries in the WHO Registry Network, including the CTRI.

The International Committee for Medical Journals Editors (ICMJE) released an editorial statement on compulsory registration of clinical trials in 2004. According to this statement, the ICJME proposed comprehensive trial registration as a solution to the problem of selective awareness and announced that all eleven ICJME member journals would adopt a trials-registration policy to promote this goal.

News:

From April, companies and organisations that have registered for clinical trials in India will have to disclose the outcomes of their tests within a year of completing them

In 2013, the Supreme Court of India forbade fresh applications for clinical trials following a public interest litigation petition due to reports that there had been a high number of deaths among those registered for trials

Proper mechanism: The court asked the government to set in place a proper mechanism to regulate trials. This led to measures which required that compensation be paid to patients affected by trials and that there was audio-visual proof that participants had indeed consented to take part in a trial. However, these requirements were later eased and a streamlined system is in place which, according to clinical-trial companies, is much more conducive to organising trials.

Source: <http://www.thehindu.com/news/national/call-to-make-clinical-trial-data-public/article20667337.ece>

Q.78) Consider the following statements about Warsaw International Mechanism

1. It was established at COP-21
2. It is associated with the impacts of climate-related stressors that occur despite efforts to reduce greenhouse gas emissions and adapt to climatic changes

Select the correct statements

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

Q.78) Solution (b)

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

Source: <http://www.thehindu.com/opinion/op-ed/far-from-keeping-the-world-safe/article20663501.ece>

Q.79) National Mineral Exploration Policy (NMEP) is on the lines of UNCOVER project of

- a) Canada
- b) Russia
- c) Australia
- d) USA

Q.79) Solution (c)

Read More - <http://pib.nic.in/newsite/PrintRelease.aspx?relid=146629>

Q.80) Eka Movement" was surfaced by

- a) Mahatma Gandhi
- b) Madri Passi
- c) Basanti Debi
- d) None of the above

Q.80) Solution (b)

Eka Movement or Unity Movement is a peasant movement which surfaced in Hardoi, Bahraich and Sitapur during the end of 1921 by Madri Passi. The initial thrust was given by the leaders of Congress and Khilafat movement. The main reason of movement was higher rent, which was generally higher than 50% of recorded rent in some areas. Oppression of thikadhars who were entrusted to collect rent and practice of share rent also contributed to this movement.

The Eka meetings were marked by a religious ritual in which a hole that represented River Ganga was dug in the ground and filled with water, a priest was brought in to preside and assembled peasants vowed that they would pay only recorded rent buy pay it on time, would not leave when ejected, would refuse to do forced labour, would give no help to criminals and abide by the Panchayat decisions, they would not pay the revenue without receipt and would remain united under any circumstance. Small zamindars who were disenchanted with British Government due to heavy land revenue demand were also a part of this movement.

Soon the leadership of Movement changed from Congress to Madari Pasi, a low caste leader who was not inclined to accept non-violence. This led the movement losing contact with nationalist class.

By March 1922, due to severe repression of British the Eka Movement came to an end.

Q.81) Dindigul lock manufacturing industry has a high brand image and the locks are known for their traditional design, safety, and quality. It is from which of the following states?

- a) Uttar Pradesh
- b) Tamil Nadu
- c) Madhya Pradesh
- d) West Bengal

Q.81) Solution (b)

Padlocks, drawer locks, almirah locks, door locks, mango locks, trick locks, and excise locks are some of the locks manufactured in the area. The art of lock making is practised within around five km radius of the town . Dindigul locks are mango shaped iron and brass locks. They are handmade and each one is unique in design and system. The lock units are concentrated in Nagalnagar, Nallampatti, Kodaiparaipatti, Yagappanpatti, and Kamalapatti and are more than 100 years old.

The uniqueness of Dindigul locks are twin keys or three keys for a single lock and locks with multi-locking system. The precision lever mechanism of Dindigul lock is unique. The shackles are meticulously designed and are hard to break.

Source: <http://www.thehindu.com/news/national/tamil-nadu/dindiguls-unique-industry-locked-away-in-the-past/article20913558.ece>

Q.82) With rising number of cases under the Insolvency and Bankruptcy Code, the government has set up a 14-member panel to identify and suggest ways to address issues faced in implementation of the law. The Insolvency Law Committee is chaired by

- a) Injeti Srinivas
- b) Bibek Debroy
- c) Amitabh Kant
- d) M S Sahoo

Q.82) Solution (a)

Source: <https://economictimes.indiatimes.com/news/economy/policy/insolvency-law-government-sets-up-14-member-panel-to-identify-issues/articleshow/61742163.cms>

Q.83) Talanoa Dialogue is associated with

- a) TPP
- b) RCEP
- c) INSTC
- d) None of the above

Q.83) Solution (d)

Talanoa Dialogue is facilitative dialogue among member of Conference of Parties of Paris Agreement to be taken in 2018.

Talanoa is a traditional word used in Fiji and the Pacific to reflect a process of inclusive, participatory and transparent dialogue. The purpose of Talanoa is to share stories, build empathy and to make wise decisions, which are for the collective good. The process of Talanoa involves the sharing of ideas, skills and experience through storytelling. During the process, Parties build trust and advance knowledge through empathy and understanding. Blaming others and making critical observations are inconsistent with the building of mutual trust and respect, and therefore inconsistent with the concept of Talanoa. Talanoa fosters stability and inclusiveness in relation to dialogue, by creating a safe space which embraces mutual respect for a platform for decision making for a greater good.

Source: <https://timesofindia.indiatimes.com/home/environment/global-warming/bonn-climate-negotiations-conclude-with-mixed-bag-for-both-rich-and-developing-blocks/articleshow/61700113.cms>

Q.84) Punchhi Commission is associated with

- a) Centre-State Relations
- b) Judicial Appointments
- c) National Institutional of Ranking Framework
- d) National Mineral Policy

Q.84) Solution (a)

The Government of India constituted a Commission on Centre-State Relations under the chairmanship of Justice Madan Mohan Punchhi, former Chief Justice of India on 27th April 2007 to look into the new issues of Centre-State relations keeping in view the changes that have taken place in the polity and economy of India since the Sarkaria Commission had last looked at the issue of Centre-State relations over two decades ago.

The Commission examined and reviewed the working of the existing arrangements between the Union and States, various pronouncements of the Courts in regard to powers, functions and responsibilities in all spheres including legislative relations, administrative relations, role of governors, emergency provisions, financial relations, economic and social planning, Panchayati Raj institutions, sharing of resources including inter-state river water etc. The Commission made 273 recommendations in its seven volume report presented to Government on 30 March 2010.

Source: <http://www.thehindu.com/news/national/rajnath-seeks-cooperation-of-states-on-central-forces/article20941992.ece>

Q.85) AGLAE was recently in news. Consider the following statements

1. It is World's only particle accelerator for art
2. It is located in Italy

Select the correct statements

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

Q.85) Solution (a)

The world's only particle accelerator dedicated to art was switched on at the Louvre in Paris to help experts analyse ancient and precious works.

The 37-metre AGLAE accelerator housed underneath the huge Paris museum will be used for the first time to routinely study and help authenticate paintings and other items made from organic materials.

The Centre for Research and Restoration of the Museum of France (C2RMF) — which is independent of the Louvre — has spent €2.1 million overhauling and upgrading the machine, which can determine the chemical make-up of objects without the need to take samples.

Source: <http://www.thehindu.com/sci-tech/technology/particle-accelerator-for-art-revs-up/article20724988.ece>

Q.86) Consider the following statements about Neelakurinji

1. It is found in Nepal, India and Tibet
2. It blossoms only once in 12 years

Select the correct statements

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

Q.86) Solution (b)

Kurinji or Neelakurinji is a shrub that is found in the shola forests of the Western Ghats in South India. Nilgiri Hills, which literally means the blue mountains, got their name from the purplish blue flowers of Neelakurinji that blossoms only once in 12 years.

Source: <http://www.thehindu.com/news/national/kerala/marayur-gets-ready-for-neelakurinji/article21014276.ece>

Q.87) Consider the following statements about 'UMANG App'

1. It is developed by Ministry of Electronics and Information Technology (MeitY) and National e-Governance Division (NeGD)
2. It provides a single platform to access pan India e-Gov services ranging from Central to Local Government bodies and other citizen centric services

Select the correct statements

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

Q.87) Solution (c)

UMANG (Unified Mobile Application for New-age Governance) is envisaged to make e-governance. It is developed by Ministry of Electronics and Information Technology (MeitY) and National e-Governance Division (NeGD) to drive Mobile Governance in India.

UMANG provides a single platform for all Indian Citizens to access pan India e-Gov services ranging from Central to Local Government bodies and other citizen centric services.

UMANG intends to provide major services offered by Central and State Government departments, Local bodies and other utility services from private organizations. It provides a unified approach where citizens can install one application to avail multiple government services.

UMANG service has been made available on multiple channels like mobile application, web, IVR and SMS which can be accessed through smartphones, feature phones, tablets and desktops. UMANG has been created with a thought to add convenience to your lifestyle. UMANG will revolutionize the way how an Indian citizen avails government services today,

because it leverages the current accelerated internet and smartphone penetration in our country.

Source: <https://economictimes.indiatimes.com/magazines/panache/umang-the-app-that-allows-access-indian-governments-services-through-web-and-mobile/articleshow/61795690.cms>

Q.88) Consider the following statements about 'Pharma Sahi Daam'

1. It is an online search tool for checking prices of Scheduled and Non-Scheduled medicines instantly at the time of purchase of the medicine
2. It is developed by National Pharmaceutical Pricing Authority

Select the correct statements

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

Q.88) Solution (c)

The Mobile App developed for NPPA (National Pharmaceutical Pricing Authority),Ministry of Chemicals & Fertilizers will provide information to consumers on prices of Scheduled medicines which are under price regulation as well as Non Scheduled medicines.'Pharma Sahi Daam' is an online search tool for checking prices of Scheduled / Non-Scheduled medicines instantly at the time of purchase of the medicine.The tool will indicate the MRP of the medicines (inclusive of VAT).This app will facilitate consumers to verify whether medicines are being sold within the approved price range and also to detect any case of overpricing by pharmaceutical company/chemist. In case of overpricing the consumer can lodge a complaint through PHARMA JAN SAMADHAN website.

(<http://nppaindia.nic.in/redressal.html>).

Source:

<https://economictimes.indiatimes.com/industry/healthcare/biotech/pharmaceuticals/more-life-saving-medicines-to-become-cheaper-by-as-much-as-53/articleshow/61782648.cms>

Q.89) NSCM-IM's main demand has been the creation of a 'Greater Nagalim'. The map of Greater Nagalim comprising "all Naga-inhabited areas" shows several districts of which of the following states?

1. Assam
2. Arunachal Pradesh
3. Manipur

Select the correct statements

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

Q.89) Solution (d)



Source: <http://indianexpress.com/article/explained/greater-nagalim-claims-as-nscnim-deal-nears-fruit-why-three-northeastern-states-are-agitated-4956070/>

Q.90) Which of the following is NOT a member of 'Cairns Group'?

- a) Australia
- b) India
- c) Pakistan
- d) South Africa

Q.90) Solution (b)

The Cairns Group (Cairns Group of Fair Trading Nations) is an interest group of 20 agricultural exporting countries, composed of Argentina, Australia, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia, New Zealand, Pakistan, Paraguay, Peru, the Philippines, South Africa, Thailand, Uruguay, and Vietnam.

The Cairns Group seeks to liberalize global trade in agricultural produce. In particular, its members aim to abolish export subsidies and trade-distorting ("amber box") domestic support for agricultural products and seek to improve market access for agricultural exports. The coalition attempts to present a common front in multilateral trade negotiations at the World Trade Organization (WTO), tabling joint proposals and occasionally working with like-minded groups such as the G20 group of developing nations.

Source: <http://www.livemint.com/Politics/qBhqHXeS9PR5bZeOINBipM/Food-security-India-to-convey-firm-stand-at-Marrakesh-meet.html>

Q.91) The government-appointed committee released a white paper as part of its work to prepare a data protection framework. The committee is headed by

- a) BN Srikrishna
- b) Ratan Watal
- c) Rajiv Kumar
- d) Arvind Panagariya

Q.91) Solution (a)

The Justice BN Srikrishna Committee, set up by the Ministry of Electronics & Information Technology on July 31, tasked with writing a draft data protection law, published a white paper on data protection framework in India, asking for stakeholders' feedback by December 31.

The seven key principles mentioned on which such a framework could be based upon in the country include:

- technology agnostic law;
- be applicable to the private sector and the government, maybe with different obligations though;
- informed and meaningful consent;
- minimal and necessary data processing;
- data controller must be accountable for any processing;

- establishing a high-powered statutory authority for enforcement, supported by a decentralised enforcement mechanism; and
- penalties for wrongful data processing to ensure deterrence.

Source: <http://indianexpress.com/article/india/data-protection-framework-srikrishna-committee-suggests-7-key-principles-setting-up-of-authority-4957720/>

Q.92) Consider the following statements

1. Ranthambore National Park is one of the Project Tiger reserves
2. The Ranthambore Fort was built by a ruler of the Chauhan dynasty around the mid-10th century

Select the correct statements

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

Q.92) Solution (c)

The Ranthambore Fort

- This fort lies within the Ranthambore National Park, near the town of Sawai Madhopur. The fort was built by a ruler of the Chauhan dynasty around the mid-10th century. Like the other forts, it is built on a hill and is surrounded by forests.
- The Ranthambore Fort bears testament to the bravery of Hammir Dev of the Chauhan dynasty. The remains of the palace of Hammir are among the oldest surviving structures of an Indian palace.

Ranthambore National Park

- It was declared one of the Project Tiger reserves in 1973. Ranthambore became a national park in 1980.
- In 1984, the adjacent forests were declared the Sawai Man Singh Sanctuary and Keladevi Sanctuary, and in 1991 the tiger reserve was enlarged to include the Sawai Man Singh and Keladevi sanctuaries.
- Ranthambore wildlife sanctuary is known for its Bengal tigers, and is one of the best places in India to see these animals in their natural jungle habitat.
- The park's deciduous forests are characteristic examples of the type of jungle found in Central India. Other fauna include the Indian leopard, nilgai, wild boar, sambar,

striped hyena, sloth bear, southern plains gray langur, rhesus macaque, mugger crocodile and chital.

Source: <http://www.thehindu.com/news/national/other-states/rajasthan-seeks-nod-to-bring-tigers-from-other-states/article20931993.ece>

Q.93) Consider the following statements about Minimum Age Convention, 1973

1. It is adopted by the International Labour Organization
2. India is yet to ratify the convention
3. It provides for the possibility of initially setting the general minimum age at 14 (12 for light work) where the economy and educational facilities are insufficiently developed

Select the correct statement

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

Q.93) Solution (c)

India has ratified the **Minimum Age Convention, 1973 (No. 138)** and **Worst Forms of Child Labour Convention, 1999 (No. 182)** of the International Labour Organization (ILO)

Minimum Age Convention, 1973 (No. 138)

- This fundamental convention sets the general minimum age for admission to employment or work at 15 years (13 for light work) and the minimum age for hazardous work at 18 (16 under certain strict conditions).
- It provides for the possibility of initially setting the general minimum age at 14 (12 for light work) where the economy and educational facilities are insufficiently developed.

Worst Forms of Child Labour Convention, 1999 (No. 182)

- This fundamental convention defines as a "child" a person under 18 years of age.
- It requires ratifying states to eliminate the worst forms of child labour, including all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict; child prostitution and pornography; using children for illicit activities, in particular for the

production and trafficking of drugs; and work which is likely to harm the health, safety or morals of children.

- The convention requires ratifying states to provide the necessary and appropriate direct assistance for the removal of children from the worst forms of child labour and for their rehabilitation and social integration.
- It also requires states to ensure access to free basic education and, wherever possible and appropriate, vocational training for children removed from the worst forms of child labour.

Child Labour

Child labour is work carried out to the detriment and endangerment of a child, in violation of international law and national legislation. It either deprives children of schooling or requires them to assume the dual burden of schooling and work. Child labour to be eliminated is a subset of children in employment. It includes:

- All “unconditional” worst forms of child labour, such as slavery or practices similar to slavery, the use of a child for prostitution or for illicit activities;
- Work done by children under the minimum legal age for that type of work, as defined by national legislation in accordance with international standards.

Source: <http://www.thehindu.com/opinion/op-ed/childhood-foregone/article21011313.ece>

Q.94) Formal sources of credit do not include

1. Banks
2. Cooperatives
3. Employers
4. Money lenders

Select the correct code:

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

Q.94) Solution (d)

Banks and cooperative societies constitute the formal sector of credit. Landlords, moneylenders, traders, relatives, friends and other sources of credit constitute the informal sector of credit.

The credit activities of the formal sector are supervised by the Reserve Bank of India.

In the informal sector there is no supervisory body. The credit activities of this sector are only driven by profit with much higher interest rate. A high rate of interest means that a borrower spends more money to repay the loan and is left with less money for himself. This also leads to a debt trap.

The rich at present have more access to cheaper credit from the formal sector, while the poor still have to depend on loans at higher rates of interest from the informal sector. Cheaper credit is essential for development in a country. The formal sector offers more affordable credit and so it must increase its lending to more and more people, especially in the rural areas.

Source: <http://www.thehindu.com/todays-paper/tp-opinion/dont-criminalise-usury/article20946391.ece>

Q.95) Consider the following statements

1. Members of parliament other than ministers are called private members and bills presented by them are known as private member's bills.
2. Private members bill can be initiated only in the Lok Sabha

Select the correct statement

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

Q.95) Solution (a)

A member of the Lok Sabha other than those part of the Union Council of Ministers is treated as a Private Member for introduction of any legislation. A private member desirous of introducing a legislation can do so on a day dedicated to such business. But any legislation seeking to amend the constitution has to be approved by the standing committee on Private Members bills.

It can be initiated in both the houses.

Out of 14 private members' bills enacted so far since the commencement of Parliament in 1952, five were introduced in the Rajya Sabha and became law of the land. These are: The Ancient and Historical Monuments and Archaeological Sites and Remains (Declaration of National Importance, Second Amendment) Bill, 1954; the Hindu Marriage (Amendment) Bill,

1956; the Indian Marine Insurance Bill, 1959; the Orphanages and other Charitable Homes (Supervision and Control) Bill, 1959; and the Indian Penal Code (Amendment) Bill, 1963.

Source: <http://indianexpress.com/article/opinion/editorials/delhi-pollution-smog-air-quality-my-right-to-clean-air-4939180/>

Q.96) Consider the following statements about Chabahar Port

1. It is located on the Gulf of Aden
2. It is intended to provide an alternative for trade between India and Afghanistan

Select the correct statements

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

Q.96) Solution (b)

It is a seaport in Chabahar located in southeastern Iran, on the Gulf of Oman. It serves as Iran's only oceanic port, and consists of two separate ports named Shahid Kalantari and Shahid Beheshti, each of which have five berths.

The port of Chabahar is located on the Makran coast of Sistan and Baluchistan Province, next to the Gulf of Oman and at the mouth of Strait of Hormuz. It is the only Iranian port with direct access to the Indian Ocean. Being close to Afghanistan and the Central Asian countries of Turkmenistan, Uzbekistan etc., it has been termed the "Golden Gate" to these land-locked countries.

In May 2016, India and Iran signed a bilateral agreement in which India would refurbish one of the berths at Shahid Beheshti port, and reconstruct a 600 meter long container handling facility at the port. The port is intended to provide an alternative for trade between India and Afghanistan. This port is 800 kilometers closer to Afghanistan than Pakistan's Karachi port. In October 2017, India's first shipment of wheat to Afghanistan was sent through the Chabahar Port.



Source: <http://indianexpress.com/article/india/first-phase-of-chabahar-port-work-over-iran-tells-india-eyes-sunday-launch-4959524/>

Q.97) 'The Two State Solution' is concerned with

- a) Spain and Catalonia
- b) Israel and Palestine
- c) China and Taiwan
- d) None of the above

Q.97) Solution (b)

Source: <http://www.thehindu.com/news/national/narendra-modi-supports-creation-of-a-sovereign-independent-viable-palestine/article21019361.ece>

Q.98) Ribbon development is

- a) building of houses in a continuous row along a main road
- b) used in land use planning to retain areas of largely undeveloped, wild, or agricultural land surrounding or neighbouring urban areas
- c) an area of higher population density lying between Mumbai and Pune
- d) a collection of low-cost, temporary changes to the built environment, usually in cities, intended to improve local neighbourhoods and city gathering places

Q.98) Solution (a)

Ribbon development is building houses along the routes of communications radiating from a human settlement. Such development generated great concern in the United Kingdom during the 1920s and the 1930s as well as in numerous other countries.

Source: <http://www.thehindu.com/business/india-must-integrate-with-global-value-chain-ADB/article21040771.ece>

Q.99) 'Towards a Pollution-Free Planet' is released by

- a) United Nations Environment Programme
- b) Green Peace
- c) Climate Action Network
- d) Earthwatch Institute

Q.99) Solution (a)

Source: <http://www.thehindu.com/news/national/india-loses-billions-to-air-pollution-says-united-nations/article21039419.ece>

Q.100) Which of the following is/are correct about Plastic Waste Management Rules, 2016?

- a) Rural areas have been brought in ambit of these rules
- b) Responsibility of waste generators has been introduced for the first time
- c) Both (a) and (b)
- d) Neither (a) nor (b)

Q.100) Solution (c)

PLASTIC WASTE MANAGEMENT RULES, 2016 – WHAT'S NEW?

1. Rural areas have been brought in ambit of these Rules since plastic has reached to rural areas also. Responsibility for implementation of the rules is given to Gram Panchayat.
2. First time, responsibility of waste generators is being introduced. Individual and bulk generators like offices, commercial establishments, industries are to segregate the plastic waste at source, handover segregated waste, pay user fee as per bye-laws of the local bodies.

3. Plastic products are left littered after the public events (marriage functions, religious gatherings, public meetings etc) held in open spaces. First time, persons organising such events have been made responsible for management of waste generated from these events.
4. Use of plastic sheet for packaging, wrapping the commodity except those plastic sheet's thickness, which will impair the functionality of the product are brought under the ambit of these rules. A large number of commodities are being packed/wrapped in to plastic sheets and thereafter such sheets are left for littered. Provisions have been introduced to ensure their collection and channelization to authorised recycling facilities.
5. Extended Producer Responsibility: Earlier, EPR was left to the discretion of the local bodies. First time, the producers (i.e persons engaged in manufacture, or import of carry bags, multi-layered packaging and sheets or like and the persons using these for packaging or wrapping their products) and brand owners have been made responsible for collecting waste generated from their products. They have to approach local bodies for formulation of plan/system for the plastic waste management within the prescribed timeframe.
6. SPCBs will not grant/renew registration of plastic bags, or multi-layered packaging unless the producer proposes the action plan endorsed by the concerned State Development Department.
7. Producers to keep a record of their vendors to whom they have supplied raw materials for manufacturing carry bags, plastic sheets, and multi-layered packaging. This is to curb manufacturing of these products in unorganised sector.
8. The entry points of plastic bags/plastic sheets/multi-layered packaging in to commodity supply chain are primarily the retailers and street vendors. They have been assigned the responsibility of not to provide the commodities in plastic bags/plastic sheets/multi-layered packaging which do not conform to these rules. Otherwise, they will have to pay the fine.
9. Plastic carry bag will be available only with shopkeepers/street vendors pre-registered with local bodies on payment of certain registration fee. The amount collected as registration fee by local bodies is to be used for waste management.
10. CPCB has been mandated to formulate the guidelines for thermoset plastic (plastic difficult to recycle). In the earlier Rules, there was no specific provision for such type of plastic.
11. Manufacturing and use of non-recyclable multi-layered plastic to be phased in two years.

Source: <http://indianexpress.com/article/opinion/columns/plastic-waste-management-polyethylene-bags-perils-of-plastics-waste-4959279/>