

**Answer & Explanation for G.S. Test-9 held on 8<sup>th</sup> April 2018**

1. Consider the following statements regarding Indian National Social Conference:
- (1) It was founded by Gopal Krishan Gokhale.
  - (2) It was a social reform cell working with the Indian National Congress.
  - (3) Its first session was held in 1885 alongside the inaugural session of the Indian National Congress.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only
  - (b) 2 only
  - (c) 2 and 3 only
  - (d) 1, 2 and 3

**Ans: (b)**

**Exp:** Indian (National) Social Conference was founded by Mahadev Govind Ranade and Raghunath Rao in 1887. The aim of the Conference was to discuss social evils and ways to remedy them. It ran as a social reform wing adjacent to the Indian National Congress. Its first session was held in Madras in December 1887.

2. Who among the following are NOT eligible for reappointment to the same office again?
- (1) Comptroller and Auditor General of India
  - (2) Chief Information Commissioner
  - (3) Chairman, UPSC
  - (4) Chief Election Commissioner
- Select the correct answer using the code given below:
- (a) 1, 3 and 4 only
  - (b) 1, 2, 3 and 4
  - (c) 1 and 2 only
  - (d) 2, 3 and 4 only

**Ans: (b)**

**Exp:** CIC shall be appointed for a term of 5 years from date on which he enters upon his office or till he attains the age of 65 years, whichever is earlier. CIC is not eligible for reappointment. Same goes for CAG, Chairman UPSC and CEC. Other members of the Election Commission and UPSC are re-eligible for the post of Chairman or Chief Election Commissioner.

3. The first ever "Investors Summit" exclusively for the North Eastern Region (NER) was organised in January, 2017. Which of the following statements are correct regarding the Summit?
- (1) It was organised jointly by the Ministry of Textiles and the Ministry of Development of North East Region.
  - (2) It was held at Guwahati, Assam
  - (3) The theme of the Summit was "Exploring Opportunities in North East Region".
- Select the correct answer using the code given below:
- (a) 1, 2 and 3
  - (b) 1 and 2 only
  - (c) 2 and 3 only
  - (d) 1 and 3 only

**Ans: (d)**

**Exp:** Statement 2 is wrong as the summit was held at Shillong, Meghalaya.

The summit aimed to showcase the NER as a global destination for investment and explored the possibility of bringing in convergence of efforts of various central Ministries and North Eastern States to attract investment in NER.

The Ministry of Textiles took the initiative to organize the first ever “Investors Summit” exclusively for NER, in association with Ministry of DONER and the industry associations FICCI and CII.

It is expected to unlock the huge potential of the NER in textile manufacturing and generate new avenues for employment in the region.

4. Consider the following statements regarding interest rates and exchange rates in Indian Economy:

- (1) Generally, the manufacturers, service exporters and farmers have preference for low interest rates and weak domestic currency.
- (2) Generally, infrastructure companies in the power sector and in the renewable energy sector have a preference for strong domestic currency and low interest rates.

Which of the statements given above is/are correct?

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

**Ans: (c)**

**Exp:** Generally, the manufacturers, service exporters and farmers have preferences in low interest rates and weak currency. Reasons: Profits increase, even if some inputs are imported since market share grows. This applies both to exporters (clothing) and firms producing for domestic market but competing with imports (steel, aluminium). Software exporters with high domestic value added will favour weak rupee.

Generally, infrastructure companies like power and renewable have preferences in strong currency and low interest rates. Reasons: Strong currency reduces costs without affecting revenues, which are earned in rupees. Costs fall because firms typically import capital equipment, financed with dollar loans. Low interest rates reduce debt service burden on domestic loans.

5. Arrange the following geographical features of India from north to south:

- (1) Marble Rocks Gorge
- (2) Zaskar Range
- (3) Ladakh Range
- (4) Silent Valley
- (5) Gawilgarh Hills

Select the correct answer using the code given below:

- (a) 2-3-5-1-4
- (b) 3-2-1-5-4
- (c) 3-2-4-1-5
- (d) 3-4-2-1-5

**Ans: (b)**

**Exp:**

- Ladakh Range in Jammu and Kashmir is the northernmost feature, followed by
- Zaskar Range in Jammu and Kashmir;

- Marble Rocks Gorge near Jabalpur in Madhya Pradesh
  - Gawilgarh Hills in Maharashtra
  - Silent Valley in Kerala
6. According to the Indian Council of Agricultural Research (ICAR), there is an annual loss of crops to the tune of almost 60 million tonnes or 10-12 % of crop production due to “Nematodes”. What are Nematodes?
- (a) They are soft bodied sucking insects that resemble tufts of white cotton which pierce the stems and leaves of a plant to ingest their nutrient rich sap.
  - (b) They are one of the 100 worst invasive species in the world. Infestations are difficult to control because of the insect’s ability to survive without food for long periods, its preference for dry conditions and low-moisture food, and its resistance to many insecticides.
  - (c) They are microscopic worms consisting of roundworms, threadworms and eelworms, many of which are parasites and are difficult to distinguish.
  - (d) They look like mosquitoes and attack leaves, stems and heads of cereals.

**Ans: (c)**

**Exp:** About 30-35% of the annual crop yield in India gets wasted because of pests. Among such pests, nematodes (microscopic worms many of which are parasites) had recently emerged as a major threat to crops in the country and they caused loss of 60 million tonnes of crops annually. The farmers are still not fully aware about these potential crop-destroyers. Unlike flatworms, nematodes have tubular digestive systems with openings at both ends. Nematodes have successfully adapted to nearly every ecosystem from marine (salt water) to fresh water, to soils, and from the Polar Regions to the tropics. They have also adapted to the highest to the lowest of elevations. Crop rotation of agricultural plants with nematode-resistant species or varieties is one of the simplest way of managing parasitic infestations of nematodes.

Option (a) is about Gypsy Moth

Option (b) is about Khapra Beetle

Option (d) is about Hessian fly.

7. With reference to the executive powers and functions and roles of the President, consider the following statements:
- (1) He can appoint a Commission to investigate into the conditions of socially and economically backward classes.
  - (2) He can appoint an Inter-State Council to promote Centre-State and Inter-State co-operation.
  - (3) He is the Chairman of the National Development Council, National Integration Council, Inter-State Council and National Water Resources Council.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 1 and 2 only
  - (c) 2 and 3 only
  - (d) 1, 2 and 3

**Ans: (b)**

**Exp:** To appoint a Commission to investigate into the conditions of socially and economically backward classes and to appoint an Inter-State Council to promote Centre–State and Inter-State cooperation, are two of the executive powers and functions of the President. The Prime Minister is the Chairman of the National Development Council, National Integration Council, Inter-State Council and National Water Resources Council.

8. With which of the following Aurobindo Ghosh was associated?

- (1) Bengal National College
- (2) Anushilan Samiti
- (3) Bande Mataram (Newspaper)

Select the correct answer using the code given below:

- (a) 1 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Ans: (d)**

**Exp:**

The Bengal National College started functioning from 15 Aug.1906 with Sri Aurobindo as its first Principal. At an early period, he left the organization of the college to the educationist Satish Mukherjee and plunged fully into politics.

The Bande Mataram was an English language newspaper founded in 1905 by Aurobindo Ghosh. It was first published on 6 August 1906.

Anushilan Samiti was a Bengali Indian organisation that existed in the first quarter of the twentieth century, and propounded revolutionary violence as the means for ending British rule in India. The organisation arose from a conglomeration of local youth groups and gyms in Bengal in 1902. It had two prominent if somewhat independent arms in East and West Bengal identified as Dhaka Anushilan Samiti centred in Dhaka (modern day Bangladesh), and the Jugantar group (centred at Calcutta) respectively.

It was led by nationalists such as Aurobindo Ghosh and his brother Barindra Ghosh and influenced by philosophies as diverse as Hindu Shakta philosophy propounded by Bengali literature Bankim and Vivekananda, Italian Nationalism, and Pan-Asianism of Kakuzo Okakura. The Samiti was involved in a number of noted incidences of revolutionary terrorism against British interests and administration in India within the decade of its founding, including early attempts to assassinate Raj officials whilst led by the Ghosh brothers. These were followed by the 1912 attempt on the life of the Viceroy of India, and the Seditious conspiracy during World War-I led by Rash Behari Bose and Jatindranath Mukherjee respectively.

The organisation moved away from its philosophy of violence in the 1920s, when a number of its members identified closely with the Congress and Gandhian non-violent movement, but a section of the group, notably under Sachindranath Sanyal, remained active in revolutionary movement, founding the Hindustan Republican Association in north India. A number of Congress leaders from Bengal, especially Subhash Chandra Bose, were accused by the British Government of having links with, and allowing patronage to, the organisation during this time.

The organisation's violent and radical philosophy revived in the 1930s, when it was involved in the Kakori conspiracy, the Chittagong armoury raid, and other attempts against the administration in British India and Raj officials.

9. Barren Island Volcano, India's only live volcano, became active again in January 2017. Which of the following statements is/are correct regarding the Barren Island Volcano?

- (1) It had started showing activity in 1991 after lying dormant for over 150 years.
- (2) Situated in the Bay of Bengal, it is a part of Andaman Islands and is totally uninhabited by either humans or animals.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

- (d) Neither 1 nor 2

**Ans: (a)**

**Exp:** The only live volcano in the Andaman and Nicobar Islands is erupting once again. The Barren Island volcano, located 140-km north-east of Port Blair, dormant for more than 150 years started erupting in 1991 and has since then shown intermittent activity.

The sediments and water in the vicinity of the volcano and recovered coal-like black pyroclastic material represent proximal volcanic ejecta.

The Andaman Basin is an active back-arc spreading basin and is known for its strong seismicity and many submarine volcanoes and hydrothermal activity.

How the goats got there remains a mystery, but the story goes that in 1891, a passing steamer from Port Blair offloaded some of these on the island. Apparently, the British would often leave livestock on islands in case they were stranded there in the future.

**10.** Which of the statements is correct about VAJRA initiative?

- (a) It is an “advanced shield of Indian army against missile attack”.
- (b) It is a programme of CDAC to protect Indian Cyber infrastructure against cyber attack.
- (c) It is a scheme to connect the Indian academic and research and development (R&D) systems to the best of global science and scientists for a sustained international collaborative research.
- (d) It is a project launched by Indian government in Antarctica for R&D in climate change and its impact on oceans.

**Ans: (c)**

**Exp:** The Science and Engineering Research Board (SERB), a Statutory body of the Department of Science and Technology (DST) has recently launched a ‘Visiting Advanced Joint Research (VAJRA) Faculty Scheme’ to connect the Indian academic and research and development (R&D) systems to the best of global science and scientists for a sustained international collaborative research. The scheme offers adjunct / visiting faculty assignments to overseas scientists, faculty members and R&D professionals including Non-resident Indians (NRI) and Overseas Citizen of India (OCI) to undertake high quality collaborative research in cutting edge areas of science and technology including interdisciplinary areas of priority such as energy, water, health, security, nutrition, materials and manufacturing, etc. with one or more Indian collaborators of public funded academic and research institutions of India. The VAJRA Faculty should be an active researcher working in an overseas leading academic / research / industrial organization with significant accomplishments in R&D. The initial Faculty assignment is given for a period of one year extendable to subsequent years based on the collaborative outcome and interest. The residency period of VAJRA Faculty in the host institution would be for a minimum of 1 month and a maximum of 3 months every year. VAJRA Faculty is provided US Dollars 15000 in the first month of residence and US Dollars 10000 in each of the subsequent month. Presently, call for applications is made open for prospective researchers.

**11.** Which among the following species of animals are critically endangered in India?

- (1) Tiger Toad
- (2) Hawksbill Turtle
- (3) Spoon-billed Sandpiper
- (4) Javan Rhinoceros

Select the correct answer using the code given below:

- (a) 1, 2, 3 and 4
- (b) 1, 2 and 3 only

- (c) 3 and 4 only
- (d) 1, 2 and 4 only

**Ans: (a)**

**Exp:** In the IUCN list, all the above-mentioned animals are listed as critically endangered in India.

12. India Air Force has formally inducted the first indigenously built Airborne Early Warning and Control System NETRA in February 2017. Which of the following statements is NOT correct about NETRA?
- (a) It is developed by the Defence Research and Development Organisation (DRDO).
  - (b) It has a range of around 200 km.
  - (c) India is only the 5<sup>th</sup> country to have developed such technology after China, Russia, Israel and United State of America.
  - (d) It is a robust monitoring system that provides 240 degree coverage.

**Ans: (c)**

**Exp:** India is only the 4<sup>th</sup> country to have developed such technology after Russia, Israel and United States of America.

The aircraft was handed over to the IAF on the opening day of Asia's largest air show Aero India-2017, more than six years behind schedule.

It is equipped with an indigenously built Active Electronically Scanned Radar, Secondary Surveillance Radar, Electronic and Communication Counter Measures, LOS (Line of Sight) and beyond LOS data link, a voice communication system and self-protection suite. It is designed to control the battle space by detecting enemy aircraft

The IAF also operates Israeli Phalcon airborne warning and control system (AWACS).

13. Which of the following statements regarding the Arakan Mountain Ranges is/are correct?
- (1) Naga Hills and Lushai Hills of India are a part of this Range.
  - (2) Irrawaddy river flows through this Range.
  - (3) Andaman and Nicobar Islands are also a part of this Mountain Range.
- Select the correct answer using the code given below:
- (a) 2 only
  - (b) 1 and 2 only
  - (c) 1 and 3 only
  - (d) 1, 2 and 3

**Ans: (d)**

**Exp:** The Arakan Mountains also called as the Arakan Range, Rakhine Range, Rakhine Yoma, ArakanYoma, Rakhine Roma or Arakan Roma is a mountain range in western Myanmar, between the coast of Rakhine State and the Central Burma Basin, in which flows the Irrawaddy River. It is the most prominent of a series of parallel ridges that arc through Assam, Nagaland, Mizoram and Burma.

The Arakan Mountains run from Manipur State of India in the north to the Cape Negrais in the south. They include the Naga Hills, the Chin Hills, and the Patkai range which includes the Lushai Hills. These mountains are submerged in the Bay of Bengal for a sufficiently long stretch and emerge again in the form of the Andaman and Nicobar Islands.

14. Consider the following statements regarding Price Deficiency Payment Scheme:
- (1) Under this scheme the government will pay the difference between MSP and actual market price of an agricultural product.

- (2) According to Niti Aayog, the key benefit of this scheme will be the reduction/removal of distortions under the MSP system.

Which of the statements given above is/are correct?

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

**Ans: (c)**

**Exp:** Under Price Deficiency Payment, farmers are proposed to be compensated for the difference between the government-announced MSPs for select crops and their actual market prices. The key benefit from the price deficiency payment is that it will reduce the need for the government to actually procure food crops, transport and store them and then dispose of them under PDS. The difference between the support and market prices can instead simply be paid in cash to the farmer. Price deficiency payment can also keep India's bill on food subsidies under check because of reduction in implementation cost and better targeting. In similar way EU was able to comply the WTO norm.

15. Which State has launched India's first social innovation centre which will function like a rural incubator to encourage entrepreneurship at the grassroots level?
- (a) Telangana  
(b) Tamil Nadu  
(c) Maharashtra  
(d) Sikkim

**Ans: (a)**

**Exp:** The Telangana government has launched India's first social innovation centre named "Kakatiya Hub for Social Innovation" in Nizamabad. It will be implemented through Kakatiya Sandbox which will function like a rural incubator to encourage entrepreneurship at the grassroots level.

There are a large number of problems to be solved in rural areas and the people who are familiar with them should be in the best position to solve the problems. However, rural entrepreneurs need a structured guidance and an incubator is the best way of providing a necessary ecosystem and support to them.

16. Which of the following statements is/are correct regarding the Congress Socialist Party?
- (1) Jai Prakash Narayan and Rambriksh Benipuri were among the founding members.  
(2) It advocated decentralised socialism.  
(3) It broke away from the Congress during the Quit India Movement.
- Select the correct answer using the code given below:
- (a) 2 only  
(b) 1 and 2 only  
(c) 2 and 3 only  
(d) 1, 2 and 3

**Ans: (b)**

**Exp:** The Congress Socialist Party (CSP) was founded in 1934 as a socialist caucus within the Indian National Congress.

Influenced by Fabianism as well as Marxism-Leninism, the CSP included advocates of armed struggle or sabotage (such as Yusuf Meherally, Jai Prakash Narayan, Rambriksh Benipuri and Basawon Singh (Sinha) as well as those who insisted upon ahimsa or non-violent resistance

(such as Acharya Narendra Deva). The CSP advocated decentralized socialism in which co-operatives, trade unions, independent farmers, and local authorities would hold a substantial share of the economic power. After independence, the CSP broke away from Congress, under the influence of JP, Rambriksh Benipuri, and Lohia to form the Socialist Party of India.

17. The functions of the Public Accounts Committee are:

- (1) To examine the accounts of autonomous and semi-autonomous bodies, the audit of which is conducted by the CAG.
- (2) To examine the money spent on any service during a financial year in excess of the amount granted by the Lok Sabha for that purpose.
- (3) To examine the reports of the Comptroller and Auditor General on public undertakings.

Which of the statements given above is/are correct?

- (a) 2 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Ans: (b)**

**Exp:** To examine the reports of the Comptroller and Auditor General on public undertakings is a function of the Committee on Public Undertakings.

18. Researchers from the Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI) have confirmed the multiple therapeutic properties of the Neurocalyx calycinus plant. The therapeutic properties of the plant were discovered based on traditional knowledge of a particularly vulnerable tribal group (PVTG) who call this plant's leaves by the local name - 'Pacha Chedi'. What is the name of this tribe which belongs to Kerala?

- (a) Korumba
- (b) Cholanaikkan
- (c) Koraga
- (d) Thoti

**Ans: (b)**

**Exp:** Researchers came to know of the miracle plant in the year 1988 during a biological survey deep inside the Nilambur forests. The plant is used by the Cholanaikkan tribe, which is the particularly vulnerable group in Kerala, to treat inflammations and wounds.

Cholanaikkan tribe primarily inhabit the southern Kerala State, especially Silent Valley National Park, and are one of the last remaining hunter-gatherer tribes of the region. The Cholanaikkans speak the Cholanaikkan language, which belongs to the Dravidian family.

Korumba is a PVTG of Tamil Nadu

Koraga is a PVTG of Karnataka

Thoti is a PVTG of Andhra Pradesh

19. Consider the following statements regarding "Negotiable Warehouse Receipts (NWRs)":

- (1) These NWRs can be traded online.
- (2) Issued by registered warehouses the NWRs help farmers to seek loans from banks.
- (3) NWRs allow transfer of ownership of a commodity in a warehouse without having to deliver the physical commodity.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only



- (c) 2 and 3 only  
 (d) 1, 2 and 3

**Ans: (d)**

**Exp:** In India, the term ‘negotiable warehouse receipt’ is defined in Section 2(m) of the Warehousing (Development and Regulation) Act, 2007 (WDR Act), which came into force from 25 October 2010. WDR Act provides for issuance of Negotiable Warehouse Receipts (NWRs) by the warehouses registered under this Act. Section 2(m) defines a “negotiable warehouse receipt” to mean a warehouse receipt under which the goods represented therein are deliverable to the depositor or order, the endorsement of which has the effect of transfer of goods represented thereby and the endorsee for which takes a good title;” It can be traded online. Further NWRs issued by registered warehouses help farmers to seek loans from banks against NWRs. Negotiable warehouse receipts allow transfer of ownership of that commodity stored in a warehouse without having to deliver the physical commodity. These receipts are issued in negotiable form, making them eligible as collateral for loans.

**20.** Consider the following pairs of important passes and the respective mountains/hills:

1.	Haldighati Pass	:	Aravali Range
2.	Thal Ghat Pass	:	Sahyadri Range
3.	Pal Ghat Pass	:	Eastern Ghats

Which of the above pairs is/are correctly matched?

- (a) 3 only  
 (b) 1 and 2 only  
 (c) 1 and 3 only  
 (d) 1, 2 and 3

**Ans: (b)**

**Exp:**

Haldighati Pass

- This is a famous historical pass in the Aravali mountain ranges of western India. It gets its name because of the yellowish soil.
- The battle of Haldighati between Maharana Pratap of Mewar and Mughal forces of Akbar led by Man Singh was fought near this pass.

Thal Ghat Pass (Kasara Ghat)

- The Western Ghats are not continuous and provide passage at various locations to reach from eastern part to western part of these ranges.
- One of these passes is Kasara Ghat (Thal Ghat) which connects Mumbai with Nashik, while other important passes are Bhor Ghat, Palakkad (Pal Ghat) etc. They provide both road and railway connectivity from eastern side of the Western Ghats to their western side.

Palakkad Gap (Pal Ghat)

- This is a low altitude mountain pass located in Palakkad in Kerala and it connects – Coimbatore, Tamil Nadu to Palakkad, Kerala in Western Ghats and surrounded by Nilgiri hills and Anaimalai hills from north and south respectively.
- The southern part of Western Ghats virtually separates entire Kerala from Tamil Nadu except the passage of Palakkad gap.

**21.** Consider the following associations:

- (1) The Bombay Presidency Association  
 (2) The Madras Mahajan Sabha  
 (3) The Poona Sarvajanik Sabha

Which of the above organisations was/were established before the formation of Indian National Congress?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Ans: (d)**

**Exp:** The Bombay Presidency Association was started by Badruddin Tyabji, Pherozshah Mehta and K.T. Telang in 1885.

Madras Mahajan Sabha was an Indian nationalist organisation based in the Madras Presidency. Along with the Poona Sarvajanik Sabha, Bombay Presidency Association and the Indian Association, it is considered to be a predecessor of the Indian National Congress.

In May 1884., M. Veeraraghavachariar, G. Subramanialyer and P. Anandacharlu established the Madras Mahajan Sabha. The office of the Sabha functioned in the beginning at the office of The Hindu, Ellis Road Junction, Mount Road. P. Rangaiah Naidu was elected President of the Sabha with R. Balaji Rao as its Secretary. The Mahajan Sabha held its first conference between December 29, 1884 and January 2, 1885. The Sabha adopted a moderate policy in its early days. However, still, its aims and objectives were considered seditious.

Pune Sarvajanik Sabha was a socio-political organization in British India which started with the aim of working as a mediating body between the government and people of India and to popularize the peasants' legal rights. It started as an elected body of 95 members elected by 6000 persons on April 2, 1870.

**22.** "Bhoorsingh the Bara Singha" is an official mascot of which Tiger Reserve in India?

- (a) Kanha Tiger Reserve
- (b) Pench Tiger Reserve
- (c) Bandhavgarh Tiger Reserve
- (d) Panna Tiger Reserve

**Ans: (a)**

**Exp:** Kanha has become the first tiger reserve in India to officially introduce a mascot "Bhoorsingh the Bara Singha" in 2017 to present the hard ground swamp deer as the spirit of the reserve and spread awareness to save it from possible extinction. Bara Singha, or swamp deer, is the state animal of Madhya Pradesh. The Kanha tiger reserve, spread over Mandla and Balaghat districts, is the only place in the world where the species exists.

Kanha hopes to create a better connect with its visitors, especially the younger generation, with the introduction of the mascot.

Kanha Tiger Reserve - It is one of the tiger reserves of India and the largest national park of Madhya Pradesh. Kanha area was divided into two sanctuaries, Hallon and Banjar. Kanha National Park was created in June 1955 and was made the Kanha Tiger Reserve in 1973.

Rest of the three Tiger reserves are also in Madhya Pradesh.

**23.** Consider the following statements about the composition, powers and appointments of the Central Administrative Tribunal (CAT):

- (1) The Chairman and members are appointed by a collegium consisting of senior Supreme Court Judges, and headed by the Chief Justice of India.
- (2) The members are drawn from both judicial and administrative streams.
- (3) CAT orders and decrees are final, and no provision of appeal lies whatsoever.

Which of the statements given above is/are correct?

- (a) 1 and 2 only

- (b) 2 and 3 only
- (c) 2 only
- (d) 1 and 3 only

**Ans: (c)**

**Exp:** The enactment of Administrative Tribunals Act in 1985 opened a new chapter in the sphere of administering justice to the aggrieved government servants. Administrative Tribunals Act under Article 323-A of the Constitution, which empowers Central Government to set-up by an Act of Parliament, Administrative Tribunals for adjudication of disputes and complaints with respect to recruitment and conditions of service of persons appointed to the public service and posts in connection with the affairs of the Union and the States.

In pursuance of the provisions contained in the Administrative Tribunals Act, 1985, the Administrative Tribunals set-up under it exercise original jurisdiction in respect of service matters of employees covered by it. As a result of the judgement of the Supreme Court, the appeals against the orders of an Administrative Tribunal shall lie before the Division Bench of the concerned High Court.

**24.** Consider the following statements with respect to the Paris Agreement on Climate Change:

- (1) All countries have taken on mitigation targets – which earlier was the main responsibility of the developed countries.
- (2) Unlike the Kyoto Protocol, which sets legally binding commitment targets, the Paris Agreement, allows for voluntary and nationally determined targets.
- (3) It will be the “respective capabilities” of countries and their national circumstances that will underpin the climate actions they take.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Ans: (d)**

**Exp:** The Paris climate agreement is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020. The language of the agreement was negotiated by representatives of 196 parties at the 21st Conference of the Parties of the UNFCCC in Paris and adopted by consensus on 12 December 2015. As of February 2018, 195 UNFCCC members have signed the agreement, and 175 have become party to it. The Agreement aims to respond to the global climate change threat by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

In the Paris Agreement, each country determines, plans and regularly reports its own contribution it should make in order to mitigate global warming. There is no mechanism to force a country to set a specific target by a specific date, but each target should go beyond previously set targets.

In June 2017, U.S. President Donald Trump announced his intention to withdraw the United States from the agreement.

The Paris Agreement has a 'bottom up' structure in contrast to most international environmental law treaties which are 'top down', characterised by standards and targets set internationally, for states to implement. Unlike its predecessor, the Kyoto Protocol, which sets commitment targets that have legal force, the Paris Agreement, with its emphasis on consensus-building, allows for

voluntary and nationally determined targets. The specific climate goals are thus politically encouraged, rather than legally bound. Only the processes governing the reporting and review of these goals are mandated under international law.

25. First biggest river festival was held in India to celebrate the river Brahmaputra in 2017. Which of the following statements is NOT true regarding the festival?
- (a) It was a five-day festival and was titled 'Namami Brahmaputra.'
  - (b) It was organised by the Assam Government.
  - (c) China refused to take part in the festival.
  - (d) Dalai Lama also attended the festival.

**Ans: (c)**

**Exp:** The five-day Brahmaputra river festival titled Namami Brahmaputra was organised by the Assam government. The festival was celebrated in 21 districts of Assam along the Brahmaputra in its entire stretch from Sadiya to Dhubri, celebrating the existence of life-sustaining river. On the second day of the festival, Tibetan spiritual leader, the Dalai Lama made his presence. The Bhutanese Prime Minister Tshering Tobgay, who attended the inaugural event as the guest of honour, said that Brahmaputra is the pride of South East Asia and there should be a cross country event to promote the mighty river. Foreign delegates from Japan, China, Thailand, Vietnam and a host of other nations also marked their presence at the festival.

26. Which of the following statements regarding Gross Capital Formation is/are correct?
- (1) It increases when gross domestic savings increases.
  - (2) Rate of Capital Formation is the ratio of Investments to the GDP.
  - (3) It is that part of GDP which helps in the growth of the GDP itself.
- Select the correct answer using the codes given below:
- (a) 2 only
  - (b) 2 and 3 only
  - (c) 1 and 3 only
  - (d) None of the above

**Ans: (b)**

**Exp:** Gross capital formation, in simple terms is equivalent to investment made. The part of GDP that is used is called gross domestic consumption, while the part that is saved is gross domestic savings (GDS). Some part of this GDS will be re-invested back and that is called gross capital formation. An increase in GDP or GDS will not necessarily lead to an increase in capital formation because how much is invested back will depend on many other factors.

27. Consider the following statements:
- (1) This State has the second highest drought prone area after Rajasthan.
  - (2) This State has a place which receives the third highest rainfall after Mawsynram and Cherrapunji.
- Which Indian State has been described in the statements given above?
- (a) Maharashtra
  - (b) Tamil Nadu
  - (c) Karnataka
  - (d) Andhra Pradesh

**Ans: (c)**

**Exp:** Agumbe and Hulikal in Shimoga district are the places which receive the next highest annual rainfall in India after Cherrapunji.

Karnataka ranks second in the extent of drought prone area after Rajasthan in India on account of having large area on the leeward side of the Western Ghats.

**28.** With regard to the qualifications required for being appointed the Attorney General of India, consider the following statements:

- (1) If a person (a citizen of India) is an advocate of a High Court for ten years, he is eligible to be appointed.
- (2) If a person (a citizen of India) has held a judicial office for ten years, he is eligible to be appointed.
- (3) If a person (a citizen of India) has been a Judge of a High Court for five years, he is eligible to be appointed.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 1, 2 and 3
- (d) None of the above

**Ans: (b)**

**Exp:** The Attorney General is appointed by the president. He must be a person who is qualified to be appointed a judge of the Supreme Court. In other words, he must be a citizen of India and he must have been a judge of some high court for five years or an advocate of some high court for ten years or an eminent jurist, in the opinion of the president. The advocate general is appointed by the governor. He must be a person who is qualified to be appointed a judge of a high court. In other words, he must be a citizen of India and must have held a judicial office for ten years or been an advocate of a high court for ten years.

**29.** With reference to Vaikom Satyagraha, consider the following statements:

- (1) Vaikom Satyagraha was a peasant rebellion against landlords and British authorities.
- (2) It was launched in Kerala by Sri Narayana Guru.

Which of the statements given above is/are correct?

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

**Ans: (d)**

**Exp:** Vaikom Satyagraha (1924–25) was a satyagraha (movement) in Travancore, India (now part of Kerala) against untouchability in Hindu society. The movement was centred at the Shiva temple at Vaikom, near Kottayam. The Satyagraha aimed at securing freedom of movement for all sections of society through the public roads leading to the Sri Mahadevar Temple at Vaikom. It was triggered in the Kakinada Congress meeting in 1923, TK Madhavan presented a report on the discrimination in Kerala and the plights of backward Hindus. The meeting decided to promote movements against untouchability. A committee was formed with members including TK Madhavan, K Kelappan, K Velaudha Menon, TR Krishnaswami Iyer and Kuroor Neelakandan Namboothiri. The chairman of the committee was K Kelappan. Gandhiji had supported the movement.

- 30.** Which of the following statements about the marginal cost of funds-based lending rate (MCLR) are correct?
- (1) It is the minimum interest rate of a bank below which it cannot lend.
  - (2) It was introduced by the RBI replacing the earlier Base Rate system in which the RBI used to set uniform base rate for all banks.
  - (3) MCLR is calculated on the basis of marginal cost or the additional cost or incremental cost of arranging one more rupee to lend the prospective borrower.
- Select the correct answer using the code given below:
- (a) 1 and 2 only
  - (b) 2 and 3 only
  - (c) 1 and 3 only
  - (d) 1, 2 and 3

**Ans: (d)**

**Exp:** The marginal cost of funds-based lending rate (MCLR) refers to the minimum interest rate of a bank below which it cannot lend, except in some cases allowed by the RBI. It is an internal benchmark or reference rate for the bank. MCLR actually describes the method by which the minimum interest rate for loans is determined by a bank - on the basis of marginal cost or the additional or incremental cost of arranging one more rupee to the prospective borrower.

The MCLR methodology for fixing interest rates for advances was introduced by the Reserve Bank of India with effect from April 1, 2016. This new methodology replaces the base rate system introduced in July 2010. In other words, all rupee loans sanctioned and credit limits renewed w.e.f. April 1, 2016 would be priced with reference to the Marginal Cost of Funds based Lending Rate (MCLR) which will be the internal benchmark (means a reference rate determined internally by the bank) for such purposes.

Existing loans and credit limits linked to the Base Rate (internal benchmark rate used to determine interest rates up till 31 March 2016) or Benchmark Prime Lending Rate (BPLR or the internal benchmark rate used to determine the interest rates on advances/loans sanctioned upto June 30, 2010.) would continue till repayment or renewal, as the case may be. However, existing borrowers will have the option to move to the Marginal Cost of Funds based Lending Rate (MCLR) linked loan at mutually acceptable terms.

*Reasons for introducing MCLR*

RBI decided to shift from base rate to MCLR because the rates based on marginal cost of funds are more sensitive to changes in the policy rates. This is very essential for the effective implementation of monetary policy. Prior to MCLR system, different banks were following different methodology for calculation of base rate /minimum rate – that is either on the basis of average cost of funds or marginal cost of funds or blended cost of funds. Thus, MCLR aims

- To improve the transmission of policy rates into the lending rates of banks.
- To bring transparency in the methodology followed by banks for determining interest rates on advances.
- To ensure availability of bank credit at interest rates which are fair to borrowers as well as banks.
- To enable banks to become more competitive and enhance their long run value and contribution to economic growth.

- 31.** India's longest road tunnel was opened in Jammu and Kashmir for traffic in 2017. Consider the following statements in this context:
- (1) It is called the Patnitop tunnel and it connects Chenani in Udhampur with Nashri in Ramban district.

- (2) It has reduced the travel distance between Srinagar and Jammu by 30 kms as it provides an all-weather road connectivity to the Valley and avoids landslide-prone stretch.

Which of the statements given above is/are correct?

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

**Ans: (c)**

**Exp:** Work on Chenani-Nashri Road Tunnel was started in May 2011. It took nearly six years for completion of the project at a cost of over Rs. 3,720 crore. The 9.2 km-long twin-tube tunnel is located at an elevation of 1,200 metres. It is an important part of a 286-km-long four-lane project on the highway.

It is India's first tunnel equipped with world class integrated tunnel control system through which ventilation, signals, fire control, communication and electrical systems are automatically actuated.

It reduces travel distance between Jammu and Srinagar by 30 kilometres and save time by three to four hours. The road distance from Chenani and Nashri will now be 10.9 km, instead of present 41 km. The tunnel will provide all-weather road connectivity to the Valley and avoid landslide-prone stretch. It will help to boost the trade and commerce and tourism in the valley.

**32.** The Gram Sabhas under Panchayat (Extension to Scheduled Areas) Act, have the:

- (1) power to manage village markets and control the lending to Scheduled Tribes (ST).  
(2) ownership of the minor forest produce.  
(3) right to mandatory consultation in matters of land acquisition, resettlement and rehabilitation.

Which of the statements given above are correct?

- (a) 1 and 2 only  
(b) 1 and 3 only  
(c) 2 and 3 only  
(d) 1, 2 and 3

**Ans: (d)**

**Exp:** All the statements are correct regarding powers of Gram Sabha under PESA. Gram Sabha has special powers vis-a-vis welfare of the scheduled tribes and forest land.

**33.** Consider the following statements:

- (1) Bioaccumulation refers to the accumulation of substances, such as pesticides or other chemicals in an organism.  
(2) Biomagnification refers to an increase in the concentration of a chemically stable substance along a food chain.  
(3) Minamata Bay in Japan is famous for ill-effects relating to Mercury biomagnifications.

Which of the statements given above is/are correct?

- (a) 1 only  
(b) 1 and 2 only  
(c) 2 and 3 only  
(d) 1, 2 and 3

**Ans: (d)**

**Exp:** Bioaccumulation is the accumulation of substances, such as pesticides, or other chemicals in an organism. Bioaccumulation occurs when an organism absorbs a substance at a rate faster than that at which the substance is lost by catabolism and excretion. Thus, the longer the biological half-life of a toxic substance, the greater the risk of chronic poisoning, even if environmental levels of the toxin are not very high. Bioaccumulation, for example in fish, can be predicted by models. Hypotheses for molecular size cut-off criteria for use as bioaccumulation potential indicators are not supported by data. Biotransformation can strongly modify bioaccumulation of chemicals in an organism.

Bioconcentration is a related but more specific term, referring to uptake and accumulation of a substance from water alone. By contrast, bioaccumulation refers to uptake from all sources combined (e.g. water, food, air, etc.)

Biomagnification, also known as bioamplification or biological magnification, is the increasing concentration of a substance, such as a toxic chemical, in the tissues of organisms at successively higher levels in a food chain.

Minamata disease is a neurological syndrome caused by severe mercury poisoning. Minamata disease was first discovered in Minamata city in Kumamoto prefecture, Japan, in 1956. It was caused by the release of methyl mercury in the industrial wastewater from the Chisso Corporation's chemical factory, which continued from 1932 to 1968. This highly toxic chemical bio-accumulated in shellfish and fish in Minamata Bay and the Shiranui Sea, which, when eaten by the local populace, resulted in mercury poisoning.

34. Kurukh, an endangered tribal language spoken by the Oraon tribal community, was given an official status in West Bengal. To which family does the Kurukh language belong?
- (a) Indo-Aryan language family
  - (b) Dravidian language family
  - (c) Austroasiatic language family
  - (d) Sino-Tibetan language family

**Ans: (b)**

**Exp:** In West Bengal, the language is spoken by Oraon tribal community, who live in Dooars. The Dooars are the alluvial floodplains in north-eastern India that lie south of outer foothills of Himalayas and north of Brahmaputra River basin. Most of the tribal languages in the West Bengal have their origins in the Austro-Asiatic and Tibeto-Barman families; however, Kurukh is an exception. The origin of the endangered language lies in the Malto, which hails from Dravidian family. Malto is not spoken in West Bengal, but in the Rajmahal hills area in Jharkhand. Jharkhand has already recognised Kurukh as a language, and students can write their school final examination in its script. According to the 2001 census report, the language is spoken by about 17 lakh persons.

Kurukh Language - Kurukh is a Dravidian language. The language belongs to the Northern Dravidian group of the Dravidian family of languages, and is closely related to Sauria Paharia and Kumarbhag Paharia, which are often together referred to as Malto. It is spoken by nearly two million Oraon and Kisan tribal peoples of Odisha, Jharkhand, West Bengal, Madhya Pradesh and Chhattisgarh. It is also spoken in Bangladesh, Nepal and Bhutan. In the UNESCO's list of endangered languages, Kurukh is marked as being in a "**vulnerable**" state. The language is written in Devanagari. Narayan Oraon had invented the Tolong Siki script specifically for Kurukh.

35. A person can enter which of the following offices by subscribing to an oath/affirmation only before the President of India?
- (1) The Vice President of India



- (2) A Judge of the Supreme Court
- (3) A Minister for the Union
- (4) The Comptroller and Auditor General of India

Select the correct answer using the code given below:

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

**Ans: (c)**

**Exp:**

All others may subscribe to the oath/affirmation even before a person appointed by the President on his/her behalf.

**36.** Which of the following rivers in India have endorheic basin?

- (1) Narmada
- (2) Tapti
- (3) Luni
- (4) Ghaggar
- (5) Ghaghara

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 3 and 5 only
- (d) 3 only

**Ans: (b)**

**Exp:** An endorheic basin is a closed drainage basin that normally retains water and allows no outflow to other external bodies of water, such as rivers or oceans, but converges instead into lakes or swamps, permanent or seasonal that equilibrates through evaporation. Such a basin may also be referred inland drainage system.

- The Ghaggar River in Haryana gets lost in dry sands near Hanumangarh in Rajasthan.
- The Luni River in Rajasthan after flowing through Thar Desert gets lost in the Rann of Kutch.

**37.** Who among the following organised a march on the Bombay beach front to break the Salt Law in 1930?

- (a) Sarojini Naidu
- (b) Kamaladevi Chattopadhyay
- (c) Annie Besant
- (d) None of the above

**Ans: (b)**

**Exp:** Kamaladevi Chattopadhyay was an Indian social reformer and freedom fighter. She is most remembered for her contribution to the Indian independence movement; for being the driving force behind the renaissance of Indian handicrafts, handlooms, and theatre in independent India; and for upliftment of the socio-economic standard of Indian women by pioneering the co-operative movement. Later she was a part of the seven-member lead team, announced by Mahatma Gandhi, in the famous Salt Satyagraha (1930), to prepare Salt at the Bombay beachfront, the only other woman volunteer of the team was Avantikabai Gokhale.

- 38.** “Operation Thunder Bird” is related to which of the following?
- It is an operation launched by the Indian government against Naxalism.
  - It is a multi-forces operation launched to tackle militancy in the North-Eastern States of India.
  - It is a multi-national and multi-species enforcement operation for wildlife protection.
  - It is a multi-forces operation launched to tackle militancy in the State of Jammu and Kashmir.

**Ans: (c)**

**Exp:** Operation Thunderbird is the code-name for INTERPOL's multi-national and multi-species enforcement operation. Wildlife Crime Control Bureau (WCCB), Ministry of Environment, Forest and Climate Change, coordinated “OPERATION THUNDER BIRD” in India, from January 30-February 19, 2017. The operation brought about a unanimous approach by the state enforcement agencies in the fight against wildlife crime in the country.

Preceding this operation, WCCB had convened a species specific operation on turtles, code named “OPERATION SAVE KURMA” from December 15 last year to January 30, this year. A total of 15,739 live turtles were recovered from 45 suspects, having inter-state linkages. The operation brought about an awareness among the enforcement agencies to focus on the existing trade routes and major trade hubs in the country, which will be specifically focused in future.

- 39.** Match List-I with List-II and select the correct answer using the code given below:

	<b>List-I (Characteristic Feature)</b>		<b>List-II (Biome)</b>
A.	Fire-climax Community	1.	Boreal Forests
B.	Simplest assemblage of plants of any biome	2.	Selvas
C.	Most continuous biome	3.	Savanna
D.	Most complex biome	4.	Tundra

Codes

	A	B	C	D
(a)	1	3	2	4
(b)	1	3	4	2
(c)	3	1	4	2
(d)	3	1	2	4

**Ans: (c)**

- 40.** Consider the following statements regarding Universal Basic Income:
- It is paid without requiring the performance of any work or the willingness to accept a job if offered.
  - It is paid to individuals rather than households.
  - It is paid irrespective of any other income from other sources.
- Which of the statements given above is/are correct?
- 1 only
  - 2 and 3 only
  - 1 and 3 only
  - 1, 2 and 3

**Ans: (d)**

**Exp:** Universal basic income (UBI) is a model for providing all individual citizens of a country or other geographic area with a given sum of money, regardless of their income, resources or employment status. The purpose of the UBI is to prevent or reduce poverty and increase equality among citizens. According to the advocacy group Basic Income Earth Network (BIEN), the essential principle behind basic income is the idea that all citizens are entitled to a liveable income, whether or not they contribute to production and despite the particular circumstances into which they are born. Thus, all the above statements are correct.

**41.** Consider the following statements regarding “Vision Zero Conference”:

- (1) Vision Zero Conference aims to focus on the occupational safety and health issues and challenges in the Manufacturing, Construction and Mining sectors.
- (2) It was organised in Mumbai in 2017 by India and Germany in association with International Social Security Association (ISSA).

Which of the statements given above is/are NOT correct?

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

**Ans: (b)**

**Exp:** International Conference on the VISION ZERO and its relevance to Occupational Safety and Health, was held in March 2017 in New Delhi. It is organized by Directorate General Factory Advice and Labour Institutes (DGFASLI), Government of India, Ministry of Labour and Employment and German Social Accident Insurance (DGUV), Germany in association with International Social Security Association - Manufacturing, Construction and Mining.

The concept of ‘Vision Zero’ is fast gaining international acceptance and is expected to leverage the efforts of the Government of India to raise the occupational safety and health standards in the country so as to improve the occupational safety and health situation. The participants attending the conference from various sectors across a wide variety of industries are expected to be benefitted by the common platform provided by the conference through sharing of best practices both nationally and internationally.

The conference will provide a forum for promoting safety and health at work by exchanging knowledge, practices and experience. Experts in the field of Occupational Safety and Health reinforce and build networks and alliances while laying the groundwork for cooperation and strengthening relationships.

**42.** Consider the following pairs:

	Type of land		Gifted to
1.	Tirunamattukkani	:	Jaina Institutions
2.	Pallichchhandam	:	Hindu Temples
3.	Brahmadeya	:	Brahmanas

Which of the pairs given above is/are wrongly matched?

- (a) 1 only
- (b) 1 and 2 only
- (c) 3 only
- (d) 1, 2 and 3

**Ans: (b)**

**Exp:** Tirunamattukkani (tax-exempted land donated to Siva temple) were donated from Kandamangalam-Singa Seermai in Araiarkulam Patru (division) to the Aludaiya Paramasuvami temple of Tirupperunturai known as Avudaiyarkovil.

Pallichchhandam was land donated to Jaina institutions.

Brahmadeya (given to Brahmin) was tax free land gift either in form of single plot or whole villages donated to Brahmins in the early medieval India. It was initially practiced by the ruling dynasties and was soon followed up by the chiefs, merchants, feudatories, etc.

**43.** Arrange the following places where different rivers originate from East to West:

- (1) Badrinath
- (2) Kedarnath
- (3) Yamunotri
- (4) Gangotri

Select the correct answer using the code given below:

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

**Ans: (b)**

**Exp:** The correct order of the places and the respective rivers are:

Badrinath – Alaknanda

Kedarnath – Mandakini

Gangotri – Bhagirathi

Yamunotri – Yamuna

**44.** A democratic polity is based on the doctrine of popular sovereignty. With regard to this principle, consider the following:

- (1) Plebiscite
- (2) Referendum
- (3) Recall
- (4) Initiative

Which of the above are used in direct democracy?

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

**Ans: (d)**

**Exp:** Democracy is of two types-direct and indirect. In direct democracy, the people exercise their supreme power directly as is the case in Switzerland. There are four devices of direct democracy, namely, Referendum, Initiative, Recall and Plebiscite. In indirect democracy, on the other hand, the representatives elected by the people exercise the supreme power and thus carry on the government and make the laws. This type of democracy, also known as representative democracy, is of two kinds-parliamentary and presidential.

**45.** Recently “Greyball” was in the news for wrong reasons. What is “Greyball”?

- (a) It is a Trojan horse malware package that runs on versions of Microsoft Windows to carry out many malicious and criminal tasks and steals banking information by man-in-the-browser keystroke logging and form grabbing.

- (b) It is a malware introduced in the systems of Hitachi Payment Services, which provide ATM services in India, enabling fraudsters to steal information allowing them to steal funds.
- (c) It is the name of a ransomware which targeted computers running the Microsoft Windows operating system by encrypting data and demanding ransom payments in the Bitcoin cryptocurrency.
- (d) It is a software tool used by Uber to identify riders and bar certain customers from travelling with the app.

**Ans: (d)**

**Exp:** Greyball is a software tool used by Uber to identify riders and bar certain customers from travelling with the app. The software uses GPS data, credit card information, social media accounts and other data to pinpoint its targets. The tool was developed by Uber and used as early as 2014, but we only learned about it after it was exposed by the New York Times in March. Greyball is usually used against riders which Uber suspects of breaking its terms and conditions. Users who are "greyballed" won't know it, and they'll still see cars moving around the app's map like normal - only none of the drivers will ever pick them up. The controversy revolves around the fact that the software can be used to deny rides to anyone trying to disrupt Uber operations. This includes potential law enforcement officials who are investigating Uber or its drivers. When it became public that Uber had been using Greyball to block investigators, the cab company promised to stop using the software against government officials.

Option (a) is Zeus (Malware)

No name is made public of the malware used to hack Hitachi Payment Services.

Option (c) is WannaCry

**46.** As per the Economic Survey 2017-18 decisive action was taken to grasp the Twin Balance Sheet (TBS) challenge (arguably the festering, binding constraint on Indian growth prospects). The Survey had identified four R's of TBS. Which among the following are these R's?

- (1) Recognition
- (2) Reconstruction
- (3) Recapitalization
- (4) Recovery

Select the correct answer using the code given below:

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

**Ans: (a)**

**Exp:** The survey had identified four R's of TBS, these are Recognition, Resolution, Recapitalisation and Reforms. Thus options (1) and (3) are correct.

**47.** Consider the following statements regarding the Ocean Currents:

- (1) Large-scale surface ocean currents result from the variability of water temperature and salinity, hence are also called thermo-haline circulation.
- (2) The Gulf Stream is a cold Ocean current originating in the tropical Caribbean.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

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

**Ans: (d)**

**Exp:** Large-scale surface ocean currents are driven by global wind systems that are fuelled by energy from the sun. These currents transfer heat from the tropics to the Polar Regions, influencing local and global climate. The warm Gulf Stream originating in the tropical Caribbean is an example for Surface Ocean Current.

Differences in water density, resulting from the variability of water temperature (thermo) and salinity (haline), also cause ocean currents. These are Deep Ocean current. This process is known as thermohaline circulation.

**48.** Consider the following statements about a personality:

- (1) He won the Goldman Environmental Prize also called the "Green Noble" in 2017.
- (2) He won this prize for a historic 12-year legal battle that affirmed the indigenous Dongria Kondh's land rights and protected the Niyamgiri Hills from a massive, open-pit aluminium ore mine.

The above statements are related to which of the following personality?

- (a) Chandi Prasad Bhatt
- (b) Pradip Krishen
- (c) Prafulla Samantra
- (d) Sunderlal Bahuguna

**Ans: (c)**

**Exp:** Social activist Prafulla Samantra was announced one of six winners of the Goldman Environmental Prize, in San Francisco, in 2017. The prize citation said this was for his "...historic 12-year legal battle that affirmed the indigenous Dongria Kondh's land rights and protected the Niyamgiri Hills from a massive, open-pit aluminium ore mine." Mr. Samantra was one of the key leaders responsible for rallying tribes, indigenous to Odisha's Niyamgiri region, and using legal provisions to thwart mining-to-metals conglomerate, Vedanta. The company has been forced to suspend plans to mine bauxite. Trained as a lawyer and involved in activism "since the Jayaprakash Narayan-movement".

Golden Environment Prize - The annual prize honours grassroot environmentalists, who undergo risk to their lives, to protect the environment and empower those who have most to lose from industrial projects threatening their traditional livelihood.

Chandi Prasad Bhatt is an Indian Gandhian environmentalist and social activist, who founded Dasholi Gram Swarajya Sangh in Gopeshwar in 1964, which later became a mother-organization to the Chipko Movement, in which he was one of the pioneers, and for which he was awarded the Ramon Magsaysay Award.

Pradip Krishen, is an Indian filmmaker and environmentalist. He has directed three films, Masey Sahib in 1985, In Which Annie Gives It Those Ones in 1989 and Electric Moon for Channel 4, UK in 1991.

Sunderlal Bahuguna is a noted Garhwali environmentalist, Chipko movement leader and a follower of Mahatma Gandhi's philosophy of Non-violence and Satyagraha. This idea of chipko movement was of his wife and the action was taken by him.

**49.** Consider the following statements with reference to the differences between the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs):

- (1) While the MDGs were primarily intended for the developing countries, SDGs are intended for both the developing and developed countries.
- (2) While the MDGs focused more on a country as a whole, the SDGs focus on the individual's wellbeing only.
- (3) While the achievement of the MDGs was primarily on the basis of funding/aid from the developed countries, the SDGs achievement will be on the basis of empowering the countries.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1 and 3 only

**Ans: (d)**

**Exp:**

1. MDGs & SDGs Comparison

MDG		SDG
Traditional assistance		Traditional assistance + Universal goals
Limited goals		More comprehensive
Top-down process		Inclusive goal setting
Traditional Statistics		Traditional + Data revolution
Hunger and Poverty together		Distinction
Quantity Education		Quality Education
Funding: Focus on ODA	Broader set of financial sources	

**What's new with SDGs**

MDGs	SDGs
Mainly for developing countries	Universal – for ALL countries
8 siloed goals for development	17 goals, 169 targets, integrating 3 dimensions of SD
From UN Secretariat	Negotiated by Member States with stronger country ownership
Means of Implementation (Moi), monitoring and follow-up not defined in advance	Moi inter-governmentally negotiated, global architecture and monitoring system being shaped

Source: Anne KS, 2015

- (c) 2 and 3 only
- (d) 1, 2 and 3

**Ans: (b)**

**Exp:** Though Aryan society was patriarchal, women were treated with dignity and honour. The family was the smallest social unit; several families (*kula*) made a village (*grama*) and several villages formed a *vis*.

Women were respected by the society, enjoyed freedom, had access to education and were often free to choose their partners through *swayamvara*. *Purdah* and *sati* system were not prevalent.

**50.** With reference to the Vedic Culture, consider the following statements:

- (1) Women were treated with dignity and honour.
- (2) *Purdah* and *sati* system were prevalent.
- (3) Game of chess was one of the modes of entertainment.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 3 only

Games of chess, chariot racing etc. were their modes of entertainment.

51. Consider the following statements regarding Asian Games 2022:

- (1) The 2022 Asian Games will be held in Hangzhou, China.
- (2) Video gaming will be featured as a full sport at the 2022 Asian Games for the first time.
- (3) The Olympic Council of Asia has entered into a collaboration with Google to bring e-sports to the games.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Ans: (b)**

**Exp:** The Olympic Council of Asia is collaborating with Alisports, a unit of China's Alibaba Group, to bring e-sports to the games. No details were given on which video games would be included. Video gaming will be featured as a full sport at the 2022 Asian Games, with competitors in electronic sports set to receive medals for their digital prowess. It will also be a demonstration sport at the 2018 Asian Games in Palembang, Indonesia.

The Olympic Council Asia said the decision reflects "the rapid development and popularity of this new form of sports participation among the youth."



52. Who among the following are the members of the Committee recommending appointments of the Chairperson and members of the National Human Rights Commission (NHRC)?

- (1) The Prime Minister
- (2) The Vice President
- (3) The Leader of the Opposition in the Lok Sabha
- (4) The Leader of the Opposition in the Rajya Sabha
- (5) The Speaker of the Lok Sabha
- (6) The Deputy Chairman of the Rajya Sabha

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 1, 2 and 3 only
- (c) 1, 2, 3, 4 and 5 only
- (d) 1, 3, 4, 5 and 6 only

**Ans: (d)**

**Exp:** The National Human Rights Commission (NHRC) of

India is an autonomous public body constituted on 12 October 1993 under the Protection of Human Rights Ordinance of 28 September 1993. It was given a statutory basis by the Protection of Human Rights Act, 1993 (TPHRA). The NHRC is the National Human Rights Commission of India, responsible for the protection and promotion of human rights, defined by the Act as "rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the International Covenants".

Section 2 Sections 3 and 4 of TPHRA lay down the rules for appointment to the NHRC. The Chairperson and members of the NHRC are appointed by the President of India, on the recommendation of a committee consisting of:

- The Prime Minister (Chairperson)



- The Home Minister
- The Leader of the Opposition in the Lok Sabha
- The Leader of the Opposition in the Rajya Sabha
- The Speaker of the Lok Sabha
- The Deputy Chairman of the Rajya Sabha

- 53.** As per the Economic Survey 2017-18, the farm loan waivers will have which of the following effects on aggregate demand?
- (1) Crowding in effect via higher credit availability as bank NPAs fall.
  - (2) Crowding out effect via changes in government expenditure or taxes.
- Select the correct answer using the code given below:
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

**Ans: (c)**

**Exp:** Crowding out impact: Loan waivers will result in higher borrowing by states with fiscal space. This could squeeze out private spending by firms.

Crowding in impact: Bank balance sheets will improve to the extent that non-performing farm loans are taken off their books. So, they might be able to provide additional resources to the private sector, leading to greater spending.

It is estimated that these two effects (Crowding out and Crowding in) would almost cancel each other.

- 54.** Which of the following statements is NOT correct about “Divya Nayan”?
- (a) It is one of the most advanced reading machine for the visually challenged.
  - (b) It is developed by the Central Scientific Instruments Organisation (CSIO), under the Council of Scientific and Industrial Research (CSIR).
  - (c) It is a non-portable device which is based on the principle of contact scanning of a printed document and converting it into speech.
  - (d) Currently it only supports Hindi and English languages.

**Ans: (c)**

**Exp:** The device is standalone, portable, completely wireless and uses open source hardware and software. The device can analyse a multicolumn document and provide seamless reading. Chandigarh-based Central Scientific Instruments Organisation (CSIO), under the Council of Scientific and Industrial Research (CSIR) has developed a reading machine for visually challenged, the most advanced so far. "Divya Nayan" can scan any script and read it aloud for visually challenged to understand.

Currently it supports Hindi and English languages. Progressively it will be programmed for other Indian and foreign languages.

'Divya Nayan' has an internal storage of 32 GB with run time of upto 3 hours and weighs 410 grams. The device is equipped with WiFi and Bluetooth interface that helps to connect with Internet. It also can be connected to a monitor and use as a mini computer with screen reader utility.

- 55.** Which of the following statements regarding the “Cyclone Ockhi” is/are correct?
- (1) The name for the cyclone was given by Myanmar.
  - (2) The origin of Ockhi can be traced back to an area of low pressure formed in the Arabian Sea.

Select the correct answer using the code given below:

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

**Ans: (d)**

**Exp:** Cyclone Ockhi originated from a low-pressure area over southwest Bay of Bengal and adjoining areas of south Sri Lanka & equatorial Indian Ocean.

The name Ockhi was given by Bangladesh which in Bengali means 'eye'.

Naming of Tropical Cyclones:

- The World Meteorological Organisation (WMO) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) started the tropical cyclone naming system in 2000. Tropical cyclones are named to provide ease of communication between forecasters and the general public regarding forecasts, watches, and warnings.
- The Cyclones worldwide are named by 9 regions — North Atlantic, Eastern North Pacific, Central North Pacific, Western North Pacific, North Indian Ocean, South West Indian Ocean, Australian, Southern Pacific, South Atlantic.
- Cyclones in the North Indian Ocean basin are named by the Indian Meteorological Department and the first tropical cyclone was named in 2004 as Onil (given by Bangladesh).
- Eight north Indian Ocean countries — Bangladesh, India, the Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand, gave eight names each which was combined into a list of 64 names. One name from each country is picked in an order to name the cyclones.

**56.** For a citizen of India, the duty to pay taxes is a

- (a) Fundamental Duty
- (b) Legal Obligation
- (c) Constitutional Obligation
- (d) Moral Obligation

**Ans: (b)**

**Exp:** The Swaran Singh committee wanted to include duty to pay taxes as a fundamental duty as well as fundamental right, but the government was not agreed. As per the Direct taxation laws; income and other kind of taxes are a legal obligation for an Indian citizen as he uses public service, receives social and political security etc.

**57.** The Jharkhand Cabinet recently approved the Jharkhand Religious Independence Bill, 2017 that forbids religious conversion through allurements or coercion. Which of the following states is India's first state to launch anti-conversion law?

- (a) Madhya Pradesh
- (b) Gujarat
- (c) Odisha
- (d) Chhattisgarh

**Ans: (c)**

**Exp:**

- In 1967, Odisha's Swatantra Party government enacted India's first anticonversion law calling it "Freedom of Religion" Law.
- Today five states – Odisha, Madhya Pradesh, Chhattisgarh, Gujarat and Himachal Pradesh – have active anticonversion laws.

- Arunachal Pradesh has an anticonversion law but it is in limbo since the rules have not been framed. Rajasthan passed a similar law a decade ago but the bill is yet to get the assent of the President of India.

**58.** Which of the following books from medieval India is/are treatises on Astronomy?

- (1) Aryabhatiya
- (2) Brahmasphuta-siddhanta
- (3) Siddhantashiromani
- (4) Brihatsamhita

Select the correct answer using the code given below:

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

**Ans: (d)**

**Exp:** Aryabhata (476–550 CE) was the first of the major mathematician-astronomers from the classical age of Indian mathematics and Indian astronomy. His works include the Aryabhatiya (499 CE, when he was 23 years old) and the Aryasiddhanta. In his book, Aryabhatiya, he suggested that the Earth was sphere, containing a circumference of 24,835 miles (39,967 km). Aryabhata also mentioned that reflected sunlight is the cause behind the shining of the moon.

The Brāhmasphuṭa-siddhānta is the main work of Brahmagupta, written c. 628. This text of mathematical astronomy contains significant mathematical content, including a good understanding of the role of zero, rules for manipulating both negative and positive numbers, a method for computing square roots, methods of solving linear and quadratic equations, and rules for summing series, Brahmagupta's identity, and Brahmagupta's theorem.

*Siddhānta Śhīromani* is the major treatise of Indian mathematician Bhāskara II. He wrote the Siddhānta Śhīromani in 1150 when he was 36 years old. The work is composed in Sanskrit Language in 1450 verses. It has three parts viz Lilavati, Bijaganita and Ganitadhyaya and Goladhyaya. Ganitadhyaya and Goladhyaya of Siddhanta Shiromani are devoted to astronomy. Varahamihira's *Brihatsamhita* of the sixth century AD is another pioneering work in the field of astronomy. His observation that the moon rotated around the earth and the earth rotated around the sun found recognition and later discoveries were based on this assertion.

**59.** Recently the Indian Prime Minister attended the 14<sup>th</sup> International Vesak Day celebrations in Colombo, Sri Lanka. Which of the following statements is NOT correct about Vesak Day?

- (a) It was the first time that Sri Lanka hosted the International Vesak Day, recognised by the UN.
- (b) Vesak Day marks only the birth and enlightenment of Lord Buddha.
- (c) The theme of the event was "Buddhist teachings for social justice and sustainable world peace".
- (d) In India, Vesak Day is celebrated as Buddha Purnima.

**Ans: (b)**

**Exp:** Vesak Day marks the birth, enlightenment and passing away of Lord Buddha. Prime Minister Narendra Modi participated in the opening ceremony of the 14th International Vesak Day celebrations in Colombo as the chief guest. Vesak Day, also known as Buddha Purnima, is a traditional holiday commemorated by Sri Lanka's majority Sinhala Buddhists. This year's

theme is 'Buddhist teachings for social justice and sustainable world peace'. This is the first time that Sri Lanka is hosting the International Vesak Day, recognised by the UN.

**60.** What does the 'commutation' power of the President denote?

- (a) It denotes awarding a lesser sentence in place of one originally awarded due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.
- (b) It denotes reducing the period of sentence without changing its character.
- (c) It denotes the substitution of one form of punishment for a lighter form.
- (d) It denotes a stay of the execution of a sentence (especially that of death) for a temporary period.

**Ans: (c)**

**Exp:** Under Indian law, the President of India and the Governors of States have been given the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence. The law governing grant of pardon is contained in Articles 72 and 161 of the Constitution. Commutation denotes the substitution of one form of punishment for a lighter form. For example, a death sentence may be commuted to rigorous imprisonment, which in turn may be commuted to a simple imprisonment.

**61.** Consider the following geographical landforms and their respective definitions:

- (1) Abyssal Plain is an underwater plain on the deep ocean floor, usually found at depths between 3,000 meters to 6,000 meters.
- (2) Abyssinian Plateau is a plateau in Ethiopia, located at an elevation of 1,388 meters above sea level.
- (3) Karst topography is a three-dimensional landscape shaped by the dissolution of a soluble layer like carbonate rock.

Which of the pairs given above is/are correctly matched?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

**Ans: (d)**

**Exp:** An abyssal plain is an underwater plain on the deep ocean floor, usually found at depths between 3,000 metres (9,800 ft) and 6,000 metres (20,000 ft). Lying generally between the foot of a continental rise and a mid-ocean ridge, abyssal plains cover more than 50% of the Earth's surface. They are among the flattest, smoothest and least explored regions on Earth. Abyssal plains are key geologic elements of oceanic basins (the other elements being an elevated mid-ocean ridge and flanking abyssal hills).

Statement (2) is a factual statement and it is correct.

Karst is a topography formed from the dissolution of soluble rocks such as limestone, dolomite, and gypsum. It is characterized by underground drainage systems with sinkholes and caves. It has also been documented for more weathering-resistant rocks, such as quartzite, given the right conditions. Subterranean drainage may limit surface water, with few to no rivers or lakes. However, in regions where the dissolved bedrock is covered (perhaps by debris) or confined by one or more superimposed non-soluble rock strata, distinctive karst features may occur only at subsurface levels and be totally missing above ground.

The study of karst is considered of prime importance in petroleum geology since as much as 50% of the world's hydrocarbon reserves are hosted in porous karst systems.

**62.** Consider the following statements:

- (1) The Official Language Act (1963) lays down that English should be used for purposes of communication between the Union and the non-Hindi States (States that have not adopted Hindi as their official language).
- (2) A State Legislature can prescribe the use of only one language mentioned in Eighth Schedule to the Constitution with respect to bills, acts, ordinances, orders, rules, bye-laws or regulations.

Which of the statements given above is/are correct?

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

**Ans: (a)**

**Exp:** A State Legislature can prescribe the use of any language with respect to bills, acts, ordinances, orders, rules, bye-laws or regulations.

**63.** Which of the following statements is correct about “Express Wi-Fi” internet services?

- (a) It is a low-cost, high bandwidth internet service launched by Facebook in India.
- (b) Hotspots were made available at 6 states – Gujarat, Uttarakhand, Meghalaya, Rajasthan, Maharashtra and Karnataka.
- (c) India is the first country where this service has been launched.
- (d) For country wide launch of the service Facebook has collaborated with Vodafone.

**Ans: (a)**

**Exp:** Facebook in 2017 launched its Express Wi-Fi service in India, with which nearly 700 hotspots will be available across the four states of Gujarat, Uttarakhand, Meghalaya and Rajasthan. Facebook announced that it had partnered with Bharti Airtel to roll out 20,000 more hotspots countrywide. The company said it had been testing this “low-cost, high bandwidth” facility with a number of internet service providers since 2015. Besides India, Facebook’s Express Wi-Fi connectivity solution is currently available in Kenya, Indonesia, Tanzania and Nigeria. Anyone can use the hotspots by signing up with an Express Wi-Fi retailer and buying a daily, weekly or monthly data pack at the rates set by the ISPs. They can then connect to the Express Wi-Fi hotspot, register/create an account, login, and “start browsing or use any app on the entire internet”.

**64.** Which among the following are the major benefits of urban Financial Inclusion to India?

- (1) More effective distribution of subsidies
- (2) Freedom from the clutches of moneylenders
- (3) Increase in employment and income opportunities
- (4) Buffer against avoidable expenditure

Select the correct answer using the code given below:

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

**Ans: (d)**

**Exp:** Major Macro benefits of urban Financial Inclusion to India are:

1. Higher and better productivity
2. Faster growth in economy and reduction in income inequalities

3. Global admiration and recognition and reduction in poverty
4. Increase in employment and income opportunities

Major Micro benefits of urban Financial Inclusion to India are:

1. Buffer against avoidable expenditure
2. Freedom from clutches of moneylenders
3. Smoothing consumption
4. Better incomes
5. Rational utilization of saving
6. Safety of assets from major disruptions
7. Enlarges livelihood opportunities

**65.** Consider the following statements with reference to Gotipua dance:

- (1) Gotipua dance is a traditional dance form of Odisha.
- (2) Only women participate in this dance.
- (3) The Gotipua dance is declared as an Intangible World Heritage by the UNESCO.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Ans: (a)**

**Exp:** Gotipua is a traditional dance form in the state of Odisha, India, and the precursor of Odissi classical dance. It has been performed in Orissa for centuries by young boys, who dress as women to praise Jagannath and Krishna. The dance is executed by a group of boys who perform acrobatic figures inspired by the life of Radha and Krishna. The boys begin to learn the dance at an early age until adolescence, when their androgynous appearance changes. In the Odia language Gotipua, means "single boy". Raghurajpur, Odisha (near Puri) is an historic village known for its Gotipua dance troupes.

Statement (3) is incorrect.

**66.** Consider the following statements regarding a plant commonly known as "Cobra Lily":

- (1) It is an extremely rare and critically endangered plant recently rediscovered in the western Nilgiris in 2017.
- (2) The Toda tribe of the Nilgiris, which knows the plant well, have an embroidery motif known as the "podwarshk", which resembles it.
- (3) The Toda people are capable of predicting the early arrival of monsoon from the blooming of the plant's "translucence".

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) None of the above

**Ans: (c)**

**Exp:** The incredibly rare *Arisaematranslucens*, more commonly known as the Cobra Lily, was recently rediscovered in the western Nilgiris after 84 years by nature enthusiasts K.M. Prabhu Kumar and Tarun Chhabra. Featuring a distinctive translucent spathe, it was last collected by E. Barnes in 1932 and described by C.E.C Fischer in 1933. Barely a few hundred cobra lily plants are left in the wild and they can be found only in a small area measuring less than 10 square kilometres in the Nilgiris. Of the handful cobra lily species found in the Nilgiris, only two are

endemic. Likely to have been quite common once, cobra lilies have vanished in the past decades along with the disappearance of the shola tree patches in which they were found. The rediscovery of the plant highlights the importance of preserving whatever is left of shola tree patches, even inside plantations and tea fields.

**67.** Consider the following statements:

- (1) When the Sun, the Earth and Moon are aligned in a straight line, the phenomenon is called Syzygy.
- (2) The Moon when it is at perigee is called Blue Moon.
- (3) The full Moon when it occurs twice in a month is called Super Moon.
- (4) The full Moon in a total lunar eclipse is called the Blood Moon.

Which of the statements given above are correct?

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

**Ans: (b)**

**Exp:** Recently, a total lunar eclipse occurred on January 31<sup>st</sup> 2018, and was referred to as Super Blue Blood Moon.

- The Moon was near its perigee on January 30 and so it was described as a “Super Moon”.
- As it was the second full moon in the calendar month of January 2018, it is also called a “Blue Moon”
- The term “Blood Moon” is used to refer to the typical colour of the Full Moon during a total lunar eclipse.

**Syzygy:**

This astronomical term is an event in which one astronomical object is lined-up with another. All eclipses are syzygys but not all syzygys are eclipses. For example, Full moon and New Moon are syzygys involving the lining up of the Sun, Earth and Moon; therefore, lunar and solar eclipses are syzygys.

**68.** Recently Petya ransomware cyber-attack has hit computer servers all across Europe, locking up computer data and crippling enterprise services in the corporate sector. Which of the following statement is NOT true regarding Petya Ransomware attack?

- (a) It encrypts all the data and locks up a computer’s files and demands Bitcoins as ransom to unlock the data.
- (b) The attack is believed to have started against an update used on a third-party Ukrainian software called MeDoc.
- (c) India was not affected by the attack.
- (d) Ukraine and Russia were the worst affected.

**Ans: (c)**

Explanation - Petya is a ransomware, similar to the WannaCry attack which affected over 300,000 computers globally and exploited this particular security vulnerability in Microsoft’s Windows systems. The Petya ransomware locks up a computer’s files and demands \$300 Bitcoins as ransom to unlock the data. All data on a computer gets encrypted.

In India, the Jawaharlal Nehru Port has been impacted given Moller-Maersk operates the Gateway Terminals India (GTI) at JNPT.

Ukraine and Russia were the worst affected, though the attack has also impacted some companies in the US and other Western European countries.

69. Consider the following statements regarding the election to the office of the President of India:
- (1) Election shall be held within a period of sixty days before the expiry of the term of office of the incumbent.
  - (2) The candidate may be a natural born or naturalised citizen of India.
  - (3) The candidate must be registered as an elector in any parliamentary constituency.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only
  - (b) 2 and 3 only
  - (c) 1 and 3 only
  - (d) 1, 2 and 3

**Ans: (d)**

**Exp:**

1. Section 4(3) of the President and VP Elections Act, 1952
2. Candidate must be a citizen - (Article 58)
3. Section 5B (2) of the President and VP Elections Act, 1952.

70. Consider the following statements regarding green bonds:
- (1) Green bonds can mobilize resources from domestic and international capital markets for climate change adaptation, renewables and other environment-friendly projects
  - (2) Blue Bonds are a type of green bonds which specifically invest in climate resilient water management and water infrastructure
- Select the correct answer using the code given below:
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

**Ans: (c)**

**Exp:**

- A bond is a debt instrument with which an entity raises money from investors.
- The capital for green bond is raised to fund 'green' projects like renewable energy, emission reductions etc.
- First Green Bond was issued by World Bank in 2007.
- There is no standard definition of green bonds as of now.
- Blue Bonds: It is a type of green bond which specifically invests in climate resilient water management and water infrastructure.

71. The Election Commission of India, for the first time launched a nationwide "Voter Registration Reminder." Consider the following statements in this context:
- (1) The Election Commission has collaborated with Facebook to launch the campaign.
  - (2) Facebook has developed a 'Register Now' button to encourage and remind the Indian citizens to register themselves with the Election Commission of India.
  - (3) Facebook has started the reminder service in only 2 languages - Hindi and English.
  - (4) In 2016 and 2017, Chief Electoral Officers made such efforts at State level during their respective State legislative elections.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 1, 2 and 4 only



- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

**Ans: (b)**

Explanation - In order to reach out to maximum eligible voters, the ECI collaborated with Facebook to launch first Nationwide "Voter Registration Reminder" on 1<sup>st</sup> July ,2017. With over 180 million people in India on Facebook, the 'Register Now' button was designed to encourage Indian citizens to register themselves with the Election Commission of India. On 1st July, a notification of the "voter registration reminder" was sent to people on Facebook in India who are eligible to vote. The reminder will be sent out in 13 Indian languages - English, Hindi, Gujarati, Tamil, Telugu, Malayalam, Kannada, Punjabi, Bengali, Urdu, Assamese, Marathi and Oriya. This was the first time Facebook's voter registration reminder has been rolled out across India. In 2016 and 2017, Chief Electoral Officers made such efforts at state level during their respective state elections.

- 72.** Which among the following administrative measures adopted by Akbar is/are correct?
- (1) To reform the land revenue system Akbar introduced a new system called as "Dahsala System".
  - (2) One-third of the average produce for last ten years was the land-revenue demand under Akbar.
  - (3) The dahsala was a ten-year settlement and not a permanent settlement
- Select the correct answer using the code given below:
- (a) 1 only
  - (b) 1 and 2 only
  - (c) 1 and 3 only
  - (d) 1, 2 and 3

**Ans: (b)**

Exp: Akbar introduced the Dahasala or Zabati system of land revenue collection in 1580-82 to alleviate the problems arising due to fixing prices every year and doing settlements of revenues of previous years. In this system, average produce of ten years was derived. One third of this average produce was fixed in Rupees per Bigha and fixed as share of the state (Mal). Rest two third share was left to the cultivators (Kharaj). The state demand in kind was given in mounds; but for the conversion of the state demand from kind to cash, a separate schedule of cash revenue rates for various crops was fixed, which were called as Dastur-i-amal. Each revenue circle had a separate schedule of dastur-i-amal for various crops. Thus, the peasant was required to pay on the basis of local produce as well as local prices. Dahsala System or Zabti System was introduced by Raja Todarmal, the able finance minister of Akbar, who had honed his skills under his first master She shah Suri. This system prevailed from Lahore to Allahabad and in the provinces of Malwa and Gujarat. This remained a standard system of revenue assessment during the greater part of the Mughal empire.

- 73.** Though coffee and tea both are cultivated on hill slopes, there is some difference between them regarding their cultivation. In this context, consider the following statements:
- (1) Tea plant is shade loving while for Coffee plant shade is not required.
  - (2) Tea plants are propagated from seeds and also from root-cuttings but coffee is grown from stem cuttings only.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 2 only

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

**Ans: (d)**

**Exp:**

- Direct sunlight is harmful for coffee plants; therefore, these are planted under shade of taller trees such as bananas. In Brazil, leguminous plants are used which not only provide shade but also enrich soil with nitrogen. Tea plant is shade loving too. This is not a difference in their cultivation.
- Tea plants are propagated from seeds and also from root-cuttings but Coffee is raised through Seedlings.

**74.** Consider the following statements in respect of “The Pradhan Mantri Swasthya Suraksha Yojana”:

- (1) It envisages setting up of AIIMS-like institutes and upgradation of existing Government Medical Colleges.
  - (2) It aims at providing free healthcare facilities to BPL families.
- Which of the statements given above is/are correct?

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

**Ans: (a)**

**Exp:** The primary objective of PMSSY is to correct the region imbalances in availability of affordable/reliable tertiary level healthcare in the country in general, and, to augment facilities for quality medical education in under-served or backward States, in particular. In addition to setting up of AIIMS, PMSSY also envisaged up-gradation of several existing Government Medical Colleges/Institutions in different states in the country.

**75.** Which is the first structure in India to get image trademark registration making it the first building in the country to get intellectual property rights protection for its architectural design?

- (a) Chhatrapati Shivaji Terminus, Mumbai
- (b) Akshardham Temple, Delhi
- (c) Lotus Temple, Delhi
- (d) Taj Mahal Palace Hotel, Mumbai

**Ans: (d)**

**Exp:** The iconic Taj Mahal Palace hotel in Mumbai has acquired an ‘image trademark’, making it the first building in the country to get intellectual property rights protection for its architectural design. It will ensure that commercial use of the image of its dome and grand exterior can be made only with the consent of Taj Hotels Palaces Resorts Safaris. This enhances the Taj Palace’s place in the world: among the other well-known structures around the world with trademarks are the Empire State Building in New York City, the Eiffel Tower in Paris, and Sydney’s Opera House.

The dome of The Taj Mahal Palace, which stands on the waterfront in south Mumbai, has long been been ‘triangulation point’ for the Indian Navy which guides its vessels to the harbour. The distinctive red-tiled Florentine Gothic dome, which crowns the elegant Indo-Saracenic arches and architraves of the hotel, sits 240 feet above the street level. The architects modeled it on

the dome of the Victoria Terminus (now Chhatrapati Shivaji Terminus). The hotel opened on December 16, 1903.

**76.** Which of the following statements describe the CO<sub>2</sub> fertilization effect?

- (a) Increase in the concentration of CO<sub>2</sub> due to global warming and decrease in the Ozone
- (b) It is when a body of water becomes overly enriched with minerals and nutrients that induce excessive growth of plants and algae.
- (c) The increase of carbon dioxide in the atmosphere increases the rate of photosynthesis in plants.
- (d) It is a natural process by which carbon dioxide is removed from the atmosphere and held in the plants.

**Ans: (c)**

**Exp:** The CO<sub>2</sub> fertilization effect or carbon fertilization effect suggests that the increase of carbon dioxide in the atmosphere increases the rate of photosynthesis in plants. The effect varies depending on the plant species, the temperature, and the availability of water and nutrients.

From a quarter to half of Earth's vegetated lands has shown significant greening over the last 35 years largely due to rising levels of atmospheric carbon dioxide.

One related trend may be what has been termed "Arctic greening". Scientists have been finding, of late, that as northern portions of the planet warm up even as total atmospheric carbon dioxide increases, there's been an increase in plant growth in these regions.

**77.** The term "AmbuSens" which was in news recently is related to which of the following?

- (a) It is a wireless technology for remote monitoring of patients' condition ferried in ambulances.
- (b) It is a bacteria, recently found which demonstrates a great deal of metabolic diversity and consequently is able to colonize a wide range of niches.
- (c) It is a mobile operating system based on a modified version of the Linux kernel and other open source software and designed primarily for touchscreen mobile devices such as smartphones and tablets.
- (d) It is a name of a financial malware which mostly affected Germany.

**Ans: (a)**

Explanation - Indian Institute of Technology, Kharagpur has come up with a wireless technology for remote monitoring of patients' condition ferried in ambulances. Named AmbuSens which is capable of wireless monitoring of various physiological parameters like ECG, heart-rate, temperature and blood-pressure. It can be fitted in an ambulance to ensure remote monitoring of patient condition by the doctors even before they reach the hospital. The system preserves patient's data confidentiality while simultaneously using the analytic and computing power of cloud computing. The web interface of the AmbuSens system provides an easy-to-use graphical interface for doctors and paramedics alike with data visualisation tools such as real-time ECG graph rendering, and can be accessed from internet-enabled laptops, tablets and smartphones.

Option (b) is the definition of Pseudomonas

Option (c) is the definition of Android.

**78.** India signed financing agreement with World Bank for Tejaswini project in 2017. Which of the following is NOT true about Tejaswini Project?

- (a) It is the first World Bank project in India that is solely focused on the welfare of adolescent girls and young women.
- (b) It supports market-driven skills training, secondary education and broader socio-economic empowerment for adolescent girls and young women .
- (c) It supports adolescent girls and young women between the ages of 14 and 24 to complete their secondary level education.
- (d) It is a pan India project which will start from Uttar Pradesh.

**Ans: (d)**

**Exp:** The World Bank will provide \$63 million loan to India to empower 6.8 lakh adolescent girls in Jharkhand under the 'Tejaswini' project. A Financing Agreement for International Development Association (IDA) credit of USD 63 million (equivalent) for the "Tejaswini: Socio-Economic Empowerment of Adolescent Girls and Young Women Project" was signed between the bank and the government. The project seeks to empower the adolescent girls with basic life skills and thereafter provide further opportunities to acquire market driven skill training or completion of secondary education, depending on the inclination of the beneficiary," a Finance Ministry release said.

The project will be delivered in 17 districts of Jharkhand. It has three main components — expanding social, educational and economic opportunities; intensive service delivery; and state capacity-building and implementation support.

About 6.8 lakh adolescent girls and young women in the project districts are expected to benefit from the programme. The closing date for the project is June 30, 2021.

**79.** Consider the following statements:

- (1) Harijan Sevak Sangh was founded by Gandhiji.
- (2) Self-Respect Movement was started by E.V. Ramaswamy Naicker.
- (3) Independent Labour Party was formed by T.M. Madhavan alone.
- (4) The All India Scheduled Caste Federation was constituted by B.R. Ambedkar.

Which of the statements given above are correct?

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

**Ans: (c)**

**Exp:** Independent Labour Party was also formed by B.R. Ambedkar.

**80.** Consider the following characteristics of a geographical region:

- (1) Average annual temperature is around 19° C, with annual rainfall around 120 cm.
- (2) It lies on the eastern coasts of continents between 25°- 45° N and S.
- (3) It has hot summers and mild winters and experiences rainfall throughout the year.

Which of the climate is being described above?

- (a) China Type of Climate
- (b) Mediterranean Climate
- (c) Continental Type of Climate
- (d) Subtropical Steppes Climate

**Ans: (a)**

**Exp:** China Type Climate occurs in the eastern coasts of continents between 25°-45° N and S. Areas – China, South East USA, South Brazil, Eastern Argentina, South East Africa, South East Australia, and South Japan. It is the eastern counterpart of the Mediterranean type.

- 81.** Consider the following statements regarding 'Sagar Vani':
- (1) 'Sagar Vani' is an Integrated Information Dissemination System (IDS) to communicate and help the coastal community, especially fishermen.
  - (2) It is a system that can send information in Hindi and English languages only through various platforms including radio, television, voice calling etc.
  - (3) It aims at timely dissemination of ocean information and advisory services that includes Potential Fishing Zone (PFZ) advisories, Ocean State Forecast (OSF), High Wave Alerts and Tsunami early warnings.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 1 and 2 only
  - (c) 2 and 3 only
  - (d) 1 and 3 only

**Ans: (d)**

**Exp:** Minister of Science & Technology, Earth Sciences and Environment, Forests & Climate Change, Dr. Harsh Vardhan launched an app "Sagar Vani" on the occasion of Foundation Day of Ministry of Earth Sciences in New Delhi in 2017. 'Sagar Vani' seeks to target the reach of information to the 9.27 lakh people involved in actual fishing either full or part time.

The system that can send information in regional languages through various platforms including radio, television, voice calling, text service, social media, mobile apps and email aims at timely dissemination of ocean information and advisory services that includes Potential Fishing Zone (PFZ) advisories, Ocean State Forecast (OSF), High Wave Alerts and Tsunami early warnings.

The advanced system has been developed by Indian National Centre for Ocean Information Services (INCOIS), under the Ministry, through its industry partner, Gaian Solutions Pvt. Ltd.

- 82.** Consider the following Bills with reference to the State Legislatures with bicameralism:
- (1) Ordinary Bills
  - (2) Money Bills
  - (3) Issue pertaining to the abolition of Legislative Council.
- In which of the Bills mentioned above, the deadlock/disagreement between the two Houses of the State Legislature can be resolved through the mechanism of joint sitting?
- (a) 1 only
  - (b) 2 and 3 only
  - (c) 1 and 3 only
  - (d) None of the above

**Ans: (d)**

**Exp:** There is no provision of joint sitting in case of deadlock between two houses of state legislature.

- 83.** Consider the following statements regarding Options:
- (1) Under Call Options, the option writer has the obligation to buy the underlying asset at the specified price.
  - (2) Under Call Options, the option holder has the right to buy the underlying asset at the specified price.
  - (3) Under the Put Options, option seller has the obligation to sell the underlying asset at the specified price.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only

- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**Ans: (b)**

**Exp:** Under Call options, the option writer/option seller has the obligation to sell the underlying asset (to the option holder) at the specified price. Thus statement 1 is incorrect.

Under call options, the option holder/option buyer has the right to buy the underlying asset at the specified price. Thus statement 2 is correct.

Under the Put options, option seller/option writer has the obligation to buy the underlying asset (from the option holder) at the specified price. Thus statement 3 is also incorrect.

- 84.** Which of the following option describes “Agri Udaan” most appropriately?
- (a) It is a special zero interest loan scheme for small and marginal farmers.
  - (b) It is a program launched by Atal Innovation Mission for rapid agricultural growth by linking the Producers Organisations with technological institutes like IITs etc.
  - (c) It is a program where Food and Agri-business start-ups will get incubation space to run their businesses and have access to research laboratories and libraries.
  - (d) It is an e-auction portal for selling agricultural produce developed by Joint Initiative of state run auctioneer MSTC and CRWC (Central Railside Warehouse Company)

**Ans: (c)**

**Exp:** In an attempt to promote innovation and entrepreneurship in agriculture, the government is launching a new AGRI-UDAAN programme that will mentor startups and help them connect with potential investors.

Managed by India’s premier farm research body, the Indian Council of Agricultural Research (ICAR), the food and agri-business accelerator programme will also help convert innovative ideas from India’s rural youth into viable businesses. The idea is to attract the youth from rural India and elsewhere, and train them so they can add value to the farmers’ produce.

The goal is to begin a start-up revolution in agriculture which so far has been limited to the services sector.

Under the programme, start-ups will get incubation space to run their businesses and have access to research laboratories and libraries. AGRI UDAAN will also help the selected start-ups with regulatory services like company registration and environmental compliances.

- 85.** Consider the following statements:
- (1) In places where the coasts are extremely mountainous, the continental shelves are generally very wide.
  - (2) The continental shelves are the richest fishing grounds in the world.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

**Ans: (b)**

**Exp:** Where the coasts are mountainous, such as the Rocky Mountain and the Andean coasts, the continental shelf may be entirely absent. These mountains are the result of plate’s subduction. The shallowness of continental shelves enables sunlight to penetrate through the water, which encourages plankton growth. These areas also get nutrients from the land. The

Sargasso Sea is the result of sub-tropical, high pressure conditions whereas the doldrums are ITCZ/low pressure areas near equator.

**86.** Consider the following statements regarding the Gayatri Mantra:

- (1) This mantra features in the Rig Veda.
- (2) It is dedicated to Varun, the God of air.

Which of the statements given above is/are correct?

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

**Ans: (a)**

**Exp:**

The Gāyatrī Mantra, also known as the Sāvitrī mantra, is a highly revered mantra from the Rig Veda (Mandala 3.62.10), dedicated to Savitr, a form of the sun. Gāyatrī is the name of the Vedic meter in which the verse is composed. Its recitation is traditionally preceded by om̐ and the formula bhūrbhuvahṡvāḥ, known as the mahāvyāhṡti, or "great (mystical) utterance". Vishvamitra is said to have created Gayatri Mantra.

**87.** Which among the following are the examples of Keystone Species?

- (1) Sea Otter
- (2) Mycorrhizal fungi in soil
- (3) Flying fox
- (4) Beaver

Select the correct answer using the code given below:

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

**Ans: (c)**

**Exp:** Species that have strong effect on the composition of communities, relating to their low abundance or biomass are called as Keystone Species. Examples of Keystone species include Flying fox, Beaver, Sea Otter, Starfish, Humming Bird, Prairie dogs and African elephants. Mycorrhizal fungi in soil are critical link species as they establish essential links in the absorption of nutrients from the soil and organic residues.

**88.** In 2017, the bicentenary celebration of the Paika Rebellion was organised by the Union Ministry of Culture. Which of the following statements is **incorrect** regarding Paika Rebellion?

- (a) The Paika Rebellion was an armed rebellion against the British East India Company's rule in Odisha in 1817.
- (b) It took place under the leadership of Baxi Jagabandhu Bidyadhara, who was the Gajapati King of Odisha.
- (c) An official announcement was done to the effect that Rebellion will be renamed as "First War of Independence."
- (d) The Rebellion was ruthlessly suppressed by the British and Baxi Jagabandhu was arrested in 1825.

**Ans: (b)**

**Exp:** Baxi Jagabandhu was the hereditary chief of the militia army of the Gajapati King. The Gajapati King of Odisha was Mukunda Deva-II at the time of rebellion. He was minor during the rebellion.

The Paika Rebellion was an armed rebellion against the British East India Company's rule in Odisha in 1817. The Paikas rose in rebellion under their leader Bakshi Jagabandhu and, projecting Lord Jagannath as the symbol of Odia unity. The rebellion quickly spread across most of Odisha before being ruthlessly put down by the company's forces. The Paikas were the traditional landed militia of Odisha. They served as warriors and were charged with policing functions during peacetime. The rebellion had several social, economic and political reasons. The Paikas were alienated by the British regime, who took over the hereditary rent-free lands granted to them after the conquest of Khurda. They were also subjected to extortion and oppression at the hands of the company government and its servants. The Paikas were led by Bakshi Jagabandhu Bidyadhar Mohapatra Bhramarabar Ray, the former bakshi or commander of the forces of the Raja of Khurda. The uprising spread rapidly across Odisha, and there were several encounters between the British and Paik forces, including at Cuttack, where the latter were quickly put down. By May 1817, the British managed to reestablish their authority over the entire province. In May 1817, the British posted judges to Khurda to sentence the captured rebels. The rebels were awarded sentences of death, transportation and long-term imprisonment.

- 89.** e-Shakti initiative was recently launched by NABARD. What is e-Shakti initiative?
- (a) It is a zero-interest credit programme to promote rural women entrepreneurship.
  - (b) It is a programme for direct subsidy transfer to dairy farmers.
  - (c) It is an initiative to promote transfer of land titles to women tillers.
  - (d) It is an initiative for digitisation of Self Help Groups (SHGs).

**Ans: (d)**

**Exp:** e-Shakti is a pilot project of National Bank for Agriculture and Rural Development (NABARD) for digitisation of Self Help Groups (SHGs). It was initiated to address certain concerns like improving the quality of book keeping of SHGs and to enable banks to take informed credit decisions about the group through a Management Information System (MIS). The project covers 25 districts and 1,30,176 SHGs have been digitised as on 31st March, 2017. As per information compiled by NABARD, about 69,696 SHGs of the SHGs which have been digitised are credit linked as on 31st July, 2017. No SHG has been de-recognised on account of, or, after digitisation. The digitisation project does not impact the profit/ loss position of the SHGs.

- 90.** A team of Indian astronomers has discovered an astronomical phenomenon named "Saraswati." What is "Saraswati"?
- (a) It is an extrasolar planet approximately 50 light-years away in the constellation of Pegasus.
  - (b) It is star in the constellation of Aquila.
  - (c) It is a small natural satellite of Pluto, about 12 km in its longest dimension.
  - (d) It is an extremely large supercluster of galaxies and is as big as 20 million billion suns.

**Ans: (d)**

**Exp:** A team of Indian astronomers has discovered an extremely large supercluster of galaxies — as big as 20 million billion Suns — which they have named Saraswati. It is one of the largest known structures in the neighbourhood of the universe, 4,000 million light-years away from



Earth and roughly more than 10 billion years old. Its mass extends over the scale of 600 million light years.

Superclusters are the largest coherent structures in the cosmic web. They are a chain of galaxies and galaxy clusters, bound by gravity, often stretching to several hundred times the size of clusters of galaxies, consisting of tens of thousands of galaxies.

Option (a) is about 51 Pegasi b

Option (b) is about Altair

Option (c) is about Kerberos.

**91.** Consider the following statements about Nudge Theory:

(1) The theory is about penalizing people financially if they don't act in a certain way.

(2) Automatic enrolment of employees into pension schemes in the UK is a good example where nudge theory has worked.

Select the correct answer using the code given below:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

**Ans: (b)**

**Exp:** Richard Thaler, the father of 'Nudge Theory', has recently been awarded the Nobel economics prize. The concept of nudge is a relatively subtle policy shift that encourages people to make decisions that are in their broad self-interest. It's not about penalising people financially if they don't act in certain way. It's about making it easier for them to make a certain decision. Thus, statement 1 is incorrect.

Public policy examples of 'Nudge' at work include automatic enrolment of employees into pension schemes in the UK and the opt-out system for organ donation in Spain. Thus, statement 2 is correct.

**92.** Match List-I with List-II and select the correct answer using the code given below:

	<b>List-I</b>		<b>List-II</b>
A.	Chopan	1.	Khadar soils
B.	Bets	2.	Sand Dunes
C.	Dhrians	3.	Alkaline and Saline soils
D.	Kari	4.	Peaty soil

**Codes**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
(a)	3	1	2	4
(b)	3	1	4	2
(c)	1	3	2	4
(d)	1	3	4	2

**Ans: (a)**

**Exp:** Chopan, Reh, Kallar, Usar etc are various local names of saline and alkaline soils. These soils form white encrustation (layers) due to capillary action. The salts of calcium, magnesium and sodium make these soils infertile.

Khadar plains are those floodplain that are low-lying next to a river. Khadar areas are prone to flooding and sometimes include portions of former river-beds that became available for

agriculture when a river changed course. It is moisture retentive and sticky when wet khadar soil consists of new alluvial soil deposits and is often very fertile. Bangar plains are more upland and consist of older alluvial soil.

Khadar soils are known as bets in Punjab.

Marusthali is a desert with shifting sand-dunes. It is located in the west of The Great Indian desert. This region is covered with, rocks, sands and dunes. The dunes here are locally known as Dhrian' and the blow-out depressions are known as 'Dhand'.

In Kerala, in Kottayam and Alleppey regions peaty and organic soils are called as 'curry/Kari'.

These are marshy soils and are result of water logging, anaerobic conditions which leads to partial decomposition of organic matter. As a result, these soils are acidic in nature.

**93.** Which among the following statements are correct regarding the "Rajagopalachari Formula"?

- (1) Gandhiji proposed to talk to Jinnah on the basis of this formula.
- (2) This included the provision about demarcation of Muslim majority areas in North West and North East and asking views of the people of these areas whether they wanted Pakistan.
- (3) The formula also provided that certain essential services could be shared.
- (4) Jinnah rejected the formula as he did not wish to share any of the services and in the plebiscite, he wanted only the Muslim community to participate.

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
- (b) 2, 3 and 4 only
- (c) None of the above
- (d) 1, 2, 3 and 4

**Ans: (d)**

**Exp:** The Rajagopalachari formula consisted of

- (i) The League was to endorse the Indian demand for independence and to co-operate with the Congress in formation of Provisional Interim Government for a transitional period.
- (ii) At the end of the War, a Commission would be appointed to demarcate the districts having a Muslim population in absolute majority and in those areas plebiscite to be conducted on all inhabitants (including the non-Muslims) on basis of adult suffrage.
- (iii) All parties would be allowed to express their stance on the partition and their views before the plebiscite.
- (iv) In the event of separation, a mutual agreement would be entered into for safeguarding essential matters such as defence, communication and commerce and for other essential services.
- (v) The transfer of population, if any would be absolutely on a voluntary basis.
- (vi) The terms of the binding will be applicable only in case of full transfer of power by Britain to Government of India.

Jinnah rejected the initiative, as he claimed that the formula was intended to 'torpedo' the Lahore resolution; it was 'grossest travesty', a 'ridiculous proposal', 'offering a shadow and a husk – a maimed, mutilated and moth-eaten Pakistan, and thus trying to pass off having met out Pakistan scheme and Muslim demand.

**94.** Which among the following instrument(s) of financial market is/are regulated by SEBI?

- (1) Public Issues
- (2) Commercial Papers
- (3) Right Issues

(4) Private Placement

Select the correct answer using the code given below:

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

**Ans: (b)**

**Exp:** Financial market instruments regulated by SEBI – Public Issue, Rights issue, Private Placement, Forward, Futures and Options.

Financial Market Instruments regulated by RBI – Commercial papers, Certificate of Deposits, Treasury Bills and Call Money.

**95.** Recently Ashalim Project was in news. It is related to which of the following?

- (a) It is Israel's largest solar power station in the Negev desert.
- (b) It is a tribal development project for the Ashalim tribe of Arunachal Pradesh.
- (c) It is a French project of Geo-Engineering to mitigate effects of Climate Change.
- (d) It is a Youth Self Employment programme launched in the North-Eastern States of India.

**Ans: (a)**

**Exp:** The Ashalim power station is a future solar power station to be established in the Negev desert near the kibbutz of Ashalim, (south of the district city of Be'erSheva) in Israel. The station will provide 121 Megawatt of electricity (2.0% of the Israeli consumption), which makes it the largest of its kind in Israel and 5th largest in the world.

The Ashalim project, deep in the Negev desert, is made up of three plots, with a fourth planned for the future, each with a different solar technology. Together, the fields will be Israel's largest renewable energy project when completed by 2018. They are set to generate some 310 megawatts of power, about 1.6 percent of the country's energy needs — enough for about 130,000 households, or roughly 5 percent of Israel's population.

The centerpiece is a solar tower that will be the world's tallest at 250 meters (820 feet). Solar towers use a method differing from the more common photovoltaic solar panels, which convert sunlight directly into electricity. Instead, towers use a solar-thermal method: Thousands of mirrors focus the sun's rays onto the tower, heating a boiler that creates steam to spin a turbine and generate electricity.

Encircling the Ashalim tower are 50,000 mirrors, known as heliostats, in a shimmering blanket of glass over the desert. The tower is so tall because the panels were squeezed together to maximize use of the land — and the closer the panels are the taller the tower must be, Gartner explained. Another solar-thermal plot at Ashalim will be able to store energy even when the sun goes down. A third plot will use photovoltaic solar technology to produce energy.

**96.** Consider the following statements with reference to the Preamble to the Constitution:

- (1) The Preamble is a modified version of the Poorna Swaraj pledge.
- (2) The Supreme Court, in the Keshavananda Bharati Case (1973), held that the Preamble can be amended subject to the Doctrine of "Basic Structure of the Constitution."

Which of the statements given above is/are correct?

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

**Ans: (b)**

**Exp:** The preamble is based on the *Objectives Resolution* which was drafted and moved in the Constituent Assembly by Jawaharlal Nehru on 13 December 1946.

The Supreme Court of India originally stated in the *Berubari* case presidential reference that the preamble is not an integral part of the Indian constitution, and therefore it is not enforceable in a court of law. However, the same court, in the 1973 *Keshavananda* case, overruled earlier decisions and recognised that the preamble may be used to interpret ambiguous areas of the constitution where differing interpretations present themselves. In the 1995 case of *Union Government Vs LIC of India*, the Supreme Court once again held that the Preamble is an integral part of the Constitution.

**97.** Recently Mankidia tribe was in news for their expertise in catching monkeys. The Mankidia Tribe belongs to which of the following State?

- (a) Odisha
- (b) Chhattisgarh
- (c) Jharkhand
- (d) Andhra Pradesh

**Ans: (a)**

**Exp:** Faced with rising incidents of monkeys raiding vegetable gardens, invading homes and attacking villagers in coastal Odisha, the State's Forest and Environment Department has asked its personnel to learn a few tricks from the Mankidia tribe to contain the menace.

Mankidias catch the monkeys surrounding them by climbing nearby trees and structures. Once they are surrounded, Mankidia shake the tree till the animal falls. A team on the ground, who are ready with a net, quickly trap the animal. When the Mankidias fail to catch a simian, the forest department officials use tranquilisers. The trapped animals are released in forests, several kilometres away from human habitation.

**98.** Pre-paid Payment Instruments (PPIs) are payment instruments that facilitate transactions like purchase of goods and services, including funds transfer, against the value stored on such instruments. These instruments can be issued under which among the following categories?

- (1) Closed System Instruments
- (2) Semi-closed System Payment Instruments
- (3) Open System Payment Instruments

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

**Ans: (d)**

**Exp:** Pre-paid Payment Instruments (PPIs) are payment instruments that facilitate transactions like purchase of goods and services, including funds transfer, against the value stored on such instruments. The value stored on PPIs represents the value paid by the holders by cash through a bank account etc. The prepaid instruments can be issued as smart cards, magnetic stripe cards, internet accounts, online wallets, mobile accounts, mobile wallets, paper vouchers and any such instruments used to access the prepaid amount.

PPI sector is regulated by the RBI and as per the RBI regulations, there are three types of PPIs:

(i) Closed system payment instruments

These are payment instruments issued by a person for facilitating the purchase of goods and services from him/her/it. Closed wallets are wallets which are issued by a company to a consumer for buying goods and services exclusively from that company. Examples: Amazon Wallet, Cleartrip Wallet

(ii) Semi-closed system payment instruments

These payment instruments are redeemable at a group of clearly identified merchants that contract specifically with the issuer to accept the payment instrument. These instruments do not permit cash withdrawal or redemption by the holder. Example: Oxigen Wallet, Mobikwik Wallet

(iii) Open system payment instruments (multipurpose cards).

These payment instruments can be used for purchase of goods and services and also permit cash withdrawal at ATMs, Merchant Local Locations, and automated business correspondents. Examples: Visa, Mastercard, RuPay.

**99.** Consider the following:

- (1) Seasonal variation in the length of day
- (2) Coriolis Effect
- (3) Twilight Period
- (4) Seasonal variation in insolation

Which of these increase as we move from the Equator to the Poles?

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

**Ans: (d)**

**100.** Which among the following statements is/are correct?

- (1) The Battle of Plassey led to the surrender of the Diwani Right by the Nawabs of Bengal to the East India Company.
- (2) After the success at Plassey the English Company made Mir Kasim the Nawab of Bengal.
- (3) Mir Kasim, after becoming the Nawab of Bengal, transferred the capital from Murshidabad to Calcutta.
- (4) To bring parity between the East India Company and the Indian traders, Mir Kasim abolished customs duty on the goods of Bengal.

Select the correct answer using the code given below:

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

**Ans: (d)**

**Exp:** It was the victory at Buxar which transferred Diwani Right.

After Plassey, the Company made Mir Jafar as the Nawab.

Capital was transferred from Murshidabad to Munger in Bihar.