

**GS SCORE**

**Set - B**

# **UPSC Prelims 2018**

Answer Key *with* Explanations

**46** Questions from GS Score  
in Prelims 2018

## UPSC PRELIMS 2018

### Answer Key with Explanation

1. Which of the following led to the introduction of English Education in India?
1. Charter Act of 1813
  2. General Committee of Public Instruction, 1823
  3. Orientalist and Anglicist Controversy

Select the correct answer using the code given below:

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

**Ans: D**

**Exp:**

- The East India Company began to adopt a dual policy in the sphere of education. It discouraged the prevalent system of oriental education and gave importance to western education and English language.
- The Charter Act of 1813 adopted a provision to spend one lakh rupees per annum for the spread of education in India.
- Although there was a prolonged debate pertaining to education during the course of a general discussion on the Act of 1813 in the British Parliament, yet the matter continued to generate debate for the next 20 years. Consequently, not even a single penny out of the allocated funds could be spent on education.
- The contemporary British scholars were divided into two groups on the issue of development of education in India. One group, called the Orientalists, advocated the promotion of oriental subjects through Indian languages. The other group, called the Anglicists, argued the cause of western sciences and literature in the medium of English language.
- In 1829, after assuming the office of the Governor-General of India, Lord William Bentinck, emphasized on the medium of English language in Indian education.
- In the beginning of 1835, the 10 members of the General Committee of Public Instruction were clearly divided into two equal groups.
- Five members including the Chairman of the committee Lord Macaulay were in favour of adopting English as medium of public instruction whereas the other five were in favour of oriental languages.

- The stalemate continued till 2 February 1835 when the Chairman of the committee, Lord Macaulay announced his famous Minute advocating the Anglicist point of view.
- Consequently, despite fierce opposition from all quarters, Bentinck got the resolution passed on 7 March 1835 which declared that henceforth, government funds would be utilized for the promotion of western literature and science through the medium of English language.

<http://www.iasscore.in/upsc-prelims/1857-revoltevolution-of-education-of-press-administration-before-1857>

2. Which one of the following is an artificial lake?

- Kodaikanal (Tamil Nadu)
- Kolleru (Andhra Pradesh)
- Nainital (Uttarakhand)
- Renuka (Himachal Pradesh)

**Ans: A**

**Exp:** Kodaikanal Lake, also known as Kodai Lake is a manmade lake located in the Kodaikanal city in Dindigul district in Tamil Nadu, India. Sir Vere Henry Levinge, the then Collector of Madurai, was instrumental in creating the lake in 1863, amidst the Kodaikanal town which was developed by the British and early missionaries from USA. The lake is said to be Kodaikanal's most popular geographic landmark and tourist attraction.

3. With reference to Pradhan MantriKaushalVikasYojana, consider the following statements:
1. It is the flagship scheme of the Ministry of Labour and Employment.
  2. It, among other things, will also impart training in soft skills, entrepreneurship, financial and digital literacy.
  3. It aims to align the competencies of the unregulated workforce of the country to the National Skill Qualification Framework.

Which of the statements given above is/are correct?

- 1 and 3 only
- 2 only
- 2 and 3 only
- 1, 2 and 3

**Ans: C**

**Exp:** Pradhan MantriKaushalVikasYojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). The objective of this Skill Certification Scheme is to enable a large number of Indian youth to take up industry-relevant skill training that will help them in securing a better livelihood. Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL). Under this Scheme, Training and Assessment fees are completely paid by the Government.

*Pradhan MantriKaushalVikasYojana (PMKVY)*

Approved for another four years (2016-2020) to benefit 10 million youth. Pradhan MantriKaushalVikasYojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE).

The objective of this Skill Certification Scheme is to enable a large number of Indian youth to take up industry-relevant skill training that will help them in securing a better livelihood. Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL). Under this Scheme, Training and Assessment fees are completely paid by the Government.

**Key Components of the Scheme:**

1. **Short Term Training:** The Short Term Training imparted at PMKVY Training Centres (TCs) is expected to benefit candidates of Indian nationality who are either school/college dropouts or unemployed. Apart from providing training according to the National Skills Qualification Framework (NSQF), TCs shall also impart training in Soft Skills, Entrepreneurship, Financial and Digital Literacy. Duration of the training varies per job role, ranging between 150 and 300 hours. Upon successful completion of their assessment, candidates shall be provided placement assistance by Training Partners (TPs). Under PMKVY, the entire training and assessment fees are paid by the Government. Payouts shall be provided to the TPs in alignment with the Common Norms. Trainings imparted under the Short Term Training component of the Scheme shall be NSQF Level 5 and below.
2. **Recognition of Prior Learning:** Individuals with prior learning experience or skills shall be assessed and certified under the Recognition of Prior Learning (RPL) component of the Scheme. RPL aims to align the competencies of the unregulated workforce of the country to the NSQF. Project Implementing Agencies (PIAs), such as Sector Skill Councils (SSCs) or any other agencies designated by MSDE/NSDC, shall be incentivized to implement RPL projects in any of the three Project Types (RPL Camps, RPL at Employers Premises and RPL centres). To address knowledge gaps, PIAs may offer Bridge Courses to RPL candidates.

<http://iascore.in/ias-prelims/skill-development-schemes>

4. In 1920, which of the following changed its name to "Swarajya Sabha"?
  - (a) All India Home Rule League
  - (b) Hindu Mahasabha
  - (c) South Indian Liberal Federation
  - (d) The Servants of India Society

**Ans: A**

5. Which among the following events happened earliest?
  - (a) Swami Dayanand established Arya Samaj.
  - (b) Dinabandhu Mitra wrote Neeldarpan.
  - (c) Bankim Chandra Chattopadhyay wrote Anandmath.
  - (d) Satyendranath Tagore became the first India to succeed in the Indian Civil Services Examination.

**Ans: B**

**Exp:** Arya Samaj is an Indian Hindu reform movement that promotes values and practices based on the belief in the infallible authority of the Vedas. The samaj was founded by the sannyasi Dayananda Saraswati on 7 April 1875

Nil Darpan is a Bengali play written by Dinabandhu Mitra in 1858–1859. The play was published from Dhaka in 1860

Anandamath is a Bengali fiction, written by Bankim Chandra Chattopadhyay and published in 1882.

Satyendranath Tagore (first to clear ICS) was selected for the Indian Civil Service in June, 1863.

6. Which of the following is/are the possible consequence/s of heavy sand mining in riverbeds?
1. Decreased salinity in the river
  2. Pollution of groundwater
  3. Lowering of the water-table

Select the correct answer using the code given below:

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

**Ans: B**

**Exp: *Sand Mining and impact on environment***

Sand Mining is an activity referring to the process of the actual removal of sand from the foreshore including rivers, streams and lakes. Sand is mined from beaches and inland dunes and dredged from ocean beds and river beds. A related process is the mining of mineral sands, such as mineral deposits like diamond, gold and silver. These minerals typically occur combined with ordinary sand. The sand is dug up, the valuable minerals are separated in water by using their different density, and the remaining ordinary sand is re-deposited.

Excessive in-stream sand-and-gravel mining causes the degradation of rivers. In-stream mining lowers the stream bottom, which may lead to bank erosion. Depletion of sand in the streambed and along coastal areas causes the deepening of rivers and estuaries, and the enlargement of river mouths and coastal inlets. It may also lead to saline-water intrusion from the nearby sea. The effect of mining is compounded by the effect of sea level rise. Any volume of sand exported from streambeds and coastal areas is a loss to the system. It is also a threat to bridges, river banks and nearby structures. Sand mining also affects the adjoining groundwater system and the uses that local people make of the river.

In-stream sand mining results in the destruction of aquatic and riparian habitat through large changes in the channel morphology. Impacts include bed degradation, bed coarsening, lowered water tables near the streambed, and channel instability. These physical impacts cause degradation of riparian and aquatic biota and may lead to the undermining of bridges and other structures. Continued extraction may also cause the entire streambed to degrade to the depth of excavation. Sand mining generates extra vehicle traffic, which negatively impairs the environment. Where access roads cross riparian areas, the local environment may be impacted.

Degraded stream habitats result in loss of fisheries productivity, biodiversity, and recreational potential. Severely degraded channels may lower land and aesthetic values.

Apart from it, sand mining transforms the riverbeds into large and deep pits; as a result, the groundwater table drops leaving the drinking water wells on the embankments of these rivers dry. Bed degradation from in-stream mining lowers the elevation of stream flow and

the floodplain water table which in turn can eliminate water table-dependent woody vegetation in riparian areas, and decrease wetted periods in riparian wetlands. For locations close to the sea, saline water may intrude into the fresh water body.

In-stream sand mining activities will have an impact upon the river's water quality. Impacts include increased short-term turbidity at the mining site due to resuspension of sediment, sedimentation due to stockpiling and dumping of excess mining materials and organic particulate matter, and oil spills or leakage from excavation machinery and transportation vehicles.

Increased riverbed and bank erosion increases suspended solids in the water at the excavation site and downstream.

Suspended solids may adversely affect water users and aquatic ecosystems. The impact is particularly significant if water users downstream of the site are abstracting water for domestic use. Suspended solids can significantly increase water treatment costs.

<http://iasscore.in/national-issues/sand-mining-and-its-impact>

7. With reference to agricultural soils, consider the following statements:
1. A high content of organic matter in soil drastically reduces its water holding capacity.
  2. Soil does not play any role in the sulphur cycle.
  3. Irrigation over a period of time can contribute to the salinization of some agricultural lands.

Which of the statements given above is/are correct?

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

**Ans: B**

**Exp: Statement 1:** Each 1 percent increase in soil organic matter helps soil hold 20,000 gallons more water per acre.

**Statement 2:**

- **Sulphur Cycle:** Sulphur cycle, circulation of sulfur in various forms through nature. Sulphur is key to protein structure and is released to the atmosphere by the burning of fossil fuels. Sulphur occurs in all living matter as a component of certain amino acids. It is abundant in the soil in proteins and, through a series of microbial transformations, ends up as sulphates usable by plants.

Sulphur-containing proteins are degraded into their constituent amino acids by the action of a variety of soil organisms. The sulphur of the amino acids is converted to hydrogen sulphide (H<sub>2</sub>S) by another series of soil microbes. In the presence of oxygen, H<sub>2</sub>S is converted to sulfur and then to sulphate by sulfur bacteria. Eventually the sulfate becomes H<sub>2</sub>S.

Hydrogen sulphide rapidly oxidizes to gases that dissolve in water to form sulphurous and sulphuric acids. These compounds contribute in large part to the "acid rain" that can kill sensitive aquatic organisms and damage marble monuments and stone buildings.

*Thus cycle can be divided as:*

- Sulphur Cycle in Soils: Sulphur enters the trophic cycle in terrestrial plants via root adsorption in the form of inorganic sulphates (e.g., calcium sulphate, sodium sulphate) or by direct assimilation of amino acids released in the decomposition of dead or excreted organic matter. Bacterial and fungal (*Aspergillus* and *Neurospora*) mineralization of the organic sulphhydryl in amino acids followed by oxidation results in sulphate; this adds to the sulphate pool for root adsorption.
- Sulphur Cycle in Atmosphere: Sulphur in the atmosphere comes from several different sources: decomposition and/or combustion of organic matter, combustion of fossil fuels, and ocean surfaces and volcanic eruptions. The most prevalent form of sulphur entering the atmosphere is sulphur dioxide (SO<sub>2</sub>). It, along with other atmospheric forms such as elemental sulphur and hydrogen sulphide, is oxidized to sulphur trioxide (SO<sub>3</sub>), which combines with water to form sulphuric acid (H<sub>2</sub>SO<sub>4</sub>), leading to acid rain.

Atmospheric sulphur, largely in the form of sulphuric acid, is removed by two general processes: rainout, which includes all processes within clouds that result in removal; and washout, which is the removal by precipitation below the clouds. Depending on the amount of the various sulphur compounds available to form the sulphuric acid, the degree of acidity can be strong enough to approximate that of battery acid. Atmospheric inputs of sulphuric acid provide the dominant source of both hydrogen ions (H<sup>+</sup>) for cation replacement.

- Sulphur in Sediments: The sedimentary aspect of the cycle involves the precipitation of sulphur in the presence of such cations as iron (Fe) and calcium (Ca) as highly insoluble ferrous sulphide (FeS) and ferric sulphide (Fe<sub>2</sub>S<sub>3</sub>, pyrite) or relatively insoluble calcium sulphate (CaSO<sub>4</sub>).

Statement 3: Salinity also caused due to excessive irrigation in dry conditions which promotes capillary action.

<http://www.iasscore.in/upsc-prelims/nitrogen-cyclesulphur-cycle-hydrological-cycle>

<http://iasscore.in/upsc-prelims/land-degradation>

8. The Partnership for Action on Green Economy (PAGE), a UN mechanism to assist countries transition towards greener and more inclusive economies, emerged at
- (a) The Earth Summit on Sustainable Development 2002, Johannesburg
  - (b) The United Nations Conference on Sustainable Development 2012, Rio de Janeiro
  - (c) The United Nations Framework Convention on Climate Change 2015, Paris
  - (d) The World Sustainable Development Summit 2016, New Delhi

**Ans: B**

**Exp:** Sustainable development has been the overarching goal of the international community since the UN Conference on Environment and Development (UNCED) in 1992. Amongst numerous commitments, the Conference called upon governments to develop national strategies for sustainable development, incorporating policy measures outlined in the Rio Declaration and Agenda 21. Despite the efforts of many governments around the world to implement such strategies as well as international cooperation to support national governments, there are continuing concerns over global economic and environmental developments in many countries. These have been intensified by recent prolonged global energy, food and financial crises, and underscored by continued warnings from global scientists that society is transgressing a number of planetary boundaries or ecological limits.

With governments seeking effective ways to lead their nations out of these related crises whilst also taking into account these planetary boundaries, green economy (in its various forms) has been proposed as a means for catalysing renewed national policy development and international cooperation and support for sustainable development. The concept has received significant international attention over the past few years as a tool to address the 2008 financial crisis as well as one of two themes for the 2012 UN Conference on Sustainable Development (Rio+20). This has resulted in a rapidly expanding literature including new publications on green economy from a variety of influential international organisations, national governments, think tanks, experts, non-government organisations and others.

Governments agreed at Rio+20 to frame the green economy as an important tool for sustainable development; one that is inclusive and can drive economic growth, employment, and poverty eradication, whilst maintaining the healthy functioning of the Earth's ecosystems. Importantly, the outcome document also recognises that capacity building, information exchange and experience sharing will be critical for implementing green economy policies.

Recent initiatives on green economy or green growth by the United Nations Environment Program (UNEP), the UN Department of Economic and Social Affairs (UNDESA), the United Nations Conference on Trade and Development (UNCTAD), the International Labour Organisation (ILO), the World Bank, the Organisation for Economic Cooperation and Development (OECD), the Global Green Growth Institute (GGGI), the Partnership for Action on Green Economy (PAGE), the Green Growth Knowledge Platform (GGKP) the Green Economy Coalition

9. "3D printing" has applications in which of the following?
1. Preparation of confectionery items
  2. Manufacture of bionic ears
  3. Automotive industry
  4. Reconstructive surgeries
  5. Data processing technologies

Select the correct answer using the code given below:

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

**Ans: D**

**Exp:** 3D printing or additive manufacturing is a process of making three dimensional solid objects from a digital file

**1. Manufacturing applications**

- Cloud-based additive manufacturing
- Mass customization
- Rapid manufacturing
- Rapid prototyping
- Research



- Food
- Agile tooling

## 2. *Medical applications*

- Bio-printing
- Medical devices
- Pills

## 3. *Industrial applications*

- Apparel
- Industrial art and jewelry
- Automotive industry
- Construction
- Firearms
- Computers and robots
- Soft sensors and actuators
- Space

## 4. *Sociocultural applications*

- Art and jewelry
- 3D selfies
- Communication
- Domestic use
- Education and research
- Environmental use
- Cultural heritage
- Specialty materials

<http://www.iasscore.in/upsc-prelims/3-d-printing>

10. Consider the following statements:

1. The Barren Island volcano is an active volcano located in the Indian Territory.
2. Barren Island lies about 140 km east of Great Nicobar.
3. The last time the Barren Island volcano erupted was in 1991 and it has remained inactive since then.

Which of the statements given above is/are correct?

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

**Ans: A**

**Exp:** According to scientists from Goa based National Institute of Oceanography (NIO), India's only live volcano at Barren Island in the Andaman and Nicobar has become active again

After lying dormant for 150 years, Barren Island volcano had erupted in 1991 and since then it is showing sporadic activity. Now it is erupting in small episodes of five to 10 minutes.

The Barren Islands are located around 140 km northeast of the Andamans capital city Port Blair.

#### GSSCORE QUESTION

Which of the following statements are true related to major island groups in India?

1. Andaman and Nicobar island group is an elevated portion of submarine mountains.
2. Entire island group of Lakshadweep and Minicoy is built of coral deposits.
3. Barren island is the only active volcano in India situated in the Nicobar Islands.

Codes:

- (a) 1 & 3
- (b) 2 & 3
- (c) 1 & 2
- (d) All

**Ans: C**

**Exp:** It is located in Andaman Islands.

[http://iasscore.in/upsc-pt-practice-test-rank.php?test\\_id=134](http://iasscore.in/upsc-pt-practice-test-rank.php?test_id=134)

11. Why is a called Prosopisjulifloru often mentioned is news?

- (a) Its extract is widely used in cosmetics.
- (b) It tends to reduce the biodiversity in the area in which it grows.
- (c) Its extracts is used in the synthesis of pesticides.
- (d) None of the above

**Ans: B**

**Exp:** Prosopisjuliflora (P juliflora), an exotic tree, is one of the top invaders in India. A native of South and Central America, it was introduced in India to meet the fuel wood requirement of the rural poor and to restore degraded lands. It tends to reduce the biodiversity in the area in which it grows.

#### GSSCORE QUESTION

Recently Madras High Court has ordered the Tamil Nadu government to enact a law on prohibition of seemaikaruvelam trees (prosopisjuliflora). What is the reason behind this?

- (a) These trees release toxic chemicals which are causing health problems in the state.
- (b) These trees are against the symbol and tenets of Vashnaivism sect in the state.
- (c) These trees suck lot of water by invading into the water bodies.
- (d) These trees are the home to various pathogens and insects.

**Ans: C**

**(PT Current Affairs Test 1)**

12. Consider the following statements

1. Most of the world's coral reefs are in tropical waters.
2. More than one third of the world's coral reefs are located in the territories of Australia, Indonesia and Philippines.
3. Coral reefs host far more number of animal phyla than those hosted by tropical rainforests.

Which of the statements given above is/are correct?

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

**Ans: D**

**Exp:** Coral reefs are found in circum-tropical shallow tropical waters along the shores of islands and continents. The reef substrate is mainly composed of calcium carbonate from living and dead corals. Many other invertebrates, vertebrates, and plants live in close association to the corals, with tight resource coupling and recycling, allowing coral reefs to have extremely high productivity and biodiversity, such that they are referred to as 'the Tropical Rainforests of the Oceans'.

Coral reefs are believed by many to have the highest biodiversity of any ecosystem on the planet—even more than a tropical rainforest.

Major Regions of Coral Reef Development

Globally, three major regions of coral reef development are generally recognized, each with a somewhat distinctive biota. These are:

- (1) The Indo-Pacific - Includes most of the Indian Ocean (excluding the Red Sea), and the western Pacific.
- (2) The Wider Caribbean (tropical western Atlantic) - Includes Florida, The Bahamas, Caribbean Sea proper, and coastal waters off northeastern S. America.
- (3) The Red Sea

Thus Australia, Indonesia and Philippines cover one-third area.

<http://www.iasscore.in/upsc-prelims/estuaries-mangroves-coral-polyps>

13. "momentum for change : climate neutral now" is an initiative launched by

- (a) The intergovernmental panel on climate change
- (b) The UNEP secretariat
- (c) The UNFCCC secretariat
- (d) The world meteorological organization

**Ans: C**

**Exp:** Momentum for Change: Climate Neutral Now brings together two of the secretariat's flagship activities that recognize leadership in tackling climate change by non-Party stakeholders.

It has been launched by the (UNFCCC) United Nations Climate Change secretariat has launched a new initiative that will showcase efforts by individuals, companies and governments that are achieving real results in transitioning to climate neutrality.

14. With reference to educational institutions during colonial rule in India, consider the following pairs:

<i>Institution</i>	<i>Founder</i>
1. Sanskrit college at Banaras	William Jones
2. Calcutta Madarsa	Warren Hastings
3. Fort William college	Arthur Wellesley

Which of the pairs given above is/are correct?

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

**Ans: B**

**Exp:** Sanskrit college: Jonathan Duncan

Calcutta madarsa: Warren Hastings

Fort William College: Richard Wellesley

<http://www.iasscore.in/upsc-prelims/1857-revoltevolution-of-education-of-press-administration-before-1857>

15. Consider the following pairs :

<i>Region sometimes mentioned in news</i>	<i>Country</i>
1. Catalonia	- Spain
2. Crimea	- Hungary
3. Mindanao	- Philippines
4. Oromia	- Nigeria

Which of the pairs given above are correctly matched?

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

**Ans: C**

**Exp:** Catalonia: Spain

Crimea: Ukraine

Mindanao: Philippines

Oromia: Ethiopia

16. Which one of the following statements correctly describes the meaning of legal tender money?
- The money which is tendered in courts of law to defray the fee of legal cases.
  - The money which a creditors is under compulsion to accept in settlement of his claims.
  - The bank money in the forms of cheque, drafts, bills of exchange, etc.
  - The metallic money in circulation in a country.

**Ans: B**

**Exp:** There is no complete definition in the options, so we need to choose most suitable, which is b, as legal tender is acceptable by law, which no one can refuse to accept.

<http://www.iasscore.in/upsc-prelims/money-inflation>

17. If a commodity is provided free to the public by the government, then
- The opportunity cost is zero.
  - The opportunity cost is ignored.
  - The opportunity cost is transferred from the consumers of the product to the tax-paying public.
  - The opportunity cost is transferred from the consumers of the product to the government.

**Ans: D**

**Exp:** Opportunity cost is the cost which could have been earned from second best investment option. For free goods, the opportunity cost is zero for the person consuming it, however, it is not so for the provider of that good. The choice of spending on various alternatives is available with government and not tax payers. Thus, it is transferred to government.

18. Increase in absolute and per capital real GNP do not connote a higher level of economics development, if
- Industrial output fails to keep pace with agriculture output.
  - Agriculture output fails to keep pace with industrial output.
  - Poverty and unemployment increase.
  - Imports grow faster than exports.

**Ans: C**

**Exp:** If gains of increase in per capita income are grabbed by a small section of society, then economic growth will not lead to economic development. For example - Libya

#### GSSCORE QUESTION

Choose the correct statement(s) with regard to GNP per capita measurement:

- GNP per capita is used for inter-country comparison of overall development.
- It reflects the pattern of distribution of income within the country hence, can be used as a measure of poverty.

Which of the above statements is/are correct?

- Only 1
- Only 2
- Both
- None

**Ans. A**

**Exp:** It gives average income and does not reflect the pattern of income within the country hence not a satisfactory measure of poverty.

**(PT crash course Economy test 1, question 26)**

19. Consider the following statements.

Human capital formation as a concept is better explained in terms of a process which enables.

- (a) Individuals of a country to accumulate more capital.
- (b) Increasing the knowledge, skill levels and capacities of the people of the country.
- (c) Accumulation of tangible wealth.
- (d) Accumulation of intangible wealth.

Which of the statements given above is/are correct?

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

**Ans: C**

**Exp:** While 2 is very meaning of human capital accumulation, 4 also increases due to 2 only, for example, patents, copyrights, etc.

20. Despite being a high saving economy, capital formation may not result in significant increase in output due to

- (a) Weak administrative machinery
- (b) Illiteracy
- (c) High population density
- (d) High capital output ratio

**Ans: D**

**Exp:** If a country has poor technology and low efficiency, even high savings, will lead to low economic growth.

21. After the Santhal uprising subsided, what was/were the measure/measures taken by the colonial government?

- 1. The territories called 'santhalparaganas were created.
- 2. It became illegal for a santhal to transfer land to a non-santhal.

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:** SanthalPargana District was created in 1885 after partition of Bhagalpur and Birbhum. An important reason behind the creation of SanthalPargana was Santhal Mutiny in 1854-55.

22. Economically, one of the results of the British rule in India on the 19th century was the
- Increase in the export of Indian handicrafts
  - Growth in the number of Indian owned factories.
  - Commercialization of Indian agriculture.
  - Rapid increase in the urban population

**Ans: C**

**Exp:** Commercialization of Indian agriculture started post 1813 when the industrial revolution in England gained pace.

<http://iasscore.in/upsc-prelims/administration-before-1857-economic-policies>

23. If the president of India exercise his power as provided under article 356 of the constitutional in respect of a particular state, then
- The assemble of the state is automatically dissolved.
  - The powers of the legislature of that state shall be exercisable by or under the authority of the parliament.
  - Article 19 is suspended in that state.
  - The president can make laws relating to that state.

**Ans: D**

**Exp:** When the President's Rule is imposed in a State the Parliament can delegate the power to make laws for the state to the President or to any other authority specified by him in this regard.

<http://iasscore.in/upsc-prelims/emergency>

24. Consider the following pairs:

<i>Crafts</i>	<i>Heritage of</i>
1. Puthukkuli shawls	Tamil Nadu
2. Sujni embroidery	Maharashtra
3. Uppadajamdani saris	Karnataka

Which of the pairs given above is/are correct?

- 1 only
- 1 and 2
- 3 only
- 2 and 3

**Ans: A**

**Exp:** Sujni Embroidery is of Bihar

UppadaJamdani Saris is of Andhra Pradesh

25. In which of the following areas can GPS technology be used?

1. Mobile phone operations
2. Banking operations
3. Controlling the power grids

Select of the correct answer using the code below:

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

**Ans: D**

**Exp:** It is a global navigation satellite system that provides geolocation and time information to a GPS receiver anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites.

Many civilian applications use one or more of GPS's three basic components: absolute location, relative movement, and time transfer.

- Agriculture
- Astronomy
- Automated vehicle
- Cartography
- Cellular telephony.
- Clock synchronization
- Disaster relief/emergency services
- Radio occultation for weather and atmospheric science applications.
- Fleet tracking: used to identify, locate and maintain contact reports with one or more fleet vehicles in real-time.
- Geofencing
- Geotagging
- GPS aircraft tracking
- GPS for mining
- GPS data mining.
- Navigation: navigators value digitally precise velocity and orientation measurements.
- Surveying: surveyors use absolute locations to make maps and determine property boundaries.

<http://www.iasscore.in/upsc-prelims/spatial-technology>



26. Consider the following statements:

1. The Reserve Bank of India manages and services Government of India Securities but not any State Government Securities.
2. Treasury bills are issued by the Government of India and there are no treasury bills issued by the State Governments.
3. Treasury bills offer are issued at a discount from the par value.

Which of the statements given above is/are correct?

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

**Ans: C**

**Exp:** Treasury Bills are issued only by the central government in India. The State governments do not issue any treasury bills. Interest on the treasury bills is determined by market forces.

Treasury bills, or T-bills, are short-term debt instruments issued by the U.S Treasury. T-bills are issued for a term of one year or less. T-bills are considered the world's safest debt as they are backed by the full faith and credit of the United States government.

Treasury bills offer are issued at a discount from the par value.

<http://www.iasscore.in/upsc-prelims/regulatory-bodies>

<http://iasscore.in/upsc-prelims/money-market-capital-marketinsurance>

27. Consider the following statements:

1. The Earth's magnetic field has reversed every few hundred thousand years.
2. When the Earth was created more than 4000 million years ago, there was 54% oxygen and no carbon dioxide.
3. When living organisms originated, they modified the early atmosphere of the Earth.

Which of the statements given above is/are correct?

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

**Ans: C**

**Exp:** The Earth's Magnetic field has reversed every few hundred thousand years. This has been proved through Sea-Floor spreading.

When Earth was created there was no oxygen in the atmosphere. Oxygen makes up about one-fifth the volume of Earth's atmosphere today and is a central element of life as we know it. But that wasn't always the case. Oxygen, although always present in compounds in Earth's interior, atmosphere, and oceans, did not begin to accumulate in the atmosphere as oxygen gas (O<sub>2</sub>) until well into the planet's history.

Carbon dioxide, water vapor, and methane played an important role in Earth's subsequent development.

By 2.7 billion years ago, a new kind of life had established itself: photosynthetic microbes called cyanobacteria, which were capable of using the Sun's energy to convert carbon dioxide and water into food with oxygen gas as a waste product. They lived in shallow seas, protected from full exposure to the Sun's harmful radiation.

These organisms became so abundant that by 2.4 billion years ago the free oxygen they produced began to accumulate in the atmosphere.

<http://www.iasscore.in/upsc-prelims/other-geographical-facts>

<http://www.iasscore.in/upsc-prelims/basic-theoriesinterior-of-earthrocks>

28. The terms 'WannaCry, Petya and EternalBlue' sometimes mentioned in the news recently are related to
- (a) Exoplanets
  - (b) Cryptocurrency
  - (c) Cyber attacks
  - (d) Mini satellites

**Ans: C**

**Exp:** Wannacry, Petya and EternalBlue are related to cyber attacks. These are form of Ransomware.

<http://iasscore.in/ias-prelims/wannacry-malware>

29. With reference to the circumstances in India agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following fall under the Conservation Agriculture?
- 1. Avoiding the monoculture practices
  - 2. Adopting minimum tillage
  - 3. Avoiding the cultivation of plantation crops
  - 4. Using crop residues to cover soil surface
  - 5. Adopting spatial and temporal crop sequencing/crop rotations

Select the correct answer using the code given below:

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

**Ans: C**

**Exp:** Conservation Agriculture is a set of soil management practices that minimize the disruption of the soil's structure, composition and natural biodiversity. Despite high variability in the types of crops grown and specific management regimes, all forms of conservation agriculture share three core principles. These include:

- maintenance of permanent or semi-permanent soil cover (using either a previous crop residue or specifically growing a cover crop for this purpose);
- minimum soil disturbance through tillage (just enough to get the seed into the ground);
- regular crop rotations to help combat the various biotic constraints;

Conservation Agriculture also uses or promotes where possible or needed various management practices listed below:

- utilization of green manures/cover crops (GMCC's) to produce the residue cover;
- no burning of crop residues;
- integrated disease and pest management;
- controlled/limited human and mechanical traffic over agricultural soils.

30. The term "sixth mass extinction/sixth extinction" is often mentioned in the news in the context of the discussion of
- (a) Widespread monoculture practices in agriculture and large-scale commercial farming with indiscriminate use of chemicals in many parts of the world that may result in the loss of good native ecosystems.
  - (b) Fears of a possible collision of a meteorite with the Earth in the near future in the manner it happened 65 million years ago that caused the mass extinction of many species including those of dinosaurs.
  - (c) Large scale cultivation of genetically modified crops in many parts of the world and promoting their cultivation in other parts of the world which may cause the disappearance of good native crop plants and the loss of food biodiversity.
  - (d) Mankind's over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats, destruction of ecosystems, pollution and global climate change.

**Ans: D**

**Exp:** Earth is currently in the midst of what is being considered the 6th great mass extinction, or the Holocene extinction, or sometimes the Anthropocene extinction.

An increasing number of species is disappearing from the face of the earth due to the human activities. This man-made mass extinction represents a very severe depletion of biodiversity, particularly because it is occurring within a short period of time.

<http://www.iasscore.in/upsc-prelims/types-of-species>

#### GSSCORE QUESTION

Consider the following statements with respect to the biodiversity extinction event:

1. An extinction event is widespread and rapid decrease in biodiversity of the earth.
2. Speciation is the rate which new species are formed, which contributes to the biodiversity.
3. Extinction events are recorded through mass disappearance of fossil records, especially for marine organisms
4. The cretaceous- tertiary mass extinction is famed for death of the dinosaurs.

Which of the above statements are correct?

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

**Ans. D**

**Exp:** Extinction is every day. Mass extinction is not. An extinction event is widespread and rapid decrease in biodiversity of the earth. It occurs when prevailing rate of extinction far exceeds the background or natural rate of extinction. This rate is measured normally in number of species going extinct over a given period of time.

The opposite of extinction is speciation - the rate at which new species are formed, which contributes to the biodiversity.

Extinction events are recorded through mass disappearance of fossil records, especially for marine organisms, whose fossils are better preserved.

Scientists have recognized several mass extinction events in past 500 million years, out of which five are considered to major ones, these are:

- End Ordovician - Silurian E E ( 450-440 million years )
- Late Devonian E E( 375 MY)
- Permian-Triassic E E( 250 MY)
- Triassic-Jurassic E E ( 200 MY )
- Cretaceous- tertiary E E( 66 MY) : It is famed for the death of the dinosaurs.

**(Prelims 2018 PT test 13, question 27)**

31. Consider the following events:

1. The first democratically elected communist party government formed in a State in India.
2. India's then largest bank, 'Imperial Bank of India', was renamed 'State Bank of India'.
3. Air India was nationalised and became the national carrier.
4. Goa became a part of independent India.

Which of the following is the correct chronological sequence of the above events?

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

**Ans: B**

**Exp:** The Kerala Legislative Assembly election of 1957 was the first assembly election in the Indian state of Kerala. The Communist Party of India won the election with 60 seats. The election led to the formation of first democratically elected communist government in India

The Government of India took control of the Imperial Bank of India in 1955, with Reserve Bank of India (India's central bank) taking a 60% stake, renaming it the State Bank of India.

In 1953-Air India was nationalized

On December 19, 1961, Goa officially became part of India

32. Right to Privacy is protected as an intrinsic part of Right to Life and Personal Liberty. Which of the following in the Constitution of India correctly and appropriately imply the above statements?
- Article 14 and the provisions under the 42nd Amendment to the Constitution
  - Article 17 and the Directive Principles of State Policy in Part IV
  - Article 21 and the freedoms guaranteed in Part III
  - Article 24 and the provisions under the 44th Amendment to the Constitution

**Ans: C**

**Exp:** Article 21- Protection of life and personal liberty No person shall be deprived of his life or personal liberty except according to procedure established by law.

<http://www.iasscore.in/upsc-prelims/basic-fundamental-rights-for-citizens-and-aliens-military-laws>

#### GSSCORE QUESTION

Which of the following fundamental rights and their derivation from Constitutional Article is/are correctly matched?

- Right to timely medical treatment in government hospital - Article 21.
- Freedom of commercial advertisements - Article 19.
- Right to peaceful protest - Article 16.
- Right to privacy - Article 21.

Select the correct answer using the codes below:

- Only 4
- 1, 2 and 4
- 1, 2, 3 and 4
- 2, 3 and 4

**Ans. B**

**Exp:** Right to peaceful protest is a fundamental right under Article 19.

(PT 2018 test 3, question 9)

33. Consider the following:

- Areca nut
- Barley
- Coffee
- Finger millet
- Groundnut
- Sesamum
- Turmeric

The Cabinet Committee on Economic Affairs has announced the Minimum Support Price for which of the above?

- (a) 1, 2, 3 and 7 only
- (b) 2, 4, 5 and 6 only
- (c) 1, 3, 4, 5 and 6 only
- (d) 1, 2, 3, 4, 5, 6 and 7

**Ans: B**

**Exp:** The MSP is announced by the Government of India for 25 crops currently at the beginning of each season viz. Rabi and Kharif. Following are the 25 crops covered by MSP:

<i>Kharif Crops</i>	<i>Rabi Crops</i>
1 Paddy	15 Wheat
2 Jowar	16 Barley
3 Bajra	17 Gram
4 Maize	18 Masur (Lentil)
5 Ragi	19 Rapeseed/Mustard
6 Arhar(Tur)	20 Safflower
7 Moong	21 Toria
8 Urad	<i>Other Crops</i>
9 Cotton	22 Copra
10 Groundnut	23 De-Husked Coconut
11 Sunflower Seed	24 Jute
12 Soyabean Black	25 Sugarcane
13 SesamumPakhui Wildlife Sanctuary	
14 Nigerseed	

34. In which one of the following State Pakhui Wildlife Sanctuary is located?
- (a) Arunachal Pradesh
  - (b) Manipur
  - (c) Meghalaya
  - (d) Nagaland

**Ans: A**

**Exp:** Pakhui Wildlife Sanctuary (862 km<sup>2</sup>, 92°36' - 93°09'E and 26°54' - 27°16'N) lies in the foothills of the Eastern Himalaya in the East Kameng District of Arunachal Pradesh.

35. With reference to India's satellite launch vehicles, consider the following statements:
1. PSLVs launch the satellites useful for Earth resources monitoring whereas GSLVs are designed mainly to launch communication satellites.
  2. Satellites launched by PSLV appear to remain permanently fixed in the same position in the sky, as viewed from a particular location on Earth.
  3. GSLV Mk III is a four-staged launch vehicle with the first and third stages using solid rocket motors; and the second and fourth stages using liquid rocket engines.

Which of the statements given above is/are correct?

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

**Ans: A**

**Exp:** PSLVs launch the satellites useful for Earth resources monitoring whereas GSLVs are designed mainly to launch communication satellites.

Satellites launched by GSLV appear to remain permanently fixed in the same position in the sky, as viewed from a particular location on Earth.

GSLV Mk III is a three-stage heavy lift launch vehicle developed by ISRO. The vehicle has two solid strap-ons, a core liquid booster and a cryogenic upper stage.

GSLV Mk III is designed to carry 4 ton class of satellites into Geosynchronous Transfer Orbit (GTO) or about 10 tons to Low Earth Orbit (LEO), which is about twice the capability of GSLV Mk II.

The two strap-on motors of GSLV Mk III are located on either side of its core liquid booster. Designated as 'S200', each carries 205 tons of composite solid propellant and their ignition results in vehicle lift-off. S200s function for 140 seconds. During strap-ons functioning phase, the two clustered Vikas liquid Engines of L110 liquid core booster will ignite 114 sec after lift-off to further augment the thrust of the vehicle. These two engines continue to function after the separation of the strap-ons at about 140 seconds after lift-off.

<http://iascore.in/upsc-prelims/types-of-satellites-indian-space-programme>

### GSSCORE QUESTION

Consider the following statements about the recently launched GSLV Mark-III X:

1. It uses cryogenic technology.
2. It is only fuelled by solid propellant in two stages.
3. It will help India become self-reliant in launching communication satellites.

Which of the above statements are correct?

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

**Ans. B**

**Exp:** Indian Space Research Organisation (ISRO's) first sub-orbital flight and India's latest generation launch vehicle- GSLV Mark-III X was successfully lifted off from SatishDhawan Space Centre, Sriharikota, Andhra Pradesh.

About GSLV-Mark III

- The GSLV-Mark III is a three stage/engine launch vehicle.

- Its first stage comprises two identical S-200 large solid boosters with 200 tonne solid propellant that are strapped on to the second stage, the L110 re-startable liquid stage.
- The third stage/engine is the cryogenic which is more efficient as it provides more thrust for every kilogram of propellant burnt.

Thus, this successful launch will help India in perfecting the cryogenic engine technology and help to become self-reliant in launching communication satellites.

(PT 2018 test 9, question 32)

36. With reference to the governance of public sector banking in India, consider the following statements:
1. Capital infusion into public sector banks by the Government of India has steadily increased in the last decade.
  2. To put the public sector banks in order, the merger of associate banks with the parent State Bank of India has been affected.

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:** After the Securitisation and Reconstruction of Financial Assets and Enforcement of Securities Interest Act, 2002 (also known as the SARFAESI Act), the government capital infusion steadily decreased until NPA problem introduced in 2015.

37. Consider the following items:
1. Cereal grains hulled
  2. Chicken eggs cooked
  3. Fish processed and canned
  4. Newspapers containing advertising material

Which of the above items is/are exempted under GST (Goods and Services Tax)?

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

**Ans: C**

38. Consider the following statements:
1. The definition of "Critical Wildlife Habitat" is incorporated in the Forest Rights Act, 2006.
  2. For the first time in India, Baigas have been given Habitat Rights.
  3. Union Ministry of Environment, Forest and Climate Change officially decides and declares Habitat Rights for Primitive and Vulnerable Tribal Groups in any part of India.



Which of the statements given above is/are correct?

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

**Ans: A**

**Exp:** The Critical Wildlife Habitats have been envisaged in Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. In a bid to undo historical injustice meted out to primitive tribal communities living in central India, the government of Madhya Pradesh has for the first time recognised the habitat rights of seven villages in Dindori district, mostly inhabited by the Baiga. Grampanchayats decide Habitat Rights for Primitive and Vulnerable.

39. Consider the following:

- 1. Birds
- 2. Dust blowing
- 3. Rain
- 4. Wind blowing

Which of the above spread plant diseases?

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

**Ans: D**

**Exp:** Plant diseases can be infectious (transmitted from plant to plant) or noninfectious. Common plant disorders are caused by deficiencies in plant nutrients, by waterlogged or polluted soil, and by polluted air. Too little (or too much) water or improper nutrition can cause plants to grow poorly. Plants can also be stressed by weather that is too hot or too cold, by too little or too much light, and by heavy winds. Pollution from automobiles and industry, and the excessive application of herbicides (for weed control) can also cause noninfectious plant disorders.

<http://www.iasscore.in/upsc-prelims/general-science-part-2>

40. With reference to organic farming in India, consider the following statements:

- 1. 'The National Programme for Organic Production' (NPOP) is operated under the guidelines and directions of the Union Ministry of Rural Development.
- 2. 'The Agricultural and Processed Food Products Export Development Authority' (APEDA) functions as the Secretariat for the implementation of NPOP.
- 3. Sikkim has become India's first fully organic State.

Which of the statements given above is/are correct?

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

**Ans: B**

**Exp:** Ministry of Commerce has implemented the National Programme for Organic Production (NPOP) since 2001. The testing is to be carried out in ISO 17025 accredited and preferably APEDA approved laboratories. Sikkim has become India's first fully organic state by implementing organic practices on around 75,000 hectares of agricultural land.

41. Consider the following statements:

1. In the first Lok Sabha, the single largest party in the opposition was the Swatantra Party.
2. In the Lok Sabha, a "Leader of the Opposition" was recognised for the first time in 1969.
3. In the Lok Sabha, if a party does not have a minimum of 75 members, its leader cannot be recognized as the Leader of the Opposition.

Which of the statements given above is/are correct?

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

**Ans: B**

**Exp:** 1952 elections The Congress had won 364 out of 489 Lok Sabha seats in the first-ever general election held in India. Its vote share was 45 per cent. The CPI was the second party with just 16 seats.

The Swatantra Party was an Indian liberal-conservative political party that existed from 1959 to 1974

Leader of opposition was recognized for the first time in 1969.

To become leader of opposition, a political party needs atleast 10% strength of the house. House total 10% seat means

Rajya Sabha	245	25 (10%)
Lok Sabha	543	55(10%)

#### **GSSCORE QUESTION**

Which of the following statements is/are true regarding post of Leader of Opposition?

1. Post of Leader of Opposition is given to party leader and not to alliance leader.
2. Original constitution provided statutory recognition to the leader of opposition.
3. He is entitled to salary, allowances and other facilities equivalent to that of a cabinet minister.

Codes:

- (a) 1 and 3
- (b) 2 and 3
- (c) Only 3
- (d) All

**Ans. A**

**Exp:** Leader of the Opposition

- In each House of Parliament, there is the 'Leader of the Opposition'. The leader of the largest Opposition party having not less than one-tenth seats of the total strength of the House is recognised as the leader of the Opposition in that House.
- The leader of Opposition in the Lok Sabha and the Rajya Sabha were accorded statutory recognition in 1977.
- They are also entitled to the salary, allowances and other facilities equivalent to that of a cabinet minister.

(PT 2018 test 10, question 43)

42. Which of the following leaf modifications occur(s) in the desert areas to inhibit water loss?
1. Hard and waxy leaves
  2. Tiny leaves
  3. Thorns instead of leaves

Select the correct answer using the code given below:

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

**Ans: D**

**Exp:** "The vegetation of hot desert climate is xerophytic type which has special characteristics to withstand very high rate of evaporation. They have long roots, thick barks, waxy leaves, thorns and little leaves."-

<http://www.iasscore.in/upsc-prelims/adaptation-interaction-between-species>

### GSSCORE QUESTION

Consider the following statements with respect to the adaptations made by animals in the Desert ecosystem:

1. Desert plants show phenomenon of Allelopathy.
2. Desert animals prevent water loss from their body by reducing surface area.
3. Most of the desert plants store water in fleshy leaves, stems or roots and have deep root systems to get water supply.

Which of the above stated adaptations is/are correct?

- (a) 1 and 2
- (b) Only 2
- (c) 2 and 3
- (d) All

**Ans: A**

**Exp:** Desert plants show phenomenon of Allelopathy, i.e., they secrete some chemical substance which inhibits the growth of plants growing in their near vicinity .

Succulent plants store water in fleshy leaves, stems or roots. All cacti are succulents, as are such non-cactus desert dwellers as agave, aloe, elephant trees, and many euphorbias. Several other adaptations are essential for the water storing habit to be effective.

Owl's clover, California poppy and other drought avoidance plants die after channeling all their energy into producing seeds

A succulent must be able to absorb large quantities of water in short periods. Desert rains are often light and brief, and the soil dries rapidly under an intense sun. To cope with these conditions, nearly all succulents have extensive, shallow root systems. The roots of a saguaro extend horizontally about as far as the plant is tall but are rarely more than four inches (10 cm) deep. The water-absorbing roots are mostly within the upper half inch (1.3 cm). So that they can get water from atmosphere.

**(PT 2018 Test 1, question 9)**

43. As per the NSSO 70th Round "Situation Assessment Survey of Agricultural Households", consider the following statements:
1. Rajasthan has the highest percentage share of agricultural households among its rural households.
  2. Out of the total agricultural households in the country, a little over 60 percent belong to OBCs.
  3. In Kerala, a little over 60 percent of agricultural households reported to have received maximum income from sources other than agricultural activities.

Which of the statements given above is/are correct?

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

**Ans: C**

**Exp:** Rajasthan has highest agricultural households (78.4) among rural households, in terms of proportion, in absolute numbers it is Uttar Pradesh

The share of OBC households among rural households is about 45 percent.

In Kerala, about 61 percent agricultural families have more income from agricultural sources.

44. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board (CPCB)?
1. The NGT has been established by an Act whereas the CPCB has been created by an executive order of the Government.
  2. The NGT provides environmental justice and helps reduce the burden of litigation in the higher courts whereas the CPCB promotes cleanliness of streams and wells, and aims to improve the quality of air in the country.

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 Central Pollution Control Board (CPCB), is statutory organisation, was constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974. It is also the statutory body.

<http://iasscore.in/upsc-prelims/environmental-institutions-environmental-legislations>

45. Consider the following statements:

1. The Parliament of India can place a particular law in the Ninth Schedule of the Constitutions of India.
2. The validity of a law placed in the Ninth Schedule cannot be examined by any court and no judgement can be made on it.

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:** In a landmark ruling on 11 January 2007, the Supreme Court of India ruled that all laws (including those in the Ninth Schedule) would be open to Judicial Review if they violated the basic structure of the constitution.

46. Which one of the following best describes the term “Merchant Discount Rate” sometimes seen in news?

- (a) The incentive given by a bank to a merchant for accepting payments through debit cards pertaining to that bank.
- (b) The amount paid back by banks to their customers when they use debit cards for financial transactions for purchasing goods or services.
- (c) The charge to a merchant by a bank for accepting payments from his customers through the bank’s debit cards.
- (d) The incentive given by the Government to merchants for promoting digital payments by their customers through Point of Sale (PoS) machines and debit cards.

**Ans: C**

**Exp:** Merchant discount rate on debit cards is the amount that a merchant has to pay to its service providers when a consumer swipes her card on the merchant’s point-of-sales terminal. It is also applicable for online transactions and QR-based transactions.

The amount that the merchant pays for every transaction gets distributed among three stakeholders—the bank that enable the transaction, the vendor that installs the PoS machine and the card network provider such as Visa or MasterCard.

47. What is/are the consequence/consequences of a country becoming the member of the 'Nuclear Suppliers Groups'?
1. It will have access to the latest and most efficient nuclear technologies.
  2. It automatically becomes a member of "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)".

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:** NSG membership also means India can begin to commercially produce nuclear power equipment, which it can then even sell to other countries. With access to state-of-the-art nuclear technologies, it can maximize its production benefits.

NSG member will not automatically becomes a member of "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)".

<http://www.iasscore.in/topical-analysis/nuclear-suppliers-group-nsg->

48. With reference to India's decision to levy an equalization tax of 6% on online advertisement services offered by non-resident entities, which of the following statements is/are correct?
1. It is introduced as a part of the Income Tax Act.
  2. Non-resident entities that offer advertisement services in India can claim a tax credit in their home country under the "Double Taxation Avoidance Agreements".

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:** The levy was introduced in the Budget as part of the finance bill and not as a part of Income Tax Act. So, because of this the companies would not be able to take the benefit of tax treaties to avoid double taxation in their home countries.

It provides that income of the non resident from provision of the specified services to the assessee under chapter VIII of the FA is exempt from income tax in the hands of the non resident if the same is chargeable to equalization levy. However, it does not mean that the income of the non resident from the specified services would be charged to income tax if the same is not chargeable to equalization levy.

49. Consider the following statements:
1. The Fiscal Responsibility and Budget Management (FRBM) Review Committee Report has recommended a debt to GDP ratio of 60% for the general (combined) government by 2023, comprising 40% for the Central Government and 20% for the State Governments.

2. The Central Government has domestic liabilities of 21% of GDP as compared to that of 49% of GDP of the State Governments.
3. As per the Constitution of India, it is mandatory for a State to take the Central Government's consent for raising any loan if the former owes any outstanding liabilities to the latter.

Which of the statements given above is/are correct?

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

**Ans: C**

**Exp:** As per N.K. Singh committee report recommendations:

The combined debt-to-GDP ratio of the centre and states should be brought down to 60 per cent by 2023 (comprising of 40 per cent for the Centre and 20% for states) as against the existing 49.4 per cent, and 21 per cent respectively.

Statement 3 is correct as per article 293 of the constitution.

50. Consider the following statements:

1. The quantity of imported edible oils is more than the domestic production of edible oils in the last five years.
2. The government does not impose any customs duty on all the imported edible oils as a special case.

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 quantity of the imported oil is almost 60% of total oil consumption in India. Government imposes custom duty on several edible oil, such as palm oil

51. He wrote biographies of Mazzini, Garibaldi, Shivaji and Shrikrishna; stayed in America for some time; and was also elected to the Central Assembly. He was

- (a) Aurobindo Ghosh
- (b) Bipin Chandra Pal
- (c) LalaLajpatRai
- (d) Motilal Nehru

**Ans: C**

52. Consider the following statements:

1. Aadhaar card can be used as a proof of citizenship or domicile.

2. Once issued, Aadhaar number cannot be deactivated or omitted by the Issuing Authority.

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:** Calcutta High Court ruled that Aadhaar Card is not a proof of citizenship and stated that "Aadhaar Card by itself shall not confer any right of or be proof of citizenship or domicile in respect of the holder thereto" while rejecting a claim of citizenship of the accused who was issued the card in view of his long residence in the country.

The Aadhaar Act regulations, which are currently in Parliament, state that an individual's Aadhaar number may be "omitted" permanently or deactivated temporarily by the Unique Identification Authority of India, the agency responsible for issuing the numbers and managing the database. The regulations give the Authority the power to deactivate Aadhaar numbers even in the absence of an effective grievance redressal procedure for those whose numbers have been suspended.

<http://iasscore.in/national-issues/the-aadhaar-targeted-delivery-of-financial-and-other-subsidies-benefits-and-service-bill-2016>

53. Which of the following has/have shrunk immensely/dried up in the recent past due to human activities?
1. Aral Sea
  2. Black Sea
  3. Lake Baikal

Select the correct answer using the code given below:

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

**Ans: D**

54. "Rule of Law Index" is released by which of the following?
- (a) Amnesty International
  - (b) International Court of Justice
  - (c) The office of UN Commissioner for Human Rights
  - (d) World Justice Project

**Ans: D**

**Exp:** The World Justice Project Rule of Law Index® measures rule of law adherence in 113 countries and jurisdictions worldwide based on more than 110,000 household and 3,000 expert surveys. Featuring primary data, the WJP Rule of Law Index measures countries'



rule of law performance across eight factors: Constraints on Government Powers, Absence of Corruption, Open Government, Fundamental Rights, Order and Security, Regulatory Enforcement, Civil Justice, and Criminal Justice.

55. Which one of the following links all the ATMs in India?

- (a) Indian Banks' Association
- (b) National Securities Depository Limited
- (c) National Payments Corporation of India
- (d) Reserve Bank of India

**Ans: C**

**Exp:** National Financial Switch (NFS) is the largest network of shared automated teller machines (ATMs) in India. It was designed, developed and deployed by the Institute for Development and Research in Banking Technology (IDRBT) in 2004, with the goal of inter-connecting the ATMs in the country and facilitating convenience banking. It is run by the National Payments Corporation of India (NPCI).

56. Regarding Money Bill, which of the following statements is not correct?

- (a) A bill shall be deemed to be a Money Bill if it contains only provisions relating to imposition, abolition, remission, alteration or regulation of any tax.
- (b) A Money Bill has provisions for the custody of the consolidated fund of India or the contingency fund of India.
- (c) A Money Bill is concerned with the appropriation of moneys out of the contingency fund of India.
- (d) A Money Bill deals with the regulation of borrowing of money or giving any guarantee by the government of India.

**Ans: C**

**Exp:** Article 110 states that a Bill is deemed to be a money bill if it contains provisions dealing with all or any of the following matters:

- (i) The imposition, abolition, remission, alteration or regulation of any tax
- (ii) The regulation of the borrowing of money or the giving of any guarantee by the Government of India, or the amendment of the law with respect to any financial obligations undertaken or to be undertaken by the Government of India
- (iii) The custody of the Consolidated Fund or the Contingency Fund of India, the payment of moneys into or the withdrawal of moneys from any such fund
- (iv) The appropriation of moneys out of the Consolidated Fund of India
- (v) The declaring of any expenditure to be expenditure charged on the consolidated Fund of India or the increasing of the amount of any such expenditure
- (vi) The receipt of money on account of the Consolidated Fund of India or the Public Account of India or the custody or issue of such money or the audit of the accounts of the Union or of a State

57. With reference to the election of the president of India, consider the following statements.
1. The value of the vote of each MLA varies from state to state.
  2. The value of the vote of MPs of the Lok Sabha is more than the value of the vote of KPs of the Rajya Sabha.

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:** Value of a vote and securing parity

- (a) Art. 55 provides for uniformity in the scale of representation of different states at the election of the President.
- (b) Besides, there should also be parity between the states as a whole and the union.
- (c) For this purpose the value of votes of an MLA and an MP is counted under the following formula:

The number of MPs in Lok Sabha are higher so value of vote is larger than Rajya Sabha. Question has asked MPs not MP.

<http://iasscore.in/upsc-prelims/president-functions-governor-functions>

58. In the context, what is the implication of ratifying the 'Additional protocol' with the international Atomic Energy Agency (IAEA)?
- (a) The civilian nuclear reactors come under IAEA safeguards.
  - (b) The military nuclear installations come under the inspection of IAEA.
  - (c) The country will have the privilege to buy uranium from the Nuclear Suppliers Group (NSG).
  - (d) The country automatically becomes a member of the NSG

**Ans: A**

**Exp:** The Additional Protocol is not a stand-alone agreement, but rather a protocol to a safeguards agreement that provides additional tools for verification. In particular, it significantly increases the IAEA's ability to verify the peaceful use of all nuclear material in States with comprehensive safeguards agreements.

59. Consider the following countries.
1. Australia
  2. Canada
  3. China
  4. India
  5. Japan
  6. USA

Which of the above are among the 'free-trade partners' of ASEAN?

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

**Ans: C**

**Exp:** ASEAN has existing free trade agreements with Australia, China, India, Japan, South Korea and New Zealand.

<http://www.iasscore.in/upsc-prelims/trade-agreements>

60. With reference to the 'Global Alliance for Climate-Smart Agriculture (GACSA)', which of the following statements is/are correct?

- 1. GACSA is an outcome of the Climate Summit held in Paris in 2015
- 2. Membership of GACSA does not create any binding obligations.
- 3. India was instrumental in the creation of GACSA

Select the correct answer using the code given below:

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

**Ans: B**

**Exp:** The Global Alliance for Climate-Smart Agriculture (GACSA), was launched on 23 September 2014 at the UN Climate Summit. GACSA is an independent alliance, governed by its members through a Strategic Committee and its co-Chairs. Since the 1 January FAO is hosting the Facilitation Unit of GACSA with is supported through a multi donor trust fund.

GACSA is a voluntary alliance of partners, dedicated to addressing the challenges facing food security and agriculture under a changing climate. In particular the alliance has the objective of up scaling the climate smart agriculture approach, a concept which was originally developed by FAO.

GACSA's ambitious future is based upon supporting and inspiring action. Farmers, fishers, foresters, and ranchers are at the center of this action, and therefore GACSA is devoting its Annual Forum to showcasing climate-smart agriculture in action.

The Forum will be a dynamic gathering, where the participants share solutions, discuss challenges, and build partnerships on climate-smart agriculture. We are seeking out action-oriented stakeholders to come to both share and learn at the GACSA Annual Forum.

61. Which of the following is/are the aim/aims of "Digital India" plan of the Government of India?

- 1. Formation of India's own Internet companies like china did.
- 2. Established a policy framework to encourage overseas multinational corporations that collect big data to build their large data centers within our national geographical boundaries.

3. Connect many of our villages to the internet and bring Wi-Fi to many of our schools, public places and major tourist centers.

Select the correct answer using the code given below:

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

**Ans: B**

**Exp: Digital Infrastructure as a Utility to Every Citizen**

- Availability of high speed internet as a core utility for delivery of services to citizens
- Cradle to grave digital identity that is unique, lifelong, online and authenticable to every citizen
- Mobile phone & bank account enabling citizen participation in digital & financial space
- Easy access to a Common Service Centre
- Shareable private space on a public cloud
- Safe and secure cyber-space

Digital Empowerment of Citizens

- Universal digital literacy
- Universally accessible digital resources
- Availability of digital resources / services in Indian languages
- Collaborative digital platforms for participative governance
- Citizens not required to physically submit Govt. documents / certificates

<http://iasscore.in/national-issues/digital-india-programme-importance-and-impact>

62. Consider the following pairs:

<i>Towns sometimes mentioned in news</i>		<i>Country</i>
1. Aleppo	-	Syria
2. Kirkuk	-	Yemen
3. Mosul	-	Palestine
4. Mazar-i-sharif	-	Afghanistan

Which of the pairs given above are correctly matched?

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

**Ans: B**

63. In the Federation established by The Government of India Act of 1935, residuary powers were given to the
- Federal Legislative
  - Governor General
  - Provincial Legislature
  - Provincial Governors

**Ans: B**

**Exp:** The residuary power, however, were not allocated either to the Federation or to the Provinces but was under Section 105 of the Government of India, 1935, reserved to be allocated by the Governor-General in his discretion to the Federation or to the Provinces.

<http://iasscore.in/upsc-prelims/constitution-and-its-typesconstitutional-development>

64. Consider the following statements:
- The Speakers of the Legislative Assembly shall vacate his/her office if he/she ceases to be a member of the Assembly
  - Whenever the legislative assembly is dissolved, the speaker shall vacate his/her office immediately.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

**Ans: A**

**Exp:** Speaker of Assembly vacates his office earlier in any of the following three cases:

- if he ceases to be a member of the assembly;
- if he resigns by writing to the deputy speaker; and
- if he is removed by a resolution passed by a majority of all the then members of the assembly.

Such a resolution can be moved only after giving 14 days advance notice.

Whenever the Assembly is dissolved, the Speaker does not vacate his office and continues till the newly- elected member meets.

<http://www.iasscore.in/upsc-prelims/parliamentary-functioning-passage-bill-budgeting>

65. Which one of the following reflects the most appropriate relationship between law and liberty?
- It there are more laws, there is less liberty.
  - If there are no laws, there is no liberty.
  - If there is liberty, laws have to be made by the people.
  - If laws are changed too often, liberty is in danger

**Ans: B**

**Exp:** It was a statement by John Locke and also endorsed by Leviathan theory Thomas Hobbes.

66. Consider the following statements:

1. No criminal proceedings shall be instituted against the Governor of a State in any court during his term of office.
2. The emoluments and allowance of the Governor of a State shall not be diminished during his term of office.

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:** Like the President, the governor is also entitled to a number of privileges and immunities. He enjoys personal immunity from legal liability for his official acts. During his term of office, he is immune from any criminal proceedings, even in respect of his personal acts.

The consequences of the proclamation of a Financial Emergency are as follows:

1. The executive authority of the Centre extends (a) to directing any state to observe such canons of financial propriety as are specified by it; and (b) to directions as the President may deem necessary and adequate for the purpose.
2. Any such direction may include a provision requiring (a) the reduction of salaries and allowances of all or any class of persons serving in the state; and (b) the reservation of all money bills or other financial bills for the consideration of the President after they are passed by the legislature of the state.
3. The President may issue directions for the reduction of salaries and allowances of (a) all or any class of persons serving the Union; and (b) the judges of the Supreme Court and the high court.

#### **GSSCORE QUESTION**

Consider the following statements with reference to the Governor in the State:

1. Same person can be appointed as a Governor of State and adjacent Union Territory.
2. Governor remains in the post during the pleasure of the President.
3. Governor cannot be imprisoned by State police for his criminal act.

Which of the above statements is/are incorrect?

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

**Ans. B**

**Exp: Governor**

- Usually, there is a governor for each state, but the 7th Constitutional Amendment Act of 1956 facilitated the appointment of the same person as a governor for two or more states. But union territories have either Lieutenant Governor or Administrator; governor has nothing to do with Union territory.
- House of residence of Governor is called Raj Bhavan. The Governor shall hold office during the pleasure of the President, after his removal, he must vacate the Raj Bhavan.
- Governor enjoys personal immunity from legal liability for his Official acts. During his term of office, he is immune from any criminal Proceedings, even in respect of his personal acts. He cannot be arrested or imprisoned. However, after giving two months' notice, civil proceedings can be instituted against him during his term of office in respect of his personal acts.

**(PT 2018 Test code 31, question 32)**

67. The well-known painting "BaniThani" belongs to the

- (a) Bundi schools
- (b) Jaipur school
- (c) Kangra school
- (d) Kishangarh school

**Ans: D**

**Exp:** BaniThani is an India miniature painting painted by Nihâl Chand from the Marwar school of Kishangarh. It portrays a woman who is elegant and graceful. The painting's subject, BaniThani, was a singer and poet in Kishangarh in the time of king Sawant Singh (1748-1764). She has been compared to the Mona Lisa.

68. What is "Terminal High Altitude Area Defense (THAAD)" sometimes seen in the news?

- (a) An Israeli radar system
- (b) India's indigenous anti missile Programme.
- (c) An American anti missile system
- (d) A defense collaborations between Japan and South Korea

**Ans: C**

**Exp:** Terminal High Altitude Area Defense (THAAD), formerly Theater High Altitude Area Defense, is an American anti-ballistic missile defense system designed to shoot down short, medium-, and intermediate-range ballistic missiles in their terminal phase (descent or reentry) by intercepting with a hit-to-kill approach.

69. With references to cultural history of India, consider the following statements:

1. Most of the Tyagarajakritis are devotional songs in praise of lord Krishna.
2. Tyagaraja created several new ragas.
3. Annamacharya and Tyagaraj are contemporaries
4. Annamacharyakirtanas are devotional songs in praise of Lord Venkateshwara

Which of the statements given above are correct?

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

**Ans: B**

**Exp:** Tyagaraja composed thousands of devotional compositions, most in Telugu and in praise of Lord Rama many of which remain popular today. [2] Of special mention are five of his compositions called the PancharatnaKritis which are often sung in programs in his honour. Annamayya (22 May 1408 - 4 April 1503) was a 15th-century Hindu saint and is the earliest known Indian musician to compose songs called sankirtanas in praise of the god Venkateswara, a form of Vishnu.

70. Which of the following are regarded as the main features of the "Rule of Law"?
- 1. Limitation of powers
  - 2. Equality before law
  - 3. People's responsibility to the government
  - 4. Liberty and civil rights

Select the correct answer using the code given below:

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

**Ans: C**

**Exp:** The Rule of Law identified eight principles to define it.

- 1. The law must be accessible and predictable.
- 2. Questions of legal rights should be resolved by the law and not the exercise of discretion.
- 3. The law should apply equally to all, except where objective differences justify differentiation.
- 4. Ministers must act within their powers and not exceed their limits.
- 5. The law must afford adequate protection of fundamental human rights.

<http://iasscore.in/national-issues/concept-of-rule-of-law>

71. With reference to the Indian Regional Navigation Satellite System (IRNSS), consider the following statements.
- 1. IRNSS has three satellites in geostationary and four satellites in geosynchronous orbits.
  - 2. IRNSS covers entire India and about 5500 sq. km beyond its borders.
  - 3. India will have its own satellite navigation system with full global coverage by the middle of 2019.



Which of the statements given above is/are correct?

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

**Ans: A**

**Exp:** ISRO opted for seven satellites – three in geostationary and four (as two pairs) in geosynchronous orbits – to provide the best navigation services.

India has an independent regional navigation satellite capability that covers the entire country and an area extending about 1,500 sq. km beyond its border, with a position accuracy better than 20m in all weather conditions.

The satellite is also working.

<http://www.iasscore.in/upsc-prelims/recent-and-future-space-missions>

72. Consider the following phenomena:

- 1. Light is affected by gravity.
- 2. The universe is constantly expanding.
- 3. Matter warps its surrounding space-time.

Which of the above is/are the prediction/predictions of Albert Einstein's General Theory of Relativity, often discussed in media?

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

**Ans: C**

**Exp:** Einstein's general theory of relativity is based on how we think gravity governs the behaviour of the Universe. We know that matter in the Universe warps the surrounding fabric of spacetime, and this warping effect is what we refer to as gravity.

According to Einstein's theory, light, just like any other form of matter, is affected by gravity. That is, light also "falls" in a gravitational field. Just as a comet's trajectory is deflected by the sun when it passes nearby, a ray of starlight grazing the sun would also be deflected or bent. When we (or our camera) look at the star, we presume that the path taken by the light is straight. The effect of the bending of the light, then, is to make the star appear to be located in a slightly different position in the sky.

73. With reference to the Genetically Modified mustard (GM mustard) developed in India, consider the following statements:

- 1. GM mustard has the genes of a soil bacterium that give the plant the property of pest-resistance to a wide variety of pests.
- 2. GM mustard has the genes that allow the plant cross-pollination and hybridization.
- 3. GM mustard has been developed jointly by the IARI and Punjab Agricultural University.

Which of the statements give above is/are correct?

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

**Ans: B**

**Exp:** DMH-11 is a Genetically Modified (GM) mustard hybrid. Hybrids are normally obtained by crossing 2 genetically diverse plants from the same species. The 1st-generation offspring resulting from it has higher yields than what either of the parents is individually capable of giving. But there is no natural hybridization system in mustard, unlike in, say, cotton, maize or tomato. This is because its flowers contain both the female (pistil) and male (stamen) reproductive organs, making the plant naturally self-pollinating.

<http://iasScore.in/national-issues/-gm-mustard-issue>

74. Consider the following pairs:

<i>Terms sometimes</i>		<i>Context/Topic</i>
1. Belle II experiment	---	Artificial Intelligence
2. Blockchain technology	---	Digital/Cryptocurrency
3. CRISPR - Cas9	---	Particle Physics

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

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

**Ans: B**

**Exp:** The Belle II experiment is a particle physics experiment designed to study the properties of B mesons (heavy particles containing a bottom quark).

CRISPR - Cas9 is related to biotechnology.

#### **GSSCORE QUESTION**

With reference to the CRISPR-Cas9, consider the following statements:

- 1. It could be used to modify disease causing Genes and removing the faulty script from the genetic code.
- 2. It may become a tool for selecting desired characteristics such as Intelligence and Attractiveness.

Which of the above statements is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both
- (d) None

**Ans. C**

**Exp:** Genome editing (also called gene editing) is a group of technologies that give scientists the ability to change an organism's DNA. These technologies allow genetic material to be added, removed, or altered at particular locations in the genome.

CRISPR could be used to modify disease-causing genes in embryos brought to term, removing the faulty script from the genetic code of that person's future descendants as well. Genome editing (Gene editing) could potentially decrease, or even eliminate, the incidence of many serious genetic diseases, reducing human suffering worldwide.

It might also be possible to install genes that offer lifelong protection against infection.

Making irreversible changes to every cell in the bodies of future children and all their descendants would constitute extraordinarily risky human experimentation.

It will become a tool for selecting desired characteristics such as intelligence and attractiveness.

**(PT test 2018 science sectional test, question 17)**

75. Which of the following statement best describes "carbon fertilization"?

- (a) Increased plant growth due to increased concentration of carbon dioxide in the atmosphere
- (b) Increased temperature of Earth due to increased concentration of carbon dioxide in the atmosphere
- (c) Increased acidity of oceans as the result of increased concentration of carbon dioxide in the atmosphere
- (d) Adaptation of all living beings on Earth to the climate change brought about by the increased concentration of carbon dioxide in the atmosphere

**Ans: A**

**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

76. When the alarm of your smartphone rings in the morning, you wake up and tap it to stop the alarm which causes your geyser to be switched on automatically. The smart mirror in your bathroom shows the day's weather and also indicates the level of water in your overhead tank. After you take some groceries from your refrigerator for making breakfast, it recognizes the shortage of stock in it and places an order for the supply of fresh grocery items. When you step out of your house and lock the door, all lights, fans, geysers and AC machines get switched off automatically. On your way to office, your car warns you about traffic congestion ahead and suggests an alternative route, and if you are late for a meeting, it sends a message to your office accordingly.

In the context of emerging communication technologies, which one of the following terms best applies to the above scenario?

- (a) Border Gateway Protocol
- (b) Internet of Things
- (c) Internet Protocol
- (d) Virtual Private Network

**Ans: B**

<http://www.iasscore.in/upsc-prelims/government-initiatives-in-it-sector>

77. Which reference to solar power production in India, consider the following statements:
1. India is the third largest in the world in the manufacture of silicon wafers used in photovoltaic units.
  2. The solar power tariffs are determined by the Solar Energy Corporation of India

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\***

78. The staple commodities of export by the English East India Company from Bengal in the middle of the 18th century were
- (a) Raw cotton, oil-seeds and opium
  - (b) Sugar, salt, zinc and lead
  - (c) Copper, silver, gold, spices and tea
  - (d) Cotton, silk, saltpeter and opium

**Ans: D**

**Exp:** British-Indian territory was developed as a source of food stuff and raw material for Britain, which fueled rapid growth in its manufacturing sector, crucial to the emergence of a powerful capitalist economy. (Indian exports consisted of raw cotton, jute, silk, oilseeds, wheat, indigo and tea.)

<http://iascore.in/upsc-prelims/administration-before-1857-economic-policies>

79. Which one of the following is a very significant aspect of the Champaran Satyagraha?
- (a) Active all-India participation of lawyers, students and women in the National Movement
  - (b) Active involvement of Dalit and Tribal communities of India in the National Movement
  - (c) Joining of peasant unrest to India's National Movement
  - (d) Drastic decrease in the cultivation of plantation crops and commercial crops

**Ans: C**

<http://iascore.in/upsc-prelims/middle-phase-of-the-freedom-struggle-1915-1930>

80. Who among the following were the founders of the "Hind Mazdoor Sabha" established in 1948?
- (a) B. Krishna Pillai, E.M.S. Namboodiripad and K.C. George
  - (b) Jayaprakash Narayan, DeenDayalUpadhyay and M.N. Roy
  - (c) C.P. RamaswamyIyer, K. Kamaraj and VeeresalingamPantulu
  - (d) Ashok Mehta, T.S. Ramanujam and G.G. Mehta

**Ans: D**

**Exp:** The HMS was founded in Howrah in west bengal on 29 December 1948, by socialists, Forward Bloc followers and independent unionists. Its founders included Basawon Singh

(Sinha), Ashok Mehta, R.S. Ruikar, Maniben Kara, Shibnath Banerjee, R.A. Khedgikar, T.S. Ramanujam, V.S. Mathur, G.G. Mehta. R.S. Ruikar was elected president and Ashok Mehta general secretary. HMS absorbed the Royist Indian Federation of Labour and the Hind MazdoorPanchayat, which was formed in 1948 by socialists leaving the increasingly communist dominated AITUC

81. With reference to the religious practices in India, the “Sthanakvasi” sect belongs to
- Buddhism
  - Jainism
  - Vaishnavism
  - Shaivism

**Ans: B**

**Exp:** After Bhadrabahu, the Jainism split into Digambara and Svetambara. The Digambara belong to the lineage of Acharya Vishakha and Shvetambar follow the tradition of Acharya Sthulabhadra. In around 1500 AD, the Swetambar sect divided into three sub-sects known as SwetambarMurtipujak, Sthanakvasi, and Terapanthi.

82. With reference to the cultural History of India, consider the following statements:
- White marble was used in making BulandDarwaza and Khankah at FatehpurSikr.
  - Red sandstone and marble were used in making Bara Imambara and Rumi Darwaza at Lucknow.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

**Ans: A**

**Exp:** The BulandDarwaza at FatehpurSikri is “the most iconic architectural accomplishment of Akbar’s reign. It incorporates almost all the essential features of Akbar’s architectural traditions: red sandstone, stone carvings, relief by inserting white marble

Whereas Imambara instead of stones and marble, brick and lime were used. Stucco ornamentation (gajkari) was used to decorate the monuments, giving it a deep relief effect even on flat walls.

83. Which one of the following foreign travelers elaborately discussed about diamonds and diamond mines on India
- Francois Bernier
  - Jean Baptiste Tavernier
  - Jean de Thevenot
  - Abbe BarthelemyCarre

**Ans: B**

**Exp:** Jean-Baptiste Tavernier (1605 – 1689) was a 17th-century French gem merchant and traveler. Tavernier, a private individual and merchant traveling at his own expense, covered,

by his own account, 60,000 leagues (120,000 miles[clarification needed]) in making six voyages to Persia and India between the years 1630 and 1668.

84. With reference to India history, who among the following is future Buddha, yet to come to save the world?
- (a) Avalokiteshvara
  - (b) Lokeshvara
  - (c) Maitreya
  - (d) Padmapani

**Ans: C**

**Exp: Maitreya Buddha**

In the world of Buddhist eschatology, Maitreya literally means the future Buddha. Maitreya Buddha is considered as the 5th Buddha that is believed to appear in this Kalpa or era. Thus, Maitreya Buddha is considered as the Future Buddha that is yet to appear in this age. In various Buddhist sutra such as Amitabha Sutra, as well as Lotus Sutra, Maitreya Buddha is believed to be called as Ajita.

According to Buddhist history and tradition, Maitreya Buddha is believed to be Bodhisattva who will appear in the Earth in the future, will achieve Nirvana and will teach the people of Earth the pure Dharma just like Shakyamuni Buddha did. According to the Buddhist texts as well scriptures, Maitreya Buddha will be considered as the successor of the living Buddha i.e. Gautama Buddha. The Prophecy of Maitreya Buddha coming back to the terrestrial world is written in most of the major Schools of Buddhism in many Buddhist countries.

85. Which one of the following statements does not apply to the system of Subsidiary Alliance introduced by Lord Wellesley?
- (a) To maintain a large standing army at other' expense
  - (b) To keep India safe from Napoleonic danger
  - (c) To secure a fixed income for the Company
  - (d) To establish British paramountcy over the Indian States

**Ans: C**

**Exp:**

- (i) Those native princes or rulers who would enter into Subsidiary Alliance would not be free to declare war against any other power, nor enter into negotiations with, any power, native or otherwise without the consent of the English,
- (ii) The princes who were comparatively strong and powerful would be permitted to retain their armies, but their armies must be placed under British generals,
- (iii) The security of the dominion of a prince who would enter into Subsidiary Alliance would be the responsibility of the English but the expenses of forces that the latter would maintain for the purpose had to be borne by the prince for which adequate area of his dominion had to be surrendered to the English.

### GSSCORE QUESTION

Consider the following statements related to the work done by Governors:

1. Warren Hastings abolished the system of dastaks, or free passes and regulated the internal trade.
2. Lord Cornwallis inaugurated the policy of making appointments mainly on the basis of merit in civil services.
3. Lord Hastings initiated the policy of Subsidiary Alliance under which the British had to maintain a contingent of British troops in territory of Indian ruler.

Which of the above stated works is/are correctly matched?

- (a) 1 and 3
- (b) 1 and 2
- (c) Only 2
- (d) All

**Ans: B**

**Exp:** Lord Wellesley initiated the policy of Subsidiary Alliance under which the British had to maintain a contingent of British troops in territory of Indian ruler.

The main principles of a subsidiary alliance were:

- An Indian ruler entering into a subsidiary alliance with the British had to accept British forces in his territory and also agreed to pay for their maintenance.
- The ruler would accept a British people in his state.
- Such a ruler would not form an alliance with any other power, nor would he declare war against any power without the permission of the British.
- The ruler would not employ any Europeans other than the British, and if he were already doing so, he would dismiss them.
- In case of a conflict with any other state, the British would decide what to do, and he would accept their solution.

**(PT crash course modern history test 3)**

86. Consider the following statements:

1. Capital Adequacy Ratio (CAR) is the amount that banks have to maintain in the form of their own funds to offset any loss that banks incur if the account-holders fail to repay dues.
2. CAR is decided by each individual bank.

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:** CAR is not decided by each individual bank but by RBI on the basis of Basel Committee recommendations.

### GSSCORE QUESTION

Why maintaining Capital Adequacy Ratio (CAR) is/are must in banks?

1. Bank capital helps to prevent bank failure.
2. It acts as a cushion to lessen the chance of the bank turning insolvent.

Which of the above stated reasons is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both
- (d) None

**Ans: C**

**Exp:** Why To Maintain Capital Adequacy Ratio (CAR):

- Bank capital helps to prevent bank failure, which arises in case the bank cannot satisfy its obligations to pay the depositors and other creditors.
- The low capital bank has a negative net worth after the loss in its business. In other words, it turns into insolvent capital, therefore, acts as a cushion to lessen the chance of the bank turning insolvent.
- The amount of capital affects returns for the owners (equity holders) of the bank.

**(PT crash course Economy test 3)**

87. The identity platform 'Aadhaar' provides open "Application Programming Interfaces (APIs)". What does it imply?

1. It can be integrated into any electronic device.
2. Online authentication using iris is possible.

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\***

88. Very recently, in which of the following countries have lakhs of people either suffered from severe famine/acute malnutrition or died due to starvation caused by war/ethnic conflicts?

- (a) Angola and Zambia
- (b) Morocco and Tunisia
- (c) Venezuela and Colombia
- (d) Yemen and South Sudan

**Ans: D**



89. Regarding Wood's Dispatch, which of the following statements are true?

1. Grants-in-Aid system was introduced
2. Establishment of universities was recommended.
3. English as a medium of instruction at all levels of education was recommended.

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: A**

**Exp:** Major Recommendations of Wood's Dispatch

- An education department was to be established in every province.
- Universities on the model of the London University are established in big cities such as Bombay, Calcutta and Madras.
- At least one Government school is opened in every district.
- Affiliated private schools should be given grant-in-aid.
- The Indian natives should be given training in their mother-tongue also.
- In accordance with the Wood's despatch, Education Departments were established in every province and universities were opened at Calcutta, Bombay and Madras in 1857 A.D.-and in Punjab in 1882 A.D. and at Allahabad in 1887 A.D.
- The medium of instruction at the primary level was to be vernacular while at the higher levels it would be English.

<http://iasscore.in/upsc-prelims/1857-revolution-of-education-of-administration-before-1857>

#### GSSCORE QUESTION

Which of the following statements is/are true about Wood's Despatch?

1. It contained the recommendations regarding the education reforms sent to Lord Canning, the then Governor General.
2. Wood's Dispatch strongly recommended the promotion of both technical and women's education in India.
3. In accordance with Wood's despatch universities of Calcutta, Madras and Bombay were set up.

Codes:

- (a) Only 1
- (b) 2 and 3
- (c) Only 3
- (d) All

**Ans: C**

**Exp:** It was sent to Lord Dalhousie for education reforms. It neglected technical and women's education.

(PT Crash course Modern History test 2)

90. With reference to the Parliament of India which of the following Parliamentary Committees scrutinizes and reports to the House whether the powers to make regulations, rules, sub-rules, by-laws, etc. conferred by the Constitution or delegated by the Parliament are being properly exercised by the Executive within the scope of such delegation?

- (a) Committee on Government Assurances
- (b) Committee on Subordinate Legislation
- (c) Rules Committee
- (d) Business Advisory Committee

**Ans: B**

**Exp:** Every house of the parliament has a Committee on subordinate legislation whose main function is to examine the rules and regulations enacted by the executive to fill the gaps in the laws enacted by the parliament and report how far these rules are within limits prescribed in the main law. This committee has 15 members each in RajyaSabha and LokSabha.

<http://www.iasscore.in/upsc-prelims/parliamentary-functioning-passage-bill-budgeting>

91. Consider the following statements:

- 1. As per the Right to Education (RTE) Act, to be eligible for appointment as a teacher in a State, a person would be required to possess the minimum qualification laid down by the concerned State council of Teacher Education.
- 2. As per the RTE Act, for teaching primary classes, a candidate is required to pass a Teacher Eligibility Test conducted in accordance with the National Council of Teacher Education Guidelines.
- 3. In India, more than 90% of teacher education institutions are directly under the State Governments.

Which of the statements given above is/are correct?

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

**Ans: B**

**Exp:** Eligibility conditions of teachers are determined by the National Council for Teacher Education.

92. Consider the following pairs

- | <i>Tradition</i>        |     | <i>State</i> |
|-------------------------|-----|--------------|
| 1. ChapcharKut festival | ___ | Mizoram      |
| 2. KhongjomParba ballad | ___ | Manipur      |
| 3. Thang-Ta dance       | ___ | Sikkim       |

Which of the pairs given above is/are correct?

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

**Ans: B**

**Exp:** Thang Ta - is an ancient Manipuri Martial Art developed from the war environment of Manipur created by the Meitei. Thang Ta was also known as HuyenLalong which means the art of sword and the spear.

<http://iascore.in/national-issues/important-festivals>

93. Consider the following statements:

1. The food Safety and Standard Act, 2006 replaced the Prevention of Food Adulteration Act, 1954.
2. The Food Safety and Standards Authority of India (FSSAI) is under the charge of Director General of Health Services in the Union Ministry of Health and Family Welfare.

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 FSS Act is a bucket for all the older laws, rules and regulations for food safety. The FSS Act took 8 older acts into one umbrella.

1. Prevention of Food Adulteration Act, 1954
2. Fruit Products Order, 1955
3. Meat Food Products Order, 1973
4. Vegetable Oil Products (Control) Order, 1947
5. Edible Oils Packaging (Regulation) Order 1988
6. Solvent Extracted Oil, De- Oiled Meal and Edible Flour (Control) Order, 1967
7. Milk and Milk Products Order, 1992

Food Safety and Standards Authority of India (FSSAI) is an autonomous body established under the Ministry of Health, Family Welfare, Government of India. The FSSAI has been established under the Food Safety and Standards Act, 2006 which is a consolidating statute related to food safety and regulation in India. FSSAI is responsible for protecting and promoting public health through the regulation and supervision of food safety.

94. The term “two state solution” is sometimes mentioned in the news in the context of the affairs of
- China
  - Israel
  - Iraq
  - Yemen

**Ans: B**

**Exp:** Two state solution is the preferred solution adopted for the Arab-Israel conflict by creation of states of Israel and Palestine.

95. With reference to the provisions made under the National Food Security Act, 2013, consider the following statements:
- The families coming under the category of ‘below poverty line (BPL)’ only are eligible to receive subsidised food grains
  - The eldest woman in a household, of age 18 years or above, shall be the head of the Household for the purpose of issuance of a ratio card.
  - Pregnant women and lactating mothers are entitled to a ‘take-home ration’ of 1600 calories per day during pregnancy and for six months thereafter.

Which of the statements given above is/are correct?

- 1 and 2
- 2 only
- 1 and 3
- 3 only

**Ans: B**

**Exp:** *The provisions are:*

- Households covered under the Targeted Public Distribution System (TPDS) are entitled to five kilograms of foodgrains per person per month at subsidised prices.
- Households covered under Antyodaya Anna Yojana (AAY) scheme continue to be entitled to 35 kilograms per household per month, as AAY households constitute the poorest of the poor.
- Foodgrains that come under the TPDS will be available at the subsidised price of Rs. 3 per kilogram for rice, Rs. 2 per kilogram for wheat, and Re. 1 per kilogram for coarse grains or at a price fixed by the central government three years after the Act.
- Each state will identify eligible households for coverage under the TPDS. The list of eligible households will be placed in the public domain and displayed prominently.
- Pregnant women and young mothers are entitled to receive meals free of charge through the local childcare centre set up under the Integrated Child Development Services (ICDS) scheme. They are also entitled to receive maternity benefits of not less than Rs. 6,000 in instalments prescribed by the central government.
- Children aged 6 months to 6 years are entitled to age-appropriate meals free of charge through the local childcare centre set up under the ICDS.
- Children aged 6 to 14 years are entitled to one free midday meal everyday (except holidays) in government-aided schools and those run by local bodies.

- If foodgrains and meals are not supplied, entitled persons will receive a food security allowance from their state government.
- The oldest woman of the family (who must be at least 18 years of age) will be considered the head of the household when ration cards are being issued.
- Every state government must set up an internal grievance redress mechanism, which may include call centres, helplines and the designation of nodal officers.
- State governments must also appoint a District Grievance Redressal Officer for each district. This officer must enforce the Act and address the grievances of those who have been denied entitlements under the law.
- If any public sector employee or authority fails to provide the relief recommended by the District Grievance Redressal Officer, he or she will be fined a penalty of not more Rs. 5,000.

<http://iasscore.in/ias-prelims/public-distribution-system-in-india>

96. India enacted The Geographical indicates of Goods (Registration and Protection) Act, 1999 in order to comply with the obligations to
- (a) ILO
  - (b) IMF
  - (c) UNCTAD
  - (d) WTO

**Ans: D**

**Exp:** Under the Uruguay and Singapore round agreement, the creation of TRIPS agreement and its expansion has brought the following under WTO rulings.

1. Copyright and Related Rights
2. Trademarks
3. Geographical Indications
4. Industrial Designs
5. Patents
6. Layout-Designs (Topographies) of Integrated Circuits
7. Protection of Undisclosed Information
8. Control of Anti-Competitive Practices in Contractual Licences

Thus the 1999 act for protection of GI was formed.

<http://www.iasscore.in/upsc-prelims/geographical-indication>

97. Consider the following statements:
1. In India, State Governments do not have the power to auction non-coal mines.
  2. Andhra Pradesh and Jharkhand do not have gold mines.
  3. Rajasthan has iron ore mines.

Which of the statements given above is/are correct?

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

**Ans: D**

**Exp:** State governments have the power to auction non-coal mines. Jharkhand and Andhra Pradesh have two of the three active gold mines. Bhilwara in Rajasthan has an iron ore mine.

98. With reference to digital payments, consider the following statements:

1. BHIM app allows the user to transfer money to anyone with a UPI enabled bank account.
2. While a chip-pin debit card has four factors of authentication, BHIM app has only two factors of authentication.

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 BHIM apps has three levels of authentication. For one, the app binds with a device's ID and mobile number, second a user needs to sync whichever bank account (UPI or non-UPI enabled) in order to the conduct transaction. Third, when a user sets up the app they are asked to create a pin which is needed to log into the app. Further, the UPI pin, which a user creates with their bank account is needed to go through with the transaction.

<http://www.iasscore.in/upsc-prelims/government-initiatives-in-it-sector>

99. Among the following cities, which one lies on a longitude closest to that of Delhi?

- (a) Bengaluru
- (b) Hyderabad
- (c) Nagpur
- (d) Pune

**Ans: A**

**Exp:** Both Delhi and Bengaluru fall on same longitude

100. International Labour Organization's Conventions 138 and 182 are related to

- (a) Child labour
- (b) Adaptation of agricultural practices to global climate change
- (c) Regulation of food prices and food security
- (d) Gender parity at the workplace

**Ans: A**

**Exp:** The Union Cabinet has given its approval for ratification of the two fundamental conventions of the International Labour Organization namely, Minimum Age Convention (No 138) concerning minimum age for admission to employment and the Worst Forms of Child Labour Convention (No 182) concerning the prohibition and immediate action for elimination of the worst forms of Child Labour.

India is a founder member of the International Labour Organization (ILO), which came into existence in 1919. At present, the ILO has 187 members. The principal means of action in the ILO is the setting up of International standards in the form of Conventions, Recommendations and Protocol. India has so far ratified 45 Conventions, out of which 42 are in force. Out of these 4 are Fundamental or Core Conventions.

GS SCORE