

General Studies Paper I , 2014



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1. **What are the significances of a practical approach to sugarcane production known as ‘Sustainable Sugarcane Initiative’?**

1. **Seed cost is very low in this compared to the conventional method of cultivation.**
2. **Drip irrigation can be practiced very effectively in this.**
3. **There is no application of chemical/ inorganic fertilizers at all in this.**
4. **The scope for intercropping is more in this compared to the conventional method of cultivation.**

Select the correct answer using the code given below.

A 1 and 3 only

B 1, 2 and 4 only

C 2, 3 and 4 only

D 1, 2, 3 and 4

Solution

Sustainable Sugarcane Initiative aims at cultivating sugarcane mainly by changing the way the inputs and methods are used. It majorly involves

- Less use of seeds

- Less user of water
- Optimum utilization of fertilizers and land
- It aims at reducing the input cost,

Hence Statement 1 is Correct.

- Its basic premise is to obtain "more with less" in agriculture.
- it brings down the cost up to 75%.
- It reduces plant mortality rate; helps in increasing the length and weight of cane.

There is the scope of intercropping and the drip irrigation method can also be used

Hence Statement 2 and 4 are correct.

There is an application of Inorganic and organic fertilizers such as NPK (fertilizers) at the rate of 112 kg, 25 kg, and 48 kg per acre, respectively.

Hence Statement 3 is Not Correct.

2. **If a wetland of international importance is brought under the ‘Montreux Record’, what does it imply?**

A

Changes in ecological character have occurred, are occurring or are likely to occur in the wetland as a result of human interference

B

The country in which the wetland is located should enact a law to prohibit any human activity within five kilo metres from the edge of the wetland

C

The survival of the wetland depends on the cultural practices and traditions of certain communities living in its vicinity and therefore the cultural diversity therein should not be destroyed

D

It is given the status of ‘World Heritage Site’

Solution

The Montreux Record is a register of wetland sites on the List of Wetlands of International Importance.

- It registers the changes occurred or occurring or may occur in ecological character because of technological developments, pollution, or other human interference.
- It is maintained as part of the Ramsar List.

- The main objective of this mechanism is to provide assistance to developed and developing countries alike in solving the problems or threats that make inclusion in the Montreux Record necessary.

Additional Information

Currently, two wetlands of India are in Montreux record:

Keoladeo National Park (Rajasthan) and Loktak Lake (Manipur).

Chilika Lake (Odisha) was placed in the record but was later removed from it.

3. Which one of the following pairs of islands is separated from each other by the 'Ten Degree Channel'?

A Andaman and Nicobar

B Nicobar and Sumatra

C Maldives and Lakshadweep

D Sumatra and Java

Solution

The Ten Degree Channel is a channel that separates the Andaman Islands and Nicobar Islands from each other in the Bay of Bengal.

The two sets of islands together form the Indian Union Territory (UT) of Andaman and Nicobar Islands.



- The Lakshadweep Islands and Maliku Atoll are separated by the Nine-degree channel.
- The Grand Channel is between the Great Nicobar islands and the Sumatra islands of Indonesia.
- Minicoy channel is a small eight-degree channel that separates Maldives and Lakshadweep.
- Sumatra and Java are separated by Sunda Strait.

4. Consider the following pairs :

Programme/ Project -----Ministry

- 1. Drought-Prone Area Programme : Ministry of Agriculture**
- 2. Desert Development Programme : Ministry of Environment and Forests**
- 3. National Watershed Development Project for Rainfed Areas : Ministry of Rural Development**

Which of the above pairs is/are correctly matched?

A 1 and 2 only

B 3 only

C 1, 2 and 3

D None

Solution

The Drought-Prone area Programme comes under the Ministry of Rural Development.

Hence Pair 1 is Not Correct.

- This programme aims to mitigate the impacts of droughts on crop production, livestock, land and water resources.

The Desert Development Programme comes under the Ministry of Rural Development **Hence Pair 2 is Not Correct.**

- The basic objective of the Desert Development Programme is to minimize the adverse effect of drought and control desertification through rejuvenation of the natural resource base of the identified desert area.

The National Watershed Project for rainfed areas implemented by the Ministry of Agriculture is an umbrella scheme under the Pradhan Mantri Krishi Sinchayi Yojana. **Hence Pair 3 is Not Correct**

- The initiative aims to enhance water availability in the watershed areas.

5. **With reference to Bombay Natural History Society (BNHS), consider the following statements :**

- 1. It is an autonomous organization under the Ministry of Environment and Forests.**
- 2. It strives to conserve nature through action-based research, education and public awareness.**
- 3. It organizes and conducts nature trails and camps for the general public.**

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

Solution

- **Bombay Natural History Society(BNHS)** is one of the largest non-governmental organizations in India engaged in conservation and biodiversity research. Hence **Statment 1 is Not Correct.**

- BNHS Mission: Conservation of nature primarily biological diversity through action based on research, education, and public awareness. Hence **Statement 2 is Correct.**
- BNHS Vision: Premier independent scientific organization with a broad-based constituency, excelling in the conservation of threatened species and habitats.
- BNHS also organizes and conducts nature trails and camps for the general public. Hence **Statement 3 is Correct.**

6. With reference to ‘Global Environment Facility’,
which of the following statements is/are correct?

A

It serves as financial mechanism for ‘Convention on Biological Diversity’ and ‘United Nations Framework Convention on Climate Change’

B

It undertakes scientific research on environmental issues at global level

C

It is an agency under OECD to facilitate the transfer of technology and funds to underdeveloped countries with specific aim to protect their environment.

D

Both (a) and (b)

Solution

- The Global Environment Facility (GEF) was established on the eve of the 1992 Rio Earth Summit to help tackle environmental problems.
- It is a private equity fund focused on seeking long term financial returns by investments in clean energy under climate change. Hence **Option 1 is Correct.**
- It does not directly undertake any scientific research on environmental issues. Hence **Option 2 is NOT Correct.**

- It is a program under the World Bank. Hence **Option 3 is NOT Correct.**

7. **With reference to technologies for solar power production, consider the following statements:**

- 1. 'Photovoltaics' is a technology that generates electricity by direct conversion of light into electricity, while 'Solar Thermal' is a technology that utilizes the Sun's rays to generate heat which is further used in electricity generation process.**
- 2. Photovoltaics generates Alternating Current (AC), while Solar Thermal generates Direct Current (DC).**
- 3. India has manufacturing base for Solar Thermal technology, but not for Photovoltaics.**

Which of the statements given above is / are correct?

A 1 only

B 2 and 3 only

C 1, 2 and 3

D None

Solution

Photovoltaic (PV) devices generate electricity directly from sunlight using PV cells made up of semiconductors. Photovoltaic devices convert optional radiation into electricity.

- Several solar thermal systems can collect and transform radiant energy received from the sun into high-temperature thermal (heat) energy, which can be used directly or converted into electricity. Hence **Statement 1 is Correct.**
- Solar energy can be converted directly into electrical energy (direct current, DC) by photovoltaic (PV) cells commonly called solar cells. Hence **Statement 2 is Not Correct.**
- India has a manufacturing base for Solar Thermal technology as well as for Photovoltaics. Hence **Statement 3 is Not Correct.**

8. Consider the following languages :

1. Gujarati

2. Kannada

3. Telugu

Which of the above has/have been declared as ‘Classical Language / Languages’ by the Government?

A 1 and 2 only

B 3 only

C 2 and 3 only

D 1, 2 and 3

Solution

Gujarati has not been declared as a classical language.

The Ministry of Culture provides the guidelines regarding Classical languages.

There are six languages that enjoy the Classical' status in India:

- The 6 languages are Tamil (declared in 2004), Sanskrit (2005), Kannada (2008), Telugu (2008), Malayalam (2013), and Odia

(2014).

- All the Classical Languages are listed in the Eighth Schedule of the Constitution.
- The following criteria were laid down to find the eligibility of languages to be classified as Classical language.
 - High antiquity of its early texts history over a period of 1500-2000 years.
 - A body of ancient literature which is considered a valuable heritage by generations of speakers.
 - The literary tradition is original and not borrowed from another speech Community.
 - The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots.

9. Consider the following pairs

1. Dampa Tiger Reserve : Mizoram
2. Gumti Wildlife Sanctuary : Sikkim
3. Saramati Peak : Nagaland

Which of the above pairs is /are correctly matched?

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

- The Dampa tiger reserve is located in Mizoram Recently it was in news as it was a part of the studied region for clouded leopards (*Neofelis nebulosa*).
- The Gumti Wildlife Sanctuary is located in Tripura. It covers an area of about 389.54 sq km. It is home to animals like elephants, sambarl buffalo, yapping deer, serow, wild goat etc.
- Saramati is a peak located in Nagaland. It is located near Thanamir Millage in the Kiphire district of Nagaland.

10. **With reference to a conservation organization called Wetlands International’, which of the following statements is/are correct?**

- 1. It is an intergovernmental organization formed by the countries which are signatories to Ramsar Convention.**
- 2. It works at the field level to develop and mobilize knowledge, and use the practical experience to advocate for better policies.**

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

Solution

Wetlands international was formed in 1954

The Ramsar Convention was signed in 1971. As it was formed way before the Ramsar Convention, hence **Statement 1 is Not Correct.**

Wetland International is an NGO

It works to sustain and restore wetlands and their resources for people and biodiversity.

Wetlands Internationals work is n esearch advocacy, and engagement with government, corporate and international policy forums and conferences.Hence, **statement 2 is correct.**

11. **With reference to a grouping of countries known as BRICS, consider the following statements:**

- 1. The First Summit of BRICS was held in Rio de Janeiro in 2009.**
- 2. South Africa was the last to join the BRICS grouping.**

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

Solution

BRICS is the acronym coined for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa,

Originally there were 4 nations grouped as "BRIC" (or the BRICs"). South Africa became the member in 2010 and was last to join. Hence **Statement 2 is Correct.**

The BRIC grouping's first meeting was held in Yekaterinburg, Russia. Hence **Statement 1 is not Correct**

About BRICS

Structure

BRICS does not exist in form of organization, but it is an annual summit between the supreme leaders of five nations.

The Chairmanship of the forum is rotated annually among the members, in accordance with the acronym B-R-I-C-S.

BRICS cooperation in the past decade has expanded to include an annual programme of over 100 sectoral meetings.

Salient Features

Together, BRICS accounts for about 40% of the world's population and about 30% of the GDP (Gross Domestic Product), making it a critical economic engine.

It's an emerging investment market and global power bloc.

12. Consider the following diseases

1. Diphtheria

2. Chickenpox

3. Smallpox

Which of the above diseases has/have been eradicated in India?

A 1 and 2 only

B 3 only

C 1, 2 and 3

D None

Solution

Smallpox

A serious infectious disease caused by the Variola virus. Smallpox was eradicated, and no cases of naturally occurring smallpox have happened since 1977. It was mainly spread by direct and fairly prolonged face-to-face contact between people.

Diphtheria

- Diphtheria is a serious bacterial infection that affects the mucous membranes of the throat and nose.
- A type of bacteria called *Corynebacterium diphtheriae* causes diphtheria.

Chickenpox

- The chickenpox infection caused by the Varicella-zoster virus (VZV).
- The virus can spread through: saliva, coughing, sneezing, contact with fluid from the blisters.

13. Which of the following phenomena might have influenced the evolution of organisms?

1. Continental drift

2. Glacial cycles

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

Solution

- Continental drift theory deals with the distribution of the oceans and the continents. According to the theory, all the continents formed a single continental mass Pangea and mega ocean- Panthalassa surrounded it
- Pangaea started splitting and broke down into two large continental masses as Laurasia and Gondwanaland forming the northern and southern components respectively.

- Subsequently, Laurasia and Gondwanaland continued to break into various smaller continents that exist today.
- The Continental drift must have moved some animals from one continent to others and few getting stuck in the same place, which must have influenced the evolution.
- Glacial cycles would affect evolution as many might not able to tolerate extreme cold and would have extincted. The rise in sea level due to qlacial melt also might have affected the evolution of organisms.

Hence both statements are correct.

14. **Other than poaching, what are the possible reasons for the decline in the population of Ganges River Dolphins?**

1. **Construction of dams and barrages on rivers**
2. **Increase in the population of crocodiles in rivers**
3. **Getting trapped in fishing nets accidentally**
4. **Use of synthetic fertilizers and other agricultural chemicals in crop-fields in the vicinity of rivers**

Select the correct answer using the code given below.

A 1 and 2 only

B 2 and 3 only

C 1, 3 and 4 only

D 1, 2, 3 and 4

Solution

- Crocodile population has nothing to do with the decline in population of dolphins.
- It is human activities that are mainly responsible for the decline of dolphins.
- Dolphins today are threatened species due to threats like construction of dams, barrages, pollution from industrial sewage and synthetic fertilisers and other chemicals.

- These have fragmented the habitat of Dolphins of Ganga river.

Hence, statement 2 is incorrect. So, the correct answer is C.

15. The Radcliffe Committee was appointed to :

A solve the problem of minorities in India

B give effect to the Independence Bill

C delimit the boundaries between India and Pakistan

D enquire into the riots in East Bengal

Solution

- Prior to independence, it was agreed to divide India into two parts, one for Hindus and the other for Muslims.
- Pakistan was given the provinces of Sindh and Baluchistan, both of which have a large Muslim population (over 70% and 90%, respectively).
- The provinces of Punjab and Bengal, on the other hand, had only a slight majority of Muslims.
- Muslims made up 55.7 percent of Punjab's population and 54.4 percent of Bengal's.
- Even though Muhammad Ali Jinnah wanted these provinces to become part of Pakistan in their entirety, the Congress Party refused due to Hindu and Sikh sentiments.
- The Radcliffe Line, which divided India and Pakistan, was unveiled on August 17, 1947. The Radcliffe line runs from the Rann of Kutch

in Gujarat to the international border in Jammu in Jammu & Kashmir, separating India and Pakistan. India was divided into three sections by Radcliffe: West Pakistan, East Pakistan, and India.

- In June 1947, Sir Cyril Radcliffe was appointed Chairman of the two Border Commissions (one for Bengal and the other for Punjab).
- Each commission had five members: Sir Cyril, the Muslim League's two nominees, and the Congress Party's two nominees. Sir Cyril was given until August 15th to complete the demarcation, but the final result was not released until August 17th.
- In the eyes of the British, Sir Cyril was a neutral figure who could not be biased against either India or Pakistan because he had no prior knowledge of the country or its circumstances. One of the reasons for his promotion was because of this.

Thus the correct answer is option 'C'.

16. **Brominated flame retardants are used in many household products like mattresses and upholstery. Why is there some concern about their use?**

- 1. They are highly resistant to degradation in the environment.**
- 2. They are able to accumulate in humans and animals.**

Select the correct answer using the code given below.

A 1 only

B 2 only

C Both 1 and 2

D Neither 1 nor 2

Solution

- Brominated Flame Retardants (BFRs) are organobromide compounds that have an inhibitory effect on ignition of combustible organic materials. They are highly resistant to degradation in the environment. **Hence statement 1 is correct.**
- Many brominated chemicals are coming under increasing criticism in their use in household furnishings and where children would come into contact with them.

- Some believe, the chemicals, including PBDE could have harmful effects on humans and animals. Increasing concern has prompted some European countries to ban some of them, following the precautionary principle more common in Europe.
- They are lipophilic and bioaccumulative. **Hence Statement 2 is correct.**
- BFRs have been found in people all over the world.
- Brominated flame retardants are persistent, bioaccumulative and toxic to both humans and environment and are suspected of causing neuro behavioural effects and endocrine disruption.

17. Consider the following :

1. Bats
2. Bears
3. Rodents

The phenomenon of hibernation can be observed in which of the above kinds of animals?

A 1 and 2 only

B 2 only

C 1, 2 and 3

D Hibernation cannot be observed in any of the above

Solution

- Hibernation is a state of inactivity and metabolic depression in endotherms.
- Hibernation can be seen in animals like **Rodents, Bears and Bats** (those living at high latitudes).
- During this period, metabolic rate is reduced.
- It is a mechanism of survival.

So, the correct answer is C.

18. Which one of the following is the largest Committee of the Parliament?

A The Committee on Public Accounts

B The Committee on Estimates

C The Committee on Public Undertakings

D The Committee on Petitions

Solution

- The Committee on Estimates consists of 30 members, who are elected by the Lok Sabha every year from amongst its members.
- The Committee on Public Undertakings consists of 15 members elected by the Lok Sabha and 7 members of Rajya Sabha are associated with it.
- A minister is not eligible for election to this Committee.
- The term of the Committee is one year.

So, the correct answer is C

19. Which of the following adds/add carbon dioxide to the carbon cycle on the planet Earth?

1. Volcanic action
2. Respiration
3. Photosynthesis
4. Decay of organic matter

Select the correct answer using the code given below.

A 1 and 3 only

B 2 only

C 1, 2 and 4 only

D 1, 2, 3 and 4

Solution

- Volcanic action results in the eruption of huge amount of volcanic matter and carbon dioxide;
- Respiration in humans and animals is a process of intake of oxygen and release of carbon dioxide;
- Decay of organic matter also results in the production of carbon dioxide due to the activity of the bacteria.
- However, photosynthesis is the activity that intakes carbon dioxide and releases oxygen in the air.

Hence, Photosynthesis can be eliminated. So, the correct answer is C.

20. If you walk through countryside, you are likely to see some birds stalking alongside the cattle to seize the insects, disturbed by their movement through grasses. Which of the following is/are such bird/birds?

1. Painted Stork
2. Common Myna
3. Black-necked Crane

Select the correct answer using the code given below.

A 1 and 2

B 2 only

C 2 and 3

D 3 only

Solution

- The **Painted Stork** feeds mainly on small fish and not insects.
- The **Black-necked Crane** feeds mainly on waste grains and is found in the wetland areas not in greazing field and injector.
- The black-necked Crane is a medium-sized crane in Asia that breeds on the Tibetan Plateau and remote parts of India and Bhutan.
- The **Common Myna** is the only bird among the three which feeds on insects.

Hence, 1 and 3 can be eliminated. So, the correct answer is B.

21. In medieval India, the designations 'Mahattara' and 'Pattakila' were used for

A military officers

B village headmen

C specialists in Vedic rituals

D chiefs of craft guilds

Solution

- The correct answer is village headmen.
- In medieval India, the designations '**Mahattara**' and '**Pattakila**' were used for village headmen.
- Village headman is the leader of the community in th village, who owned most of the lands.

Additional information

- **Mansab** means a military rank conferred by the Mughal emperor.
- Chief craftman were called as **Prathama-Kulika**.

22. Lichens, which are capable of initiating ecological succession even on a bare rock, are actually a symbiotic association of

A algae and bacteria

B algae and fungi

C bacteria and fungi

D fungi and mosses

Solution

- A lichen is not a single organism but a **symbiosis among different organisms like fungus and a cyanobacterium or algae.**
- Cyanobacteria are also referred to as blue-green algae despite the fact of being distinct from algae.
- The fungal part is called mycobiont and non-fungal part is called photobiont that contains chlorophyll.
- Many lichen partners include one photobiont and one mycobiont which is not universal and there are lichens with more than one photobiont partner.
- The fungal partner is viewed to be composed of filamentous cells and every filament is known as hypha.

- These hyphae may branch but maintain a constant distance and grow by extension.
- There are a few lichens with filamentous structure among the photobionts while others consist of chains of more or fewer cells.
- A lichen is not a single organism; it is a stable symbiotic association between a fungus and algae and/or cyanobacteria.

23. If you travel through the Himalayas, you are likely to see which of the following plants naturally growing there?

1. Oak
2. Rhododendron
3. Sandalwood

Select the correct answer using the code given below

A 1 and 2 only

B 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

- Sandalwood is found in tropical deciduous forests or monsoon forests which are found in western ghats, deccan plateu, northern plains and foot hills of Himalayas.
- Thus, sandalwood grows naturally in Himalaya foothills.
- Oak and Rhododendron are naturally growing in the Himalayan region.
- **Hence, we can eliminate Sandalwood. So, the correct answer is A.**

Trees grow in Himalayas

- Pine
- Fir
- Oak
- Rhododendron
- Junipers

24. Which of the following are some important pollutants released by steel industry in India?

1. Oxides of sulphur
2. Oxides of nitrogen
3. Carbon monoxide
4. Carbon dioxide

Select the correct answer using the code given below.

A 1, 3 and 4 only

B 2 and 3 only

C 1 and 4 only

D 1, 2, 3 and 4

Solution

- In steel furnace, coke reacts with iron ore, releasing iron and generating CO and CO₂ gases.
- Due to use of coal, pollutants such as SO_x and NO_x are released, thus all are correct options.
- So, the correct answer is **D**.

National Steel Policy 2017

- The National Steel Policy which was released in 2017 aims to attain a steel production capacity in India of 300 MT by 2030.
- It has a long-term vision to enhance domestic consumption, produce high-quality steel and make the sector globally competitive.
- The policy's mission is to create an environment that enables:
 - Self-sufficiency in the production of steel by giving policy support and guidance to MSME producers of steel, the private sector, central public sector enterprises and boost sufficient capacity additions.
 - Development of internationally competitive manufacturing capabilities.
 - Increase in the domestic demand for steel.
 - Cost-efficient production and domestic availability of iron ore, coking coal and natural gas.
 - Investment in overseas asset acquisitions of raw materials.

25. Which of the following Kingdoms were associated With the life of the Buddha?

1. Avanti
2. Gandhara
3. Kosala
4. Magadha

Select the correct answer using the code given below.

A 1, 2 and 3

B 2 and 4

C 3 and 4 only

D 1, 3 and 4

Solution

- The correct answer is 3 and 4 only.
- Buddha traveled through the towns and villages in the kingdoms of **Kosala and Magadha** teaching his philosophy.
- Other regions where he wandered were **Vaishali, Vajji**, etc.

Additional Information

- **Jetavana (Jeta garden)** was perhaps the best known amongst the beautiful gardens provided to Buddha's entourage and it was close to

Sravasti, capital of the **Kosala kingdom**.

- Perhaps the second-most important monastic resort of Buddha was the “bamboo grove” in Rajgriha, capital of Magadha, provided by king Bimbisara. Gandhara is not directly associated with the life of Buddha.
- During the rule of Asoka Gandhara was influenced by Buddhist culture.
- Avanti was not related to the life of Buddha. Buddha belonged to the Shakya clan whose capital was Kapilavastu, and who were later annexed by the growing Kingdom of Kosala during the Buddha's lifetime.

26. Every year, a month long ecologically important campaign/festival is held during which certain communities/ tribes plant saplings of fruit-bearing trees. Which of the following are such communities/tribes?

A Bhutia and Lepcha

B Gond and Korku

C Irula and Toda

D Sahariya and Agariya

Solution

- The correct answer is **Gond and Korku**.
- Every monsoon, the Gond and Korku tribes of Madhya Pradesh's Betul and Harda districts celebrate Hari Jiroti.
 - It is a month-long festival of greenery, during which the tribals plant saplings of fruit-bearing trees.

Additional Information

- **Bhutia and Lepcha** are the indigenous tribes of Sikkim.
- **Irula and Toda** are the tribals of Niligir hills in Tamil Nadu.
- **Sahariya and Agariya** are the tribals mostly lived in the state of Madhya Pradesh.

27. **The sales tax you pay while purchasing a toothpaste is a**

A tax imposed by the Central Government

B tax imposed by the Central Government but collected by the State Government

C tax imposed by the State Government but collected by the Central Government

D tax imposed and collected by the State Government

Solution

- The correct answer is **tax imposed and collected by the State Government.**
- Taxes on toothpaste come under GST Act, which is administered by the State Government.
- Sales Tax is paid to the Sales Tax Authority in the state from where the goods are moved.
- Now the taxes on toothpaste comes under GST.

28. What does venture capital mean?

- A** A short-term capital provided to industries
- B** A long-term start-up capital provided to new entrepreneurs
- C** Funds provided to industries at times of incurring losses
- D** Funds provided for replacement and renovation of industries

Solution

- **The correct answer is A long-term start-up capital provided to new entrepreneurs.**
- It is a type of private equity provided by wealthy investors to small business companies that are believed to have long-term growth potential.
- The amount of the venture capital raised varies greatly depending on the stage a startup is at.
- Important Points Venture capital is a long-term risk capital to finance high technology projects, which involve risk, but at the same time has a high potential for growth.

29. The main objective of the 12th Five-Year Plan is

- A inclusive growth and poverty reductions
- B inclusive and sustainable growth
- C sustainable and inclusive growth to reduce unemployment
- D faster, sustainable and more inclusive growth

Solution

- **The correct answer is faster, sustainable and more inclusive growth.**
- The **Twelfth Five Year Plan** lasted from 2012-2017.
- It was launched with the **objective of faster, sustainable, and more inclusive growth.**
- It was the last five-year plan.
- The plan was under the leadership of Manmohan Singh and Narendra Modi.
- Its growth rate target was 8%.
- Later, the government has dissolved the Planning Commission with the NITI Aayog.

Additional Information

- Few objectives of the Twelfth Five-Year Plan were:

- To remove gender and social gap in school enrolment.
- To enhance access to higher education.
- To reduce malnutrition among children aged 0–3 years.
- To provide electricity to all villages.
- Generate 50 million new work opportunities in the non-farm sector.

30. **With reference to Balance of Payments, which of the following constitutes/constitute the Current Account?**

1. **Balance of trade**
2. **Foreign assets**
3. **Balance of invisibles**
4. **Special Drawing Rights**

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 4 only

Solution

- **The correct answer is 1 and 3.**
- The balance of payment is a record of all monetary transactions made between the residents of one country and the rest of the world.
- A balance of payments deficit means the nation imports are more than it exports.
- The two components of the Balance of Payments are the current account and capital account.

- The **current account** includes **trade in goods and services** (Invisibles) and transfer payments etc.
- The **capital account** includes **Foreign Direct Investment, Foreign Portfolio Investment, External Commercial Borrowings, SDR.**
- The capital account records all international purchases and sales of assets such as money, stocks, bonds, etc.

31. The terms ‘Marginal Standing Facility Rate’ and ‘Net Demand and Time Liabilities’, sometimes appearing in news, are used in relation to

A banking operations

B communication networking

C military strategies

D supply and demand of agricultural products

Solution

- **The correct answer is banking operations.**
- **Marginal Standing Facility (MSF):**
 - It is the rate at which banks borrow funds overnight from the RBI against approved government securities.
 - Under MSF, banks can borrow funds up to one percentage of their net demand and time liabilities (NDTL).
 - It used by banks to borrow from the Reserve Bank of India in an emergency situation when inter-bank liquidity dries up completely.

32. **What is/are the facility/facilities the beneficiaries can get from the services of Business Correspondent (Bank Saathi) in branchless areas?**

- 1. It enables the beneficiaries to draw their subsidies and social security benefits in their villages.**
- 2. It enables the beneficiaries in the rural areas to make deposits and withdrawals.**

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

Solution

- The correct answer is Both 1 and 2.**
- The Business Correspondent (BC) Model was initiated by the Reserve Bank of India (RBI) in 2006 to upgrade financial inclusion in India.**
- Business Correspondents are agents who represent banks and are responsible for delivering banking services at locations other than a bank branch/ATM.**

- It enables **government subsidies** and social security benefits to be directly credited to the accounts of the beneficiaries, enabling them to draw the money from the bank saathi or business correspondents in their village itself.

33. In the context of Indian economy; which of the following is/are the purpose/purposes of ‘Statutory Reserve Requirements’?

- 1. To enable the Central Bank to control the amount of advances the banks can create**
- 2. To make the people’s deposits with banks safe and liquid**
- 3. To prevent the commercial banks from making excessive profits**
- 4. To force the banks to have sufficient vault cash to meet their day-to-day requirements**

Select the correct answer using the code given below.

A 1 only

B 1 and 2 only

C 2 and 3 only

D 1, 2, 3 and 4

Solution

The correct answer is 1 only.

- Statutory Reserve Requirement is an instrument to manage liquidity.
- RBI requires commercial banks to keep reserves in order to ensure that banks have sufficient assets to draw on when account holders want to be paid.

Hence statement 2 is not correct. (According to the UPSC answer key)

- The first instrument is the Cash Reserve Ratio in which is the fraction of their deposits that banks must keep with RBI.
- Another tool is the Statutory Liquidity Ratio which requires the banks to maintain a given fraction of their total demand and time deposits in the form of specified liquid assets.
- When the central bank wants to increase the money supply in the economy, it lowers the reserve ratio.
- Hence it enables the Central Bank to control the number of advances the banks can create.

Hence statement 1 is correct.

- Reserve requirements are designed as “precautionary measures” to control the economy and not to stop banks from “excessive” profit and not to force the banks to have sufficient cash to meet their day-to-day requirements.

Hence statement 3 and 4 is incorrect.

34. **Recently, a series of uprisings of people referred to as ‘Arab Spring’ originally started from**

A Egypt

B Lebanono

C Syria

D Tunisia

Solution

The correct answer is Tunisia.

- Arab Spring:
 - It is an anti-government protest against oppressive regimes and a low standard of living, started in Tunisia in December 2010.
 - By early 2011, it spread across Arabic-speaking countries in North Africa and the Middle East.

Additional Information

- Egypt is bordered by Libya, Sudan, and Israel.
- Lebanon is bounded by Syria and Israel and has marine boundary with the Mediterranean Sea.

- Syria is bounded by Turkey, Iraq, Jordan, Lebanon, and Israel.
- Tunisia is bordered by Algeria and Libya and has a marine boundary with the Mediterranean Sea.



35. Consider the following countries :

1. Denmark
2. Japan
3. Russian Federation
4. United Kingdom
5. United States of America

Which of the above are the members of the ‘Arctic Council ‘?

A 1, 2 and 3

B 2, 3 and 4

C 1, 4 and 5

D 1, 3 and 5

Solution

Arctic Council:

- It is a high-level intergovernmental body set up in 1996 by the Ottawa declaration.
- It is an intergovernmental forum promoting cooperation in the Arctic region.
- Members of the Arctic Council are **Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation,**

Sweden and the United States of America.

- Iceland is the current chair of the Arctic Council.

36. Consider the following pairs :

Region often in news : Country

1. Chechnya : Russian Federation
2. Darfur : Mali
3. Swat Valley : Iraq

Which of the above pairs is/are correctly matched?

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

The correct answer is 1 only.

- Chechnya, republic in southwestern Russia, situated on the northern flank of the Greater Caucasus range.
- **Chechnya** is conquered by Russia in 1858.
- **Darfur** is a region in western Sudan.
- **Swat Valley** is known as the “mini Switzerland”. It is a province in Pakistan.

37. Which reference to Agni-IV Missile, which of the following statements is/are correct?

1. It is a surface-to-surface missile.
2. It is fuelled by liquid propellant only.
3. It can deliver one-tonne nuclear warheads about 7500 km away.

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

Solution

- Agni-IV is a nuclear-capable long-range ballistic missile of India, with a strike range of 4,000 km.
- The indigenously developed Agni-IV is a two-stage surface-to-surface missile.
- It is 20 metres long with a weight of 17 tonnes. **Hence, statement 1 is correct.**
- It is a two-stage solid fuelled system that can carry a one-tonne nuclear warhead over a distance of 4,000 kilometres. **Hence,**

statements 2 and 3 are not correct.

Therefore, option (a) is the correct answer.

38. **With reference to two non-conventional energy sources called ‘coalbed methane’ and ‘shale gas’, consider the following ‘statements:**

- 1. Coalbed methane is the pure methane gas extracted from coal seams, while shale gas is a mixture of propane and butane only that can be extracted from fine-grained sedimentary rocks.**
- 2. In India abundant coalbed methane sources exist, but so far no shale gas sources have been found.**

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

Solution

The correct answer is Neither 1 nor 2.

- Coalbed methane is a non-conventional and is a major source of natural gas.
- Coalbed methane is extracted from coal seams. Shale gas refers to natural gas that is trapped within shale formations.

- Shales are fine-grained sedimentary rocks that can be rich sources of petroleum and natural gas.
- Shale gas is natural gas and is a hydrocarbon gas mixture.
 - It consists mainly of methane.
 - It contains other hydrocarbons like ethane, propane, and butane, and it also contains carbon dioxide, nitrogen, and hydrogen sulfide. **Hence statement 1 is incorrect.**
- India has identified six basins as areas for shale gas exploration: Cambay (Gujarat), Assam-Arakan (North East), Gondwana (Central India), Krishna Godavari onshore (East Coast), Cauvery onshore, and Indo-Gangetic basins. **Hence statement 2 is incorrect.**
- Shale gas is primarily methane, **so option 1 is wrong.** Also Shale gas is found in India, though its utilisation is very less. **Thus, option D is correct.**

39. With reference to 'Changpa' community of India, consider the following statement :

1. They live mainly in the State of Uttarakhand.
2. They rear the Pashmina goats that yield a fine wool.
3. They are kept in the category of Scheduled Tribes.

Which of the statements given above is/are correct?

A 1 only

B 2 and 3 only

C 3 only

D 1, 2 and 3

Solution

The correct answer is 2 and 3 only.

- The Changpa are a semi-nomadic Tibetan people found mainly in the Changtang in Ladakh and in Jammu and Kashmir.

Hence statement 1 is incorrect.

- The Changpas rear the highly pedigreed and prized Changra goats (Capra Hircus) that yield the rare Pashmina (Cashmere) fibre.

Hence statement 2 is correct.

- The pashmina fibre is the finest fibre of all goat hair. In 1989, Changpas were declared as the Scheduled Tribes.

Hence statement 3 is correct.

40. In India, cluster bean (Guar) is traditionally used as a vegetable or animal feed, but recently the cultivation of this has assumed significance. Which one of the following statements is correct in this context?

A

The oil extracted from seeds is used in the manufacture of biodegradable plastics

B

The gum made from its seeds is used in the extraction of shale gas

C

The leaf extract of this plant has the properties of anti-histamines

D

It is a source of high quality biodiesel

Solution

The correct answer is The gum made from its seeds is used in the extraction of shale gas.

Key Points

- Cluster bean (Guar) is native to India and is widely grown in dry, warm, and arid regions.
- It is a source of Guar gum.
- Guar gum is derived from guar seeds, a legume crop that grows in semi-arid regions of Rajasthan, Gujarat and Haryana.
- It is traditionally used as a vegetable or animal feed.
- The gum made from its seeds is used in the extraction of shale gas.

- Guar gum is used as a stabilizing, thickening and suspending agent in drilling fluids.
- India is the world's largest producer of guar.

41. Which of the following have coral reefs?

1. Andaman and Nicobar Islands
2. Gulf of Kachchh
3. Gulf of Mannar
4. Sunderbans

Select the correct answer using the code given below.

A 1, 2 and 3 only

B 2 and 4 only

C 1 and 3 only

D 1, 2, 3 and 4

Solution

The correct answer is 1, 2 and 3 only.

- Most of the world's coral reefs are located within the tropical zone between 30° N and 30° S latitude.

Key Points

- Conditions for the growth of Coral Reefs:
 - It required a preferred temperature range of approximately 22° to 30° C.

- For the growth of coral, the depth of the water should not exceed 200m.
- Corals can live only in saline waters, and the average salinity should be between 27 to 40‰ for their proper growth.
- More than one-third of the world's coral reefs are located in territories of Australia, Indonesia, and the Philippines.
- The coral reefs are most commonly grown in the Pacific and the Indian Ocean, due to their shallow, warm, and clean water.
- Coral reefs in India are found in Andaman and Nicobar Islands, Gulf of Kutch, northwest coast in Gujarat state, Lakshadweep in the Arabian Sea in the southwest of Kerala coast and Gulf of Mannar in the southeast in Tamilnadu, Palk bay in southeast India.

42. In India, the problem of soil erosion is associated with which of the following?

1. Terrace cultivation
2. Deforestation
3. Tropical climate

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

Solution

The correct answer is 2 only.

- Soil erosion is the removal of the topmost fertile layer of the soil through wind or water.

Additional Information

- **Causes of Soil Erosion:**
 - Over-grazing, **Deforestation**, Action of wind, water, glacier, etc.

- Topography i.e steep slopes & heavy rainfall;
- Faulty methods of agriculture like over-irrigation, shifting agriculture, etc;
- Anthropogenic factors like mining, industrial activities, etc.
- **Terrace farming**, contour ploughing, etc are the measures to control soil erosion.

43. **The seasonal reversal of winds is the typical characteristic of**

A Equatorial climate

B Mediterranean climate

C **Monsoon climate**

D All of the above climates

Solution

The correct answer is Monsoon climate.

- **Monsoon type of climate:**

- It is best developed in the Indian subcontinent, Myanmar, Thailand, Laos, Cambodia, parts of Vietnam, and south china and northern Australis.
- This type of climate is characterized by the onshore wet monsoon in summer and offshore dry monsoon in winter.
- The basic cause of monsoon climates is the difference in the rate of heating and cooling of land and sea.
- **Monsoon refers to the seasonal reversal in the wind direction during a year.**
- The monsoon type of climate is characterized by a distinct seasonal pattern.

Additional Information

- **Equatorial type of climate:**

- Equatorial type of climate is found in the Amazon basin in South America, Congo basin in Africa, Guinea coast in Africa, and much of the Indo-Malaysian region, eastern Central America, some islands in the Caribbean Sea, western Colombia, and eastern Madagascar.
- This type of climate is located till 5 degrees to 10 degrees on either side of the equator.

- **Warm Temperate Western Margin Climate:**

- It is also called a Mediterranean type of climate because most of the areas falling under this climate are situated around the Mediterranean Sea.
- This climate has developed between 30°C and 45°C latitudes in both the hemispheres in the western part of the continents.
- The climate of Central Chile is of temperate Mediterranean type of climate.
- This climate region includes Southern Italy, Greece, Western Turkey, Syria, Lebanon, Western Israel, North Coastal Africa, central and Southern California in the USA, Central Chile in South America, Cape Town area in South Africa, and the coastal zones of Southern and Southwest Australia.

44. **With reference to the cultural history of India, the term ‘Panchayatan’ refers to**

A an assembly of village elders

B a religious sect

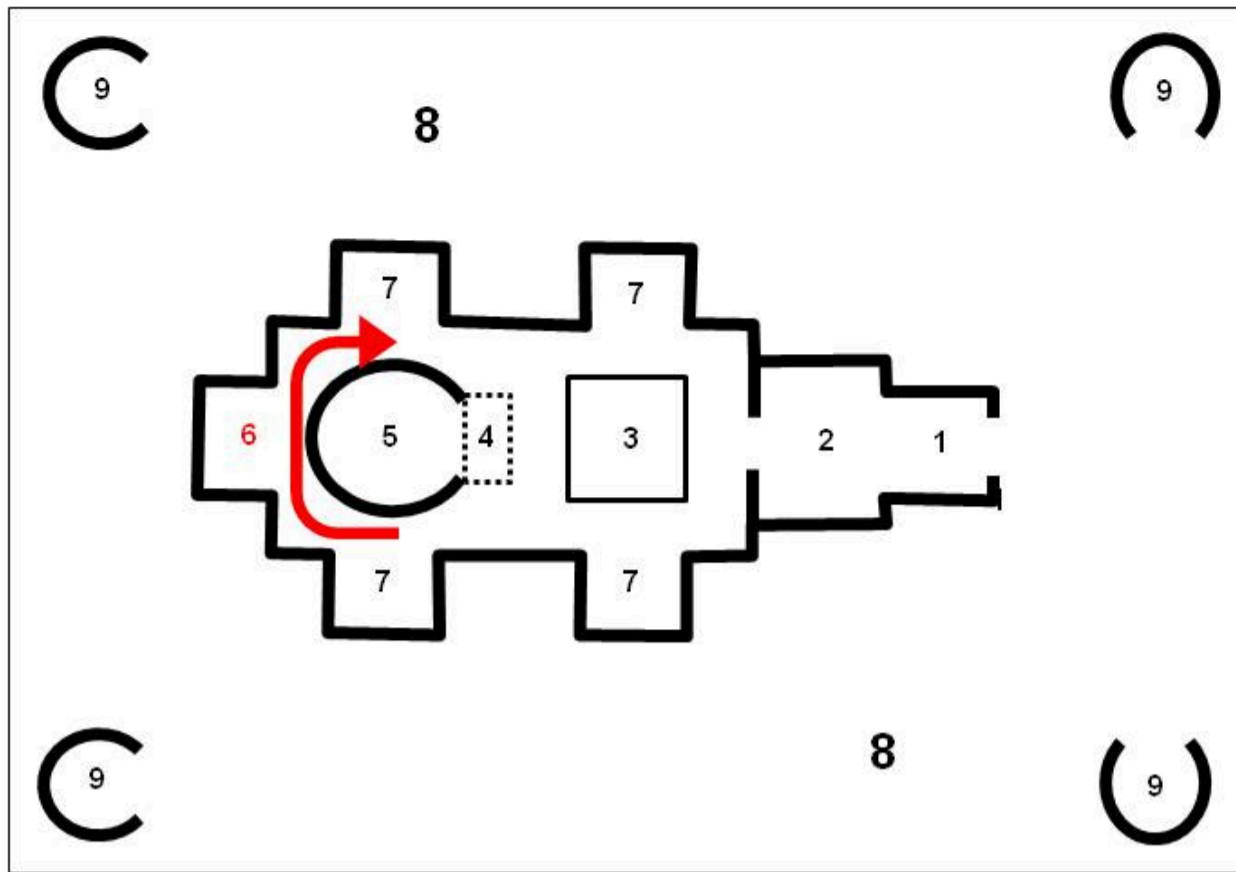
C a style of temple construction

D an administrative functionary

Solution

The correct answer is a style of temple construction.

- In the Panchayatana style of temple architecture, the main shrine is surrounded by four subsidiary shrines at four different corners, making it total of five shrines.
- In the Panchayatana style of temple architecture, the main shrine is built on a rectangular plinth.
- Additional Information Kandariya Mahadeva Temple in Khajuraho, Lingaraja Temple in Bhubaneswar, Dashavatara Temple in Deogarh, Uttar Pradesh are the famous examples of this style of architecture.



1. Ardha mandapa
2. Mandapa
3. Maha mandapa
4. Antarala
5. Garba griha

6. Pradakshina
7. Transepts
8. Jagati
9. Subsidiary shrines

Plan of Kandariya Mahadeva Temple

45. Consider the following rivers:

1. Barak
2. Lohit
3. Subansiri

Which of the above flows / flow through Arunachal Pradesh?

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

The correct answer is 2 and 3 only.

- Barak River flows through the states of Manipur, Nagaland, Mizoram, and Assam in India and into the Bay of Bengal
 - It rises in the Manipur Hills in northern Manipur state, India, where it is called the Barak.
- Lohit river is a river in Arunachal Pradesh and is a tributary of River Brahmaputra.
 - It originates in eastern Tibet, in the Zayal Chu range, and surges through Arunachal Pradesh.

- The Subansiri River flows through the Indian states of Assam and Arunachal Pradesh, and the Tibet Autonomous Region of China.
 - It is the largest tributary of the River Brahmaputra.

Additional Information

- **River Brahmaputra:**

- It is known by the name of the Yarlung Tsangpo in the Tibet region.
- It originates in Chemayungdung glacier in the Himalayas and drains into the Bay of Bengal.
- It is about 2,900 km in length.
- After flowing through Tibet it enters India through Arunachal Pradesh and flows through Assam and Bangladesh before it joins the Bay of Bengal.
- The river crosses Assam and enters Bangladesh where the river is known as Jamuna and joins Ganga and then finally drains into the Bay of Bengal.
- Dibang River, **Lohit River**, Dhansiri River, Kameng River, Manas River, Teesta River, **Subansiri River** are the major tributaries of River Brahmaputra.

46. Consider the following pairs :

Wetlands : Confluence of rivers

1. Harike Wetlands : Confluence of Beas and Satluj/Sutlej
2. Keoladeo Ghana National Park :Confluence of Banas and Chambal
3. Kolleru Lake :Confluence of Musi and Krishna

Which of the above pairs is/are correctly matched?

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

The correct answer is 1 only.

Harike Wetland

- It is one of the largest man-made wetlands of northern India.
- This wetland shares its area with the Tarntaran, Ferozpur, and Kapurthala districts of Punjab.

- It came into existence after the construction of a barrage near the confluence of rivers Sutlej and Beas in 1952.
- It is also a Ramsar site. Harike is a significant site for birds migrating from across the international frontiers.
- The wetland area is spread over about 41 km² and supports more than 400 avian species.
- Harike also harbours endangered aquatic mammalian as well as reptilian fauna like the Indus river dolphin, smooth-coated otter, and seven species of rare freshwater turtles.

Keoladeo Ghana National Park

- It is a man-made and man-managed wetland in Rajasthan.
- It is also declared a World Heritage site.
- It is situated at the confluence of the Gambhir and Banganga rivers.
- It was designated as a Ramsar site under the Wetland Convention in October 1981.
- There is open grassland that provides a habitat for breeding, wintering, and staging migratory birds. The 29 km² (11 sq mi) reserve is locally known as Ghana.
- These diverse habitats are home to approximately 366 bird species, 379 floral species, 50 species of fish, 13 species of snakes, 5 species of lizards, 7 amphibian species, 7 turtle species, and a variety of other invertebrates.

Kolleru Lake

- It is a freshwater lake in Andhra Pradesh.
- It was previously a lagoon.
- It was designated a wetland of international importance in November 2002 under the international Ramsar Convention.
- It lies between the Godavari and Krishna river deltas.

- Many birds migrate here in winters, such as Siberian cranes, ibis, and painted storks.
- The lake was an important habitat for an estimated 20 million residents and migratory birds, including the grey or spot-billed pelican.

47. Which one of the following pairs does not form part of the six systems of Indian Philosophy?

A Mimamsa and Vedanta

B Nyaya and Vaisheshika

C Lokayata and Kapalika

D Sankhya and Yoga

Solution

Lokayata and Kapalika are not among six orthodox schools of philosophy

Six Orthodox Schools are

1. Samkhya
2. Nyanya
3. Yoga
4. Vaisheshika
5. Minasa
6. Vedanta

48. Consider the following pairs :

Hills : Region

1. Cardamom Hills : Coromandel Coast
2. Kaimur Hills : Konkan Coast
3. Mahadeo Hills : Central India
4. Mikir Hills : North-East India

Which of the above pairs are correctly matched?

A 1 and 2

B 2 and 3

C 3 and 4

D 2 and 4

Solution

The correct answer is 3 and 4.

Cardamom Hills

- These are located in Kerala and south-west Tamil Nadu.
- It is located on the south-western side of India.
- It produces tea, coffee, teak, cardamom, and bamboo.
- Anamudi is the highest peak with 2,695 meters (8,842 ft)

Kaimur Hills

- It is the eastern portion of the Vindhya Range.
- Kaimur range is present in Madhya Pradesh, Uttar Pradesh and Bihar.

Mahadeo Hills

- These are a range of hills in Madhya Pradesh state of central India.
- These are located in the northern part of the Satpura Range.

Mikir Hills

- These are located to the south of the Kaziranga National Park, Assam.
- It is in north-east India and part of Karbi-Plateau.
- Dambuchko is the highest peak of Mikir Hills.

Coromandel Coast

- It is the coastal plain in eastern Tamil Nadu state.
- It is bounded by the Utkal Plains to the north, the Bay of Bengal to the east, and the Kaveri delta to the south and the Eastern Ghats to the west, extending over an area of about 22,800 square kilometres.

Konkan coast

- It is at the western coastline of India. It extends throughout the western coasts of Maharashtra, Goa and Karnataka.

49. Which one of the following Schedules of the Constitution of India contains provisions regarding anti-defection?

A Second Schedule

B Fifth Schedule

C Eighth Schedule

D Tenth Schedule

Solution

- The **Tenth Schedule** was inserted in the Constitution in 1985 by the **52nd Amendment Act**.
- It deals with the Anti defection law i.e, provisions as to disqualification on the ground of defection.
- Decision on questions as to disqualification on the ground of detection:-
 - If any question arises as to whether a member of a House has become subject to disqualification under this Schedule, the question shall be referred for the decision of the Chairman or, as the case may be, the Speaker of such House and his decision shall be final.
 - Provided that where the question which has arisen is as to whether the Chairman or the Speaker of a House has become

subject to such disqualification, the question shall be referred for the decision of such member of the House as the House may elect in this behalf and his decision shall be final.

50. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of

A biosphere reserves

B botanical gardens

C national parks

D wildlife sanctuaries

Solution

The correct answer is biosphere reserves.

- The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of biosphere reserves.
- **Biosphere Reserves**
 - These reserves are established to protect larger areas of natural habitat than a typical national park or animal sanctuary.
 - The site must contain a protected and minimally disturbed core area of value of nature conservation.
 - Sustainable development of reserves is based on local community efforts.

- It includes terrestrial, marine and coastal ecosystems.
- There are 18 biosphere reserves in India.

51. Turkey is located between

A Black Sea and Caspian Sea

B Black Sea and Mediterranean Sea

C Gulf of Suez and Mediterranean Sea

D Gulf of Aqaba and Dead Sea

Solution

- The correct answer is Black Sea and Mediterranean Sea.
- Turkish peninsula is surrounded by four seas:-
 - the Mediterranean to the south, the Aegean to the west, the Sea of Marmara between the European and Asian landmasses, and the Black Sea to the north.
 - Turkey lies partly in Asia and partly in Europe.



52. What is the correct sequence of occurrence of the following cities in South-East Asia as one proceeds from south to north?

1. Bangkok
2. Hanoi
3. Jakarta
4. Singapore

Select the correct answer using the code given below.

A 4-2-1-3

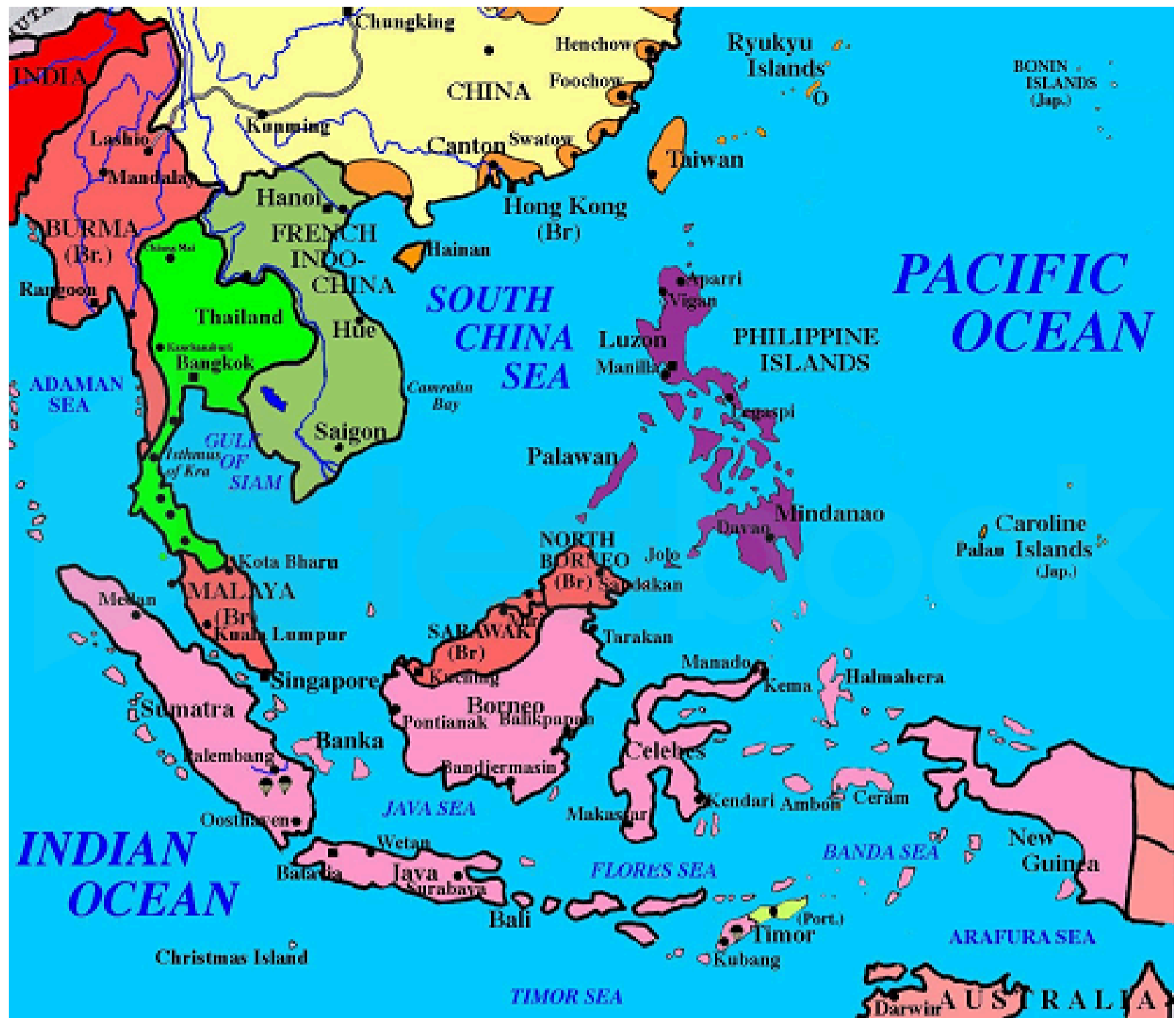
B 3-2-4-1

C 3-4-1-2

D 4-3-2-1

Solution

- Jakarta-Singapore-Bangkok-Hanoi is the correct sequence of occurrence of the following cities in South-East Asia as one proceeds from south to north.



53. The scientific view is that the increase in global temperature should not exceed 2 °C above pre-industrial level. If the global temperature increases beyond 3 °C above the pre-industrial level, what can be its possible impact/impacts on the world?

1. Terrestrial biosphere tends toward a net carbon source
2. Widespread coral mortality will occur.
3. All the global wetlands will permanently disappear.
4. Cultivation of cereals will not be possible anywhere in the world.

Select the correct answer using the code given below.

A 1 only

B 1 and 2 only

C 2, 3 and 4 only

D 1, 2, 3 and 4

Solution

The correct answer is 1 and 2 only.

- **Terrestrial biosphere**
 - It has an important role in regulating atmospheric composition and climate.

- It can release or absorb the greenhouse gases, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O).
- It regulates fluxes of energy, water and aerosols between the earth surface and atmosphere.
- Carbon is exchanged most quickly with the atmosphere, although small amounts of carbon leave the terrestrial biosphere and enter the oceans as dissolved organic carbon.
- If the global temperature increases beyond 3 °C above the pre-industrial level, the terrestrial biosphere tends toward a net carbon source. Taiga and temperate forests act as an important carbon sink; these forests would turn into a carbon source.
- **Corals**
 - These are invertebrate animals belonging to a large group of colourful and fascinating animals called Cnidaria.
 - Coral reefs are extremely diverse marine ecosystems hosting over 4,000 species of fish, massive numbers of cnidarians, molluscs, crustaceans, and many other animals.
 - As temperatures rise, mass coral bleaching events occur.
 - If the temperature keeps on rising, widespread coral mortality will occur.
- The temperate regions can still survive if the temperature increases.
- The temperate zones are where the widest seasonal changes occur.
- The vegetation can survive there. The weather should be warm and moist during the early stage of growth of cereals.
- **Hence, the cultivation of cereals would still be possible if the temperature rises.**

54. The national motto of India, 'Satyameva Jayate' inscribed below the Emblem of India is taken from:

A Katha Upanishad

B Chandogya Upanishad

C Aitareya Upanishad

D **Mundaka Upanishad**

Solution

- The national motto of India, **Satyameva Jayate'** inscribed below the Emblem of India is taken from Mundaka Upanishad.
- This motto means "Truth Alone Triumphs".
- It is written in Devanagari script.
- Mundaka Upanishad is listed as number 5 in the Muktika canon of 108 Upanishads of Hinduism.
- This Upanishad is a poetic verse style Upanishad, with 64 verses, written in the form of mantras.

55. In the Constitution of India, promotion of international peace and security is included in the

A Preamble to the Constitution

B Directive Principles of State Policy

C Fundamental Duties

D Ninth Schedule

Solution

The correct answer is the Directive Principles of State Policy.

- In the Constitution of India, promotion of international peace and security is included in the "Directive Principles of State Policy".
- **Article 51** says to promote international peace and security and maintain just and honourable relations between nations.
- It is to foster respect for international law and treaty obligations and to encourage settlement of the international dispute by arbitration.
- These provisions are contained in Part IV (Article 36–51) of the Constitution of India.
- However, these are not enforceable by any court.
- It is the duty of the states to consider Directive Principles while making laws for the welfare of the people.

- It is taken from the Constitution of Ireland.
- The Preamble of the Indian Constitution was adopted i.e. November 26, 1949. The objectives are to secure justice, liberty, equality to all citizens and promote fraternity to maintain unity and integrity of the nation.
- The Ninth Schedule of the Indian Constitution contains a list of central and state laws which cannot be challenged in courts.
- The fundamental duties are included in Article 51-A of the Indian Constitution.
- There are 11 fundamental duties to which citizens must abide by.

56. **What are the benefits of implementing the ‘Integrated Watershed Development Programme’?**

1. **Prevention of soil runoff**
2. **Linking the country’s perennial rivers with seasonal rivers**
3. **Rainwater harvesting and recharge of groundwater table**
4. **Regeneration of natural vegetation**

Select the correct answer using the code given below.

A 1 and 2 only

B 2, 3 and 4 only

C 1, 3 and 4 only

D 1, 2, 3 and 4

Solution

- The correct answer is 1, 3 and 4 only.
- The Integrated Watershed Management Programme is implemented by the Department of Land Resources of the Ministry of Rural Development.
- The following three Development Programmes were integrated for the development of rainfed/ degraded land in the country:-
 - Desert Development Programme (DDP)
 - Drought Prone Areas Programme (DPAP)

- Integrated Wastelands Development Programme
- The primary objectives of Integrated Watershed Management Programme are
 - harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water;
 - prevention of soil run-off;
 - rainwater harvesting and recharging of the groundwater table;
 - increasing the productivity of crops; introduction of multi-cropping and diverse agro-based activities;
 - promoting sustainable livelihoods and increasing the household incomes.
- **The programme does not include "Linking the country's perennial rivers with seasonal rivers".**

57. Which of the following are associated with 'Planning' in India?

1. The Finance Commission
2. The National Development Council
3. The Union Ministry of Rural Development
4. The Union Ministry of Urban Development
5. The Parliament

Select the correct answer using the code given below.

A 1, 2 and 5 only

B 1, 3 and 4 only

C 2 and 5 only

D 1, 2, 3, 4 and 5

Solution

The correct answer is 2 and 5 only.

- **The Finance Commission**
 - It is constituted by the President under article 280 of the Constitution to give its recommendations on the distribution of tax revenues between the Union and the States.
- **The National Development Council**
 - It is presided over by the Prime Minister.

- It is an executive body established in August 1952.
- This body is neither a constitutional nor a statutory body.
- It is the apex body to take decisions on matters related to approval of five-year plans of the country.
- This council has been proposed to be abolished.
- **The Union Ministry of Rural Development**
 - It is entrusted with the task of accelerating the socio-economic development of rural India.
- **The Union Ministry of Urban Development**
 - This Ministry is known as the Ministry of Housing and Urban Affairs.
 - It is entrusted with the formulation and administration of the rules and regulations and laws relating to the housing and urban development in India.
- **The Parliament**
 - It is the supreme legislative body of the Republic of India.
 - The is directly responsible to make laws for the welfare of the society.
- **Out of the given options, The Parliament and the NDC are related to "planning" in India.**

58. Which of the following is / are the function/functions of the Cabinet Secretariat?

- 1. Preparation of agenda for Cabinet Meetings**
- 2. Secretarial assistance to Cabinet Committees**
- 3. Allocation of financial resources to the Ministries**

Select the correct answer using the code given below.

A 1 only

B 2 and 3 only

C 1 and 2 only

D 1, 2 and 3

Solution

- **The correct answer is 1 and 2 only.**
- The Cabinet Secretariat is entrusted with the responsibility of administering the Government of India.
- The functions of the Cabinet Secretariat are preparation of agenda for Cabinet Meetings & Secretarial assistance to Cabinet Committees.
- However Allocation of financial resources to the Ministries as per the provisions in budget is prepared by finance ministry.

59. Consider the following statements :

A Constitutional Government is one which

- 1. places effective restrictions on individual liberty in the interest of State Authority**
- 2. places effective restrictions on the Authority of the State in the interest of individual liberty**

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

Solution

- Constitutional government have provisions like Fundamental Rights to protect individual liberty and protect individual from any arbitrary state actions because the Constitution grants power in the name of the people and the state draws its power from the consent of the governed.
- The Constitution said that states will use his powers in the interests of the people.

- Constitution permits reasonable restriction to be imposed on individual's liberties in the interest of society not the interest of state authority.
- **The Constitutional Government places effective restrictions on the Authority of the State in the interest of individual liberty.**

Hence, statement 1 is Not correct and statement 2 is correct.

60. Which of the following are the discretionary powers given to the Governor of a State?

1. Sending a report to the President of India for imposing the President's rule
2. Appointing the Ministers
3. Reserving certain bills passed by the State Legislature for consideration of the President of India
4. Making the rules to conduct the business of the State Government

Select the correct answer using the code given below.

A 1 and 2 only

B 1 and 3 only

C 2, 3 and 4 only

D 1, 2, 3 and 4

Solution

The correct answer is 1 and 3 only.

- The Governor performs the same duties as the President, but for the State.
- The **discretionary powers of the Governor** include:-

- He/She has the discretion to choose a candidate for the chief minister when no party gets a clear majority.
- He/She can withhold his assent to a bill and send it to the President for his approval.
- He/She can reserve certain bills passed by the State Legislature for consideration of the President of India.
- He/She can override the advice of the council of ministers if specifically permitted by the President during emergency rule per Article 353.
- Article 356 also states that the President can invoke President rule in a state on the report of the governor.
- **The Governor appoints Chief Minister and other Ministers as per Article 164 and the Advocate General for the State as per Article 165. But this is not a part of discretionary powers.**

61. If the interest rate is decreased in an economy, it will

A decrease the consumption expenditure in the economy

B increase the tax collection of the Government

C increase the investment expenditure in the economy

D increase the total savings in the economy

Solution

The correct answer is to increase the investment expenditure in the economy.

- When the interest rates decrease, citizens do not want to keep their currency in banks since they would not get a high return. **Option 4 can be eliminated.**
- In such times, citizens keep the cash flowing in the economy.
- They either invest in productive things or can spend the money on a day-to-day basis. **Option 1 can be eliminated.**
- Hence, the interest rate is decreased in an economy, it will increase the investment expenditure in the economy.
 - Decreased interest rates would ensure the availability of capital for investment expenditure. **Hence Option 3 is correct.**

- The relationship between the interest rate and investment Expenditure is also illustrated by the investment curve of the economy.
- The curve has a downward slope, indicating that a drop in interest rate, causes the investment-spending to rise.

62. Consider the following statements :

1. The President shall make rules for the more convenient transaction of the business of the Government of India, and for the allocation among Ministers of the said business.
2. All executive actions of the Government of India shall be expressed to be taken in the name of the Prime Minister.

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

Solution

The correct answer is 1 only.

- **The Clause (3) of Article 77 of the Indian Constitution includes Conduct of Business of the Government of India".**
- It says that "The President shall make rules for the more convenient transaction of the business of the Government of India, and for the allocation among Ministers of the said business". **Hence statement 1 is correct.**

- The Clause (1) of Article 77 of the Indian Constitution includes that "All executive action of the Government of India shall be expressed to be taken in the name of the President". **Hence statement 2 is not correct.**
- The Clause (2) of Article 77 of the Indian Constitution includes that "Orders and other instruments made and executed in the name of the President shall be authenticated in such manner as may be specified in rules to be made by the President, and the validity of an order or instrument which is so authenticated shall not be called in question on the ground that it is not an order or instrument made or executed by the President".

63. Consider the following statements regarding a No-Confidence Motion in India:

1. There is no mention of a No-Confidence Motion in the Constitution of India.
2. A Motion of No-Confidence can be introduced in the Lok Sabha only.

Which of the statements given above is / are correct?

A 1 only

B 2 only

C Both 1 and 2

D Neither 1 nor 2

Solution

- Article 75 of the Indian Constitution specifies that the council of ministers shall be collectively responsible to the House of the People.
- A Motion of No-Confidence can be introduced in the Lok Sabha only. **Hence statement 2 is correct.**
- Article 118 of the Indian Constitution permits both houses (Lok Sabha and Rajya Sabha) of Parliament to make its own rules for its functioning.

- There is no mention of "no-confidence" motion in the Articles of Indian Constitution. **Hence statement 1 is correct.**
- Rule 198 of Lok Sabha mentions the procedure for a motion of no-confidence.
- Once a notice is given, the speaker reads it in the House and asks those who are in favour of it.
- In case there are 50 MPs in favour, a date for discussing the motion is assigned.
- The vote has to take place within 10 days of the notice, if the majority of the members vote in favour of the motion then the motion is passed and the government in power has to vacate the office.

64. With reference to Neem tree, consider the following statements:

1. Neem oil can be used as a pesticide to control the proliferation of some species of insects and mites.
2. Neem seeds are used in the manufacture of biofuels and hospital detergents.
3. Neem oil has applications in pharmaceutical industry.

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

Solution

The correct answer is 1 and 3 only.

- **Azadirachta indica is commonly known as neem tree.**
 - It is a tree in the mahogany family Meliaceae.
 - Neem Tree can grow up to 30 m tall and 2.5 m in girth.
 - The roots penetrate the soil deeply, at least where the site permits, and, particularly when injured, they produce suckers.

- **The tree is easily propagated - both sexually and vegetatively.** It can be planted using seeds, seedlings, saplings, root suckers, or tissue culture.
- Neem leaf has various properties such as antibacterial, antiviral, antiparasitic, anti-inflammatory, anticarcinogenic, antioxidant, and immune upregulation. It is used in the pharmaceutical industry.

Hence statement 3 is correct.

- Neem oil can be used as a pesticide to control the proliferation of some species of insects and mites. **Hence statement 1 is correct.**
- It is also used for skin diseases and digestive system disorders.
- Neem Oil can also be obtained from solvent extraction of the neem seed and this solvent-extracted oil is mostly used for soap manufacturing.
- Neem oil can be used as a pesticide to control the proliferation of some species of insects and mites.
- Neem seeds are used in the manufacture of biofuels and hospital detergents. **Hence statement 2 is not correct.**

65. Which one of the following is the process involved in photosynthesis?

A Potential energy is released to form free energy

B Free energy is converted into potential energy and stored

C Food is oxidized to release carbon dioxide and water

D Oxygen is taken, and carbon dioxide and water vapour are given out

Solution

- **Photosynthesis**- It is the process by which green plants and certain other organisms transform light energy into chemical energy.
- Photosynthesis uses light energy to convert carbon dioxide and water into glucose and oxygen gas.
- **The potential energy stored in the molecular bonds of glucose becomes kinetic energy after cellular respiration. Hence option 2 is correct.**
- Chemical bonds are a form of stored or “potential” energy because when the bonds are broken, energy is released.
- Photosynthesis converts water and carbon dioxide into sugar and oxygen using sunlight as the catalyst.
- A byproduct of the photosynthetic process is the release of oxygen into the atmosphere. **Hence, option 3 and option 4 are incorrect.**

66. In addition to fingerprint scanning, which of the following can be used in the biometric identification of a person?

1. Iris scanning
2. Retinal scanning
3. Voice recognition

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

Solution

- Biometric verification is any means by which a person can be uniquely identified by evaluating one or more distinguishing biological traits.
- Unique identifiers include fingerprints, hand geometry, earlobe geometry, retina and iris patterns, voice waves, DNA, and signatures.
- The oldest form of biometric verification is fingerprinting.

- All the given processes, namely, Iris scans, Voice recognition and Retinal scanning can be used for biometric identification.
- **Hence, 1, 2 and 3 are correct.**

Therefore, option (d) is the correct answer.

67. Which of the following statements is / are correct regarding vegetative propagation of plants?

1. Vegetative propagation produces clonal population.
2. Vegetative propagation helps in eliminating the virus.
3. Vegetative propagation can be practiced most of the year.

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

Solution

The correct answer is 1 and 3 only.

- **Vegetative propagation**

- It is an asexual method of plant reproduction that occurs in its leaves, roots and stem.
- It is often used when the crop plants either do not produce seeds or when the seeds produced are not viable or are of long dormancy.

- **Clonal propagation**

- It is the process of asexual reproduction by multiplication of genetically identical copies of individual plants.
- It occurs by apomixis (seed development without meiosis and fertilization) and/or vegetative reproduction (regeneration of new plants from vegetative parts).
- The widespread use of vegetative propagation results in the **spread of viruses** through propagules such as cuttings, tubers, runners and bulbs. A plant once systemically infected with a virus usually remains infected for its lifetime.
- Vegetative propagation can be practised most of the year.

68. Which of the following pair is/are correctly matched?

Spacecraft : Purpose

1. Cassini-Huygens : Orbiting the Venus and transmitting data to the Earth
2. Messenger : Mapping and investigating the Mercury
3. Voyager 1 and 2 : Exploring the outer solar system

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

Solution

The correct answer is 2 and 3 only.

Cassini-Huygens

- It was the fourth space probe to visit **Saturn**.
- The spacecraft was launched with two elements: the Cassini orbiter and the Huygens probe.
- Cassini-Huygens reached Saturn in July 2004.

- The objective was to determine the dynamic behaviour of the rings of Saturn and the atmosphere of Saturn at cloud level among many other goals.

Messenger

- It was the seventh Discovery-class mission, and the first spacecraft to orbit **Mercury**.
- Its primary goal was to study the geology, magnetic field, and chemical composition of the planet.

Voyager 1 and 2

- These spacecraft were launched in 1977.
- The primary mission was the exploration of **Jupiter and Saturn**.
- Voyager 2 went on to explore Uranus and Neptune.
- **The Voyagers explore the outer boundary of the heliosphere in interstellar space.**

69. Consider the following pairs :

Region : Well-known for the production of

1. Kinnaur : Areca nut
2. Mewat : Mango
3. Coromandel : Soya bean

Which of the above pairs is/are correctly matched?

A 1 and 2 only

B 3 only

C 1, 2 and 3

D None

Solution

The correct answer is None of these.

- **Kinnaur**

- It is a district in Himachal Pradesh.
- According to the 2011 census, Kinnaur district has a population of 84,121.
- It is mostly famous for apples.
- The production of Areca nuts is mostly confined to Karnataka, Kerala and Assam. **Hence pair 1 is not correct.**

- **Mewat**

- It is a district in Haryana.
- The main occupation is agriculture along with allied and agro-based activities.
- It is not primarily famous for Mango. **Hence pair 2 is not correct.**

- **Coromandel**

- It is a coastal plain in the eastern Tamil Nadu state.
- Rice, pulses, sugarcane, cotton, and peanuts are primarily grown in this region.
- The production of soybean in India is dominated by Maharashtra and Madhya Pradesh which contribute 89 per cent of the total production. **Hence pair 3 is not correct.**

70. Which of the following is/are the example/examples of chemical change?

1. Crystallization of sodium chloride
2. Melting of ice
3. Souring of milk

Select the correct answer using the code given below.

A 1 and 2 only

B 3 only

C 1, 2 and 3

D None

Solution

The correct answer is 3 only.

- When one chemical substance is transformed into one or more different substances, it is called a chemical change. The most common example is when iron transforms into rust.
- **Crystallization of sodium chloride**
 - When the solubility limit of NaCl exceeds, the crystallization of NaCl takes place.

- It is a **physical change since sodium chloride does not transform into some other chemical element after crystallization.**
- **Melting of ice**
 - Ice is the solid form that liquid water takes when it is cooled below 0 degrees celsius.
 - When the temperature rises, solid ice changes into liquid water.
 - It is **not a chemical change since the composition of water molecules stays the same before and after melting.**
- **Souring of milk**
 - Lactic acid bacteria ferment lactose at room temperature and turn it into lactic acid.
 - As a result, the acidity of the milk increases, which in its turn causes the protein to fold and liquid to separate into whey and a viscous mass.
 - **The soured milk has new elements and it cannot be reversed. Hence, it is a chemical change.**

71. **The power of the Supreme Court of India to decide disputes between the Centre and the States falls under its**

A advisory jurisdiction

B appellate jurisdiction

C original jurisdiction

D writ jurisdiction

Solution

- The power of the Supreme Court of India to decide disputes between the center and the states falls under its original jurisdiction.
- The original jurisdiction of a court is the power to hear a case for the first time, as opposed to appellate jurisdiction, when a court has the power to review a lower court's decision.
- In India, the Supreme Court has exclusive original jurisdiction on all cases between the government and the states or between government and states on side and one or more states on other side or cases between different states.
- In addition, Article 32 of the Constitution of India grants original jurisdiction to the Supreme Court on all cases involving the enforcement of fundamental rights of citizens.

72. Consider the following techniques/phenomena:

1. Budding and grafting in fruit plants
2. Cytoplasmic male sterility
3. Gene silencing

Which of the above is/are used to create transgenic crops?

A 1 only

B 2 and 3

C 1 and 3

D None

Solution

The correct answer is 2 i.e. 2 and 3 only.

- **Transgenic Crops** are the crops that have their genomes modified through genetic engineering techniques either by the addition of a foreign gene or removal of a certain detrimental gene. the aim is to introduce a new trait to the plant which does not naturally occur.
- **Budding and Grafting** are horticultural techniques, Grafting is the act of placing a portion of one plant (bud or scion) into or on a stem, root, or branch of another (stock) in such a way that a union will be formed and the partners will continue to grow.

- In the budding process, a bud is taken from one plant and grown on another. it does not lead to any genetic modification.

Hence, option 1 is not correct.

- **Cytoplasmic male sterility** is total or partial male sterility in plants as the result of specific nuclear and mitochondrial interactions.
 - Male sterility is the failure of plants to produce pollen or male gametes.
 - The cytoplasmic male sterility systems are widely utilized in crop plants for hybrid breeding due to the convenience of controlling sterility.
- **Gene Silencing** using RNA interference technology, transcriptional gene silencing, virus-induced gene silencing, has been used in horticultural techniques.
 - The double-strand RNAs present inside the cell are responsible for producing small interfering RNAs, short hairpin RNAs, and micro RNAs.

73. Consider the following statements :

1. Maize can be used for the production of starch.
2. Oil extracted from maize can be a feedstock for biodiesel.
3. Alcoholic beverages can be produced by using maize.

Which of the statements given above is/are correct?

A 1 only

B 1 and 2 only

C 2 and 3 only

D 1, 2 and 3

Solution

The correct answer is 4 i.e. 1, 2 and 3.

- Maize starch is produced by the wet milling process, which involves the grinding of softened maize and separation of corn oil seeds (germs), gluten (proteins), fibers (husk), and finally pure starch.
 - Corn starch is made from maize kernels, which are high in starch. **Hence, Option 1 is correct.**
 - Corn starch has a wide variety of applications. It is used as a thickening agent in soups.

- Corn starch is also used in manufacturing bio-plastics and the preparation of corn syrup.
- The general way to Produce Biodiesel fuels is transesterification of fat or oil triacylglycerols with short-chain alcohol such as methanol or ethanol in the presence of alkaline or acid catalysts.
 - Corn Biodiesel chemically is a mixture of long-chain fatty acid methyl esters (FAMES).
 - Oil extracted from maize that can be converted into ethanol or biodiesel. **Hence, Option 2 is correct.**
- The type of alcohol in the alcoholic drinks we drink is a chemical called ethanol. To make alcohol, you need to put grains, fruits, or vegetables through a process called fermentation. the common source of ethanol is maize and other grains. **Hence, Option 3 is correct.**

74. Among the following organisms, which one does not belong to the class of other three?

A Crab

B Mite

C Scorpion

D Spider

Solution

- Mite, Scorpion, and Spider are Arachnids, while Crab is a Crustacean. **Hence, Option 1 is correct.**
- **Crustacean-**
 - **Phylum:** Arthropoda
 - **Kingdom:** Animalia
 - **Scientific name:** Crustacea
- Crustaceans are generally aquatic and differ from other arthropods in having two pairs of appendages (antennules and antennae) in front of the mouth and paired appendages near the mouth that function as jaws.
- Crabs, lobsters, shrimps, and woodlice are among the best-known crustaceans.

- **Arachnids** any member of the arthropod group that includes spiders, daddy longlegs, scorpions, and the mites and ticks.
 - **Phylum:** Arthropoda
 - **Kingdom:** Animalia
 - **Scientific name:** Arachnida
- All Arachnids have eight legs, and unlike insects, they don't have antennae.
- The bodies of Arachnids are divided into two sections, the cephalothorax in front and the abdomen behind.

75. **The power to increase the number of judges in the Supreme Court of India is vested in:**

A The President of India

B The Parliament

C The Chief Justice of India

D The Law Commission

Solution

- The power to increase the number of judges in the Supreme Court of India is vested in the "**Parliament**".
- In the Indian Constitution, **Parliament is authorized to regulate judges.**
- The number of judges in the Supreme Court, the Bill of 2019, was increased by four judges.
- With this, the total number of judges including the Chief Justice has been increased from 31 to 34.
- Under **Article 124**, the Constitution of India provides for a Supreme Court.

76. Consider the following towns of India :

1. Bhadrachalam
2. Chanderi
3. Kancheepuram
4. Kamal

Which of the above are famous for the production of traditional sarees / fabric?

A 1 and 2 only

B 2 and 3 only

C 1, 2 and 3

D 1, 3 and 4

Solution

The correct answer is 2 i.e 2 and 3 only.

- **Chanderi** is a township in Ashoknagar district of Madhya Pradesh.
 - The main occupation of the people of Chanderi is handicraft.
 - Chanderi sarees are famous all over the world.
 - Chanderi is also famous for Ancient Jain Temples.
- **Kancheepuram** in Tamil Nadu famous for silk Sarees. **Hence, option 2 is correct.**

- 108 holy temples of the Hindu god Vishnu, 15 are located in Kanchipuram.

77. Consider the following pairs :

National Highway : Cities connected

1. NH 4 : Chennai and Hyderabad
2. NH 6 : Mumbai and Kolkata
3. NH 15 : Ahmedabad and Jodhpur

Which of the above pairs is/are correctly matched?

A 1 and 2 only

B 3 only

C 1, 2 and 3

D None

Solution

- NH4 Connects Thane with Chennai.
- NH 6 connects Dhule with Kolkata.
- NH 15 connects Pathankot with Jaisalmer.
- For the purpose of construction and maintenance, roads in India are classified into 4 types.
 - They are - **National Highways (NH), State Highways(SH), Major District Roads and Rural Roads.**

- **National Highways** connect the state capitals, major cities, important ports, railway junctions, etc constitute about 1% of total road length in India.
- **State Highways** join the state capitals with district headquarters and other important towns constitute about 4% of total road length in India.
- **District roads** are the connecting link between District Headquarters and the other important nodes in the district and constitute about 14% of total road length in India.
- **Rural roads** are vital for providing links in rural areas and constitute about 80 per cent of the total road length in India.
- Today India has one of the largest road networks in the world with a total length of 45.3 lakh km.

78. Consider the following international agreements:

1. The International Treaty on Plant Genetic Resources for Food and Agriculture
2. The United Nations Convention to Combat Desertification
3. The World Heritage Convention

Which of the above has / have a bearing on the biodiversity?

A 1 and 2 only

B 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

The correct answer is 4 i.e. 1, 2 and 3.

- **The International Treaty on Plant Genetic Resources for Food and Agriculture-**
 - It was adopted by the 31st session of the Conference of the Food and Agriculture Organization (FAO) of the United Nations on 3rd November 2001.
 - It is also known as the Seed Treaty. India is a signatory to the treaty.

- **The United Nations Convention to Combat Desertification-**

- It is the sole legally binding international agreement linking environment and development to sustainable land management.
- The convention was drafted and opened for signing in 1994.
- It became effective in 1996 after receiving 50 ratifications.
- Aim: Its 197 Parties aim, through partnerships, to implement the Convention and achieve the Sustainable Development Goals.

- **The World Heritage Convention-**

- Created in 1972, the primary mission of the Convention is to identify and protect the world's natural and cultural heritage considered to be of outstanding universal value.
- It is a Convention under the United Nations Educational, Scientific and Cultural Organization (UNESCO).

79. Consider the following statements regarding 'Earth Hour' :

1. It is an initiative of UNEP and UNESCO.
2. It is a movement in which the participants switch off the lights for one hour on a certain day every year.
3. It is a movement to raise the awareness about the climate change and the need to save the planet.

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

Solution

The correct answer is 3 i.e. 2 and 3 only.

Earth Hour

- Organized by: World Wide Fund for Nature (WWF). **Hence, option 1 is incorrect.**
- Earth Hour was started as a lights out event in Sydney, Australia in 2007. It is held every year on the last Saturday of March.

- The idea is to refrain from the use of non-essential lighting to save energy in a symbolic call for environmental protection.
- It encourages people to switch off the lights from 8.30 pm to 9.30 pm as per their local time. **Hence, option 3 is correct.**

80. Which one of the following is the correct sequence of a food chain?

A Diatoms-Crustaceans-Herrings

B Crustaceans-Diatoms-Herrings

C Diatoms-Herrings-Crustaceans

D Crustaceans-Herrings-Diatoms

Solution

The correct answer is Diatoms-Crustaceans-Herrings.

- The food chain starts with a producer.
 - **Phytoplankton** are the primary producers in the oceans.
 - They include- Diatoms (unicellular algae) Cyanobacteria (Bluegreen algae) Coccolithophores (unicellular, eukaryotic protist)
- **Crustaceans** form a very large group of arthropods which include crabs, lobsters, crayfish, shrimp, krill, and barnacles.
- Herrings are fish, and they eat crustaceans. **Hence, option 1 is correct.**

81. **The Partition of Bengal made by Lord Curzon in 1905 lasted until**

A

the First World War when Indian troops were needed by the British and the partition was ended.

B

King George V abrogated Curzon's Act at the Royal Darbar in Delhi in 1911

C

Gandhiji launched his Civil Disobedience Movement

D

the Partition of India, in 1947 when East Bengal became East Pakistan

Solution

The correct answer is King George V abrogated Curzon's Act at the Royal Durbar in Delhi in 1911.

- **Partition of Bengal (1905)** As per Curzon, after the partition, the two provinces would be Bengal (including modern West Bengal, Odisha, and Bihar) and the other one is Eastern Bengal and Assam.
- **1911: King George V visits India -**
 - Owing to mass political protests, the Bengal partition was annulled in 1911.
 - The capital of British India was moved to Delhi from Calcutta (now Kolkata).
 - East and West Bengal were reunited while Bihar and Orissa became separate provinces.

- A separate Assam province was created. **Hence, option 2 is correct.**

82. **The 1929 Session of Indian, National Congress is of significance in the history of the Freedom Movement because the :**

A

attainment of Self-Government was declared as the objective of the Congress

B

attainment of Poorna Swaraj Was adopted as the goal of the Congress

C

Non-Cooperation Movement was launched

D

decision to participate in the Round Table Conference in London was taken

Solution

The correct answer is B.

- **1929 Congress Session-**

- Place - Lahore
- President - Jawahar Lal Nehru
- Indian National Congress, took the **resolution of Poorna Swaraj or Complete Independence.**
- Civil Disobedience movement for complete independence to be launched.
- Congress decided to observe 26th January as the total independence or Purna Swaraj Day. **Hence, option 2 is correct.**

- **1906 Congress Session-**

- Place- Calcutta
- President - Dadabhai Naoroji
- Congress **adopted Swaraj (Self Government) as the Goal** of the Indian people.
- Boycott Movement, Swadeshi & National Education Movement Adopted.
- **Non-Cooperation Movement** In March 1920, Mahatma Gandhi starts the non-violent non-cooperation movement.
- **The Round Table Conference** In response to the inadequacy of the Simon Report, the British Government decided to hold a series of Round Table Conferences in London. The first Round Table Conference convened from 12 November 1930 to 19 January 1931.

83. **With reference to the famous Sattriya dance, consider the following statements:**

1. **Sattriya is a combination of music, dance and drama.**
2. **It is a centuries-old living tradition of Vaishnavites of Assam.**
3. **It is based on classical Ragas and Talas of devotional songs composed by Tulsidas, Kabir and Mirabai.**

Which of the statements given above is /are correct?

A 1 only

B 1 and 2 only

C 2 and 3 only

D 1, 2 and 3

Solution

- Sattriya originated in Sattri, monastery, as a part of the neo-Vaishnavite movement started by **Srimanta Sankardev** in Assam.
- He propagated the “**ek sharan naama dharma**”(chanting the name of one God devotedly).
- It was introduced in the 15th century A.D.
- Sattriya was given the status of classical dance in the year 2000 by the Sangeet Natak Akademi.

- The themes performed are mostly on Radha Krishna and other myths.
- It consists of dhemali, drum playing, known as gayan bayan, where several men play drums, in various talas (rhythms) and also use hand gestures.
- Popular Artists are Guru Jatin Goswami and Sharodi Saikia among others.
- It is based on devotional songs composed by Sankardeva.

84. **Chaitra 1 of the national calendar based on the Saka Era corresponds to which one of the following dates of the Gregorian calendar in a normal year of 365 days?**

A 22 March (or 21st March)

B 15th May (or 16th May)

C 31st March (or 30th March)

D 21st April (or 20th April)

Solution

- **National Calendar of India – Saka Calendar**

- The Saka Era marked the beginning of the Saka Samvat, a historic Hindu calendar which was later introduced as ‘Indian National Calendar’ in 1957.
- The Saka calendar consists of 365 days and 12 months which is similar to the structure of the Gregorian Calendar.
- The first month of the Saka Samvat is Chaitra which begins on March 22 which corresponds with March 21 during the leap year. **Hence, option 1 is correct.**

85. With reference to the Indian history of art and culture, consider the following pairs:

Famous work of sculpture : Site

1. A grand image of Buddha's Mahaparinirvana with numerous celestial musicians above and the sorrowful figures of his followers below : Ajanta
2. A huge image of Varaha Avatar (boar incarnation) of Vishnu, as he rescues Goddess Earth from the deep and chaotic waters, sculpted on rock : Mount Abu
3. "Arjuna's Penance" / "Descent of Ganga" sculpted on the surface of huge boulders : Mamallapuram

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

A 1 and 2 only

B 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

Mahaparinirvana:

- The Mahaparinirvana of the Buddha in Cave 17, with numerous celestial musicians above and the sorrowful figures of his followers below, is one of the grandest expressive scenes with the grieving figure of Ananda near his feet is exceptional.
- Ajanta Caves is a series of Rock-cut caves in the Sahyadri ranges on Waghora river Aurangabad in Maharashtra.
- It consists of 29 Buddhist Caves of which 25 are viharas remaining 4 are Chaityas or prayer hall.
- They were developed between 200 BC to 658AD.
- They were built under the patronage of Vakataka Kings.
- They are abundant with Fresco paintings, outlining in red colour, absence of blue colour, all themed around Buddhism.
- It was designated as a UNESCO World Heritage site in 1983.

Udaygiri caves:

- Udaygiri caves are 20 Rock-cut caves near Vidisha Madhya Pradesh.
- They were built near the fifth century and are the oldest surviving Hindu temples in India.
- The sculpture of Vishnu in his incarnation as the male boar rescuing the mother earth presenting bhudevi to the boar's tusk as depicted in Hindu mythology is present here.
- They were built under the patronage of Gupta rulers.

“Arjuna's Penance”/ “Descent of Ganda”

- The Monolithic sculpture was built under the reign of Pallava King Mahendra Varma located at Sri Sathya Perumal Temple.
- It was built around 600-640 AD.
- It is carved out of two huge boulders 27 meters long and 43 feet high and is the size of a huge blue whale.
- Arjun, practising austerities to please Lord Shiva for obtaining a mighty weapon before the war of Kurukshetra is depicted in these

structures.

- The rock-cut sculpture has been fashioned to portray the penance done by King Bhagiratha, an ancestor of Lord Rama, to bring down the River Ganges from the heavens to the earth.
- Lord Vishnu, sages, celestial nymphs, Nagas, holy deities, Gandharvas, Yakshas, auspicious animals, and other divine entities are carved out in rock sculpture.

86. The Ghadr (Ghadar) was a :

A

revolutionary association of Indians with headquarters at San Francisco

B

nationalist organization operating from Singapore

C

militant organization with headquarters at Berlin

D

communist movement for India's freedom with head-quarters at Tashkent

Solution

- Gadar movement was an early 20th-century movement among Indians in North America to end British rule.
- It originated with the organization of immigrants in California called the Hindustani workers of the Pacific coast with Sohan Singh Bhakna as its president after the outbreak of the first world war.
- Many of the Gadarites return to India to carry out terrorist activities in Central Punjab.
- Lala Hardayal delivered lectures to Americans in intellectual workers in radicals.
- He became the leader of Indian immigrants on the West Coast.
- A weekly periodical called Gadar was also started for propaganda campaigns to spread awareness about British rule in India.

87. **With reference to India's culture and tradition, what is 'Kalaripayattu'?**

A

It is an ancient Bhakti cult of Shaivism still prevalent in some parts of South India

B

It is an ancient style bronze and brasswork still found in southern part of Coromandel area

C

It is an ancient form of dance-drama and a living tradition in the northern part of Malabar

D

It is an ancient martial art and a living tradition in some parts of South India

Solution

- Kalaripayattu is an ancient martial art and a living tradition in some parts of South India.
- Kalaripayattu is practised in Kerala, in contiguous parts of Tamil Nadu and among Malyali community of Malaysia.
- Kalaripayattu includes kicks, grappling preset forms, weaponry and healing methods.
- It is considered to be among the oldest martial arts still in existence.

Hence, option 4 is correct.

88. Consider the following pairs :

1. Garba : Gujarat
2. Mohiniattam : Odisha
3. Yakshagana : Karnataka

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

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

The correct answer is 1 and 3 only.

- The three main components of classical dances are
 - Natya (the dramatic element of the dance i.e. the imitation of characters)
 - Nritta (the dance movements in their basic form)
 - Nritya (expressional component i.e. mudras or gestures)
- **Garba is a folk dance of Gujarat.**
- **Yakshagana is in Karnataka.**

There are eight classical dances in India:

- Bharatanatyam: Tamil Nadu
- Mohiniyattam: Kerala (**Hence 2nd statement is wrong**)
- Kathakali: Kerala
- Kathak: North India (Uttar Pradesh)
- Kuchipudi: Andhra Pradesh
- Sattriya: Assam
- Odissi: Odisha
- Manipuri: Manipur

89. **With reference to Buddhist history, tradition and culture in India, consider the following pairs :**

Famous shrine : Location

- 1. Tabo monastery and temple complex : Spiti Valley**
- 2. Lhotsava Lhakhang temple, Nako : Zanskar Valley**
- 3. Alchi temple complex : Ladakh**

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

A 1 only

B 2 and 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

Tabo monastery

- It is located in the Tabo village of Spiti Valley, Himachal Pradesh, India. **Hence pair 1 is correct.**
- It was founded in 996 CE by the Tibetan Buddhist Lotsawa Rinchen Zangpo on behalf of the king of the western Himalayan Kingdom of Guge, Yeshe-O.

Alchi temple complex

- It is situated in Alchi village of Leh District, Ladakh Autonomous Hill Development Council. **Hence pair 3 is correct.**
- It is administered by the Likir Monastery.
- It was constructed by Guru Rinchen Zangpo between 958 and 1055 AD.

Lhotsava Lhakhang temple, Nako

- It is the 12th century Temple at now Ko in the Kinnaur region of Himachal Pradesh. **Hence pair 2 is not correct.**
- It has been identified as one of the hundred most endangered heritage sites by the words monuments fund.

90. Consider the following statements:

1. 'Bijak' is a composition of the teachings of Saint Dadu Dayal.
2. The Philosophy of Pushti Marg was propounded by Madhvacharya.

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

Solution

Saint Kabir:

- Kabir was a renowned poet and social reformer during that 15 century.
- His writings influenced the Bhakti movement.
- He was against religious discrimination and propagated the presence of one Supreme being in all the religions.
- He founded a religious community known as KabirPanth and his followers referred to as kabirpanthis.

- He was greatly influenced by his Guru Saint Swami Ramanand.
- His works: Sakhi Granth, Anurag Sagar, bijak, kabir granthawali, etc. **Hence statement 1 is not correct.**

Pusti Bhakti is the grace of God and is of four kinds

- Vallabhacharya's philosophy came to be known as Pushtimarga (the path of grace). **Hence statement 2 is not correct.**
- Pravaha Pustibhakti worldly life but move with awareness to attain God Maryada Pustibhakti withdrawing from the world and devote themselves to God Pusti-Pustibhakti enjoying God's grace and attempt to acquire knowledge.
- Suddha-Pustibhakti devotes themselves to the singing and praising of God.

91. A community of people called Manganiyars is well-known for their

- A martial arts in North-East India
- B musical tradition in North-West India**
- C classical vocal music in South India
- D pietra dura tradition in Central India

Solution

- Manganiyars are Muslim communities in Jaisalmer and Barmer districts of Rajasthan.
- They are famous for their classical folk music and the playing of Khartals.
- Khartal is a traditional percussion instrument that is a part of Rajasthani folk music.
- The instrument is named after the Hindi words 'kara' means hand and 'tala' means rhythm — the rhythm of the hand.
- It is used during religious and social celebrations.
- It is made from Sheesham wood or teak and some can also be made of metals.
- Manganiyars are patronized by the Bhati Rajput.
- They still sing on various auspicious occasions and festivals.

- They considered themselves as descendants of the Rajput and renowned as folk Musicians of the Thar desert.

92. **What was/were the object/objects of Queen Victoria's Proclamation (1858)?**

- 1. To disclaim any intention to annex Indian States**
- 2. To place the Indian administration under the British Crown**
- 3. To regulate East India Company's trade with India**

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

Solution

- Queen Victoria's proclamation of 1858 aimed at ending the rule of the company and transferring all the powers to the British crown after the 1857 revolt. **Hence statement 2 is correct.**
- It is aimed at improving the administrative machinery of supervision and control over the Indian government. **Hence statement 3 is not correct.**
- Its objective was to disclaim any intention to annex the Indian States. **Hence statement 1 is correct.**

- The governor-general of India was given the title of Viceroy who became the representatives of the British crown.

Features:

- It provided that India will be a government in the name of the crown and the governor-general was given a new title of Viceroy who will be a representative of the Crown.
- Lord Canning was the first viceroy of India.
- It ended the dual system of government by abolishing the Board of Control and the court of directors and created a new office of the Secretary of state for India.
- The secretary of state was vested with complete authority and control over Indian Administration.
- A 15 member Council of India was established to assist the secretary of state which was an advisory body.

93. Ibadat Khana at Fatehpur Sikri was

A the mosque for the use of Royal Family

B Akbar's private chamber prayer

C the hall in which Akbar held discussions with scholars of various religions

D the room in which the nobles belonging to different religions gathered to discuss religious affairs

Solution

- The Ibadat khana was the meeting house built by Mughal Emperor Akbar at Fatehpur Sikri 1575 AD.
- It was a meeting house together spiritual leaders of different religious grounds and to conduct a discussion on teachings of various religious leaders.
- It is also known as the Hall of prayer.
- It was a place for theologians, mystics, and religious Scholars known for their scholarship and intellectual attainment.
- Akbar also attempted to Reconcile all different religion by creating a new faith called Din-e-Ilahi or the fate of the divine.
- It incorporated elements of various Islamic Sufism, Bhakti, and devotional movements along with some elements from Christianity,

Zoroastrianism, Jainism, etc.

94. In the context of food and nutritional security of India, enhancing the 'Seed Replacement Rates' of various crops helps in achieving the food production targets of the future. But what is/are the constraint/constraints in its wider / greater implementation?

1. There is no National Seeds Policy in place.
2. There is no participation of private sector seed companies in the supply of quality seeds of vegetables and planting materials of horticultural crops.
3. There is a demand-supply gap regarding quality seeds in case of low value and high volume crops.

Select the correct answer using the code given below.

A 1 and 2

B 3 only

C 2 and 3

D None

Solution

- There is a National Seed Policy 2002. Hence 1 is incorrect.
- The private sector seed companies supply quality seeds of vegetables but in a small volume.

- The private sector is the majority supplier of hybrid vegetable seeds. **Hence statement 2 is also incorrect.**
- There is a demand-supply gap recording quality of seeds in case of low value and high volume crops such as wheat and rice.
- Farmers prefer to use their own preserve seeds due to the high demand and supply gap. **Hence statement 3 is correct.**

95. With reference to 'Eco-Sensitive Zones', which of the following statements is/are correct?

1. Eco-Sensitive Zones are the areas that are declared under the Wildlife (Protection) Act, 1972 .
2. The purpose of the declaration of Eco-Sensitive Zones is to prohibit all kinds of human activities, in those zones except agriculture.

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

Solution

- Eco-sensitive zones are ecologically Fragile Areas are areas within 10 km around protected areas to act as a buffer.
- They are notified under section 3 of the **Environment Protection Act 1986** by the Ministry of Environment and Forest. **Hence statement 1 is incorrect.**
- Certain activities are either banned or regulated to protect the environment.

- Agriculture, Horticulture practices by local communities, organic farming, rainwater harvesting, scientific research, tourism, etc. are permitted in the Eco-sensitive zones. **Hence statement 2 is also incorrect.**
- They act as a shock absorber for the protected areas and are a transition zone from high protection areas to lesser protection areas.
- They help in In-situ conservation.
- They minimize forest depletion and man-animal conflict.
- They minimize the impact of urbanization and developmental activities in protected areas.

96. Consider the following statements:

1. Animal Welfare Board of India is established under the Environment (Protection) Act, 1986.
2. National Tiger Conservation Authority is a statutory body.
3. National Ganga River Basin Authority is chaired by the Prime Minister.

Which of the statements given above is/ are correct?

A 1 only

B 2 and 3 only

C 2 only

D 1, 2 and 3

Solution

Animal Welfare Board of India:

- Animal welfare Board of India is a statutory body established under the prevention of cruelty to animals act 1960 in 1962.
- It's an advisory body of the Government of India on animal welfare laws. **Hence statement 1 is incorrect.**
- It consists of 28 members who serve for a term of 3 years.

- The nodal ministry of the board is the Ministry of Environment and Forest.
- Its headquarters is in Ballabgarh in the Faridabad district of Haryana.

National Tiger conservation authority

- **National Tiger conservation authority is a statutory body** under the ministry of environment forest and climate change established in 2005.
- It was constituted under the provisions of the **Wildlife Protection Act 1972**.

National Ganga River Basin Authority

- The national Ganga river basin authority was replaced by the National Ganga Council under River Ganga (Rejuvenation, Protection, and Management) Authorities Order, 2016.
- The National Ganga Council is **chaired by the Prime Minister** and the Union Minister for JalShakti is its vice-chairperson.
- It is responsible for the implementation of the national mission for Clean Ganga.

97. Consider the following pairs : Vitamin Deficiency : Disease

1. Vitamin C : Scurvy
2. Vitamin D : Rickets
3. Vitamin E : Night blindness

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

A 1 and 2 only

B 3 only

C 1, 2 and 3

D None

Solution

- Vitamins are substances that our bodies need to develop and function normally like vitamins A, C, D, E, and K, choline, and vitamin B (thiamin, riboflavin, niacin, pantothenic acid, biotin, vitamin B6, vitamin B12, and folate/folic acid).
- They shore up bones, heal wounds, and bolster your immune system.

- They convert food into energy and repair cellular damage.

Vitamin/ Mineral	Deficiency disease/disorder	Symptoms
Vitamin A	Loss of vision	Poor vision, loss of vision in darkness (night), sometimes complete loss of vision
Vitamin B1	Beriberi	Weak muscles and very little energy to work
Vitamin C	Scurvy	Bleeding gums, wounds take longer time to heal
Vitamin D	Rickets	Bones become soft and bent
Calcium	Bone and tooth decay	Weak bones, tooth decay
Iodine	Goiter	Glands in the neck appear swollen, mental disability in children
Iron	Anaemia	Weakness

98. **There is some concern regarding the nanoparticles of some chemical elements that are used by the industry in the manufacture of various products. Why?**

- 1. They can accumulate in the environment, and contaminate water and soil.**
- 2. They can enter the food chains.**
- 3. They can trigger the production of free radicals.**

Select the correct answer using the code given below.

A 1 and 2 only

B 3 only

C 1 and 3 only

D 1, 2 and 3

Solution

- A nanoparticle is defined as a particle of matter that is between 1 and 100 nanometres (nm) in diameter.
- Nanoparticles are formed through the breaking down of larger particles or by controlled assembly processes.
- Nanoparticles are used in the manufacture of scratchproof eyeglasses, crack-resistant paints, anti-graffiti coatings for walls,

transparent sunscreens, stain-repellent fabrics, self-cleaning windows, and ceramic coatings for solar cells.

- Nanoparticles can also be used in stronger, lighter, cleaner, and “smarter” surfaces and systems.
- The toxicity of nanoparticles depends on their chemical composition.
- The properties of particles may change in unpredictable ways at nanoparticle form.

Impact of Nanoparticles:

- They can accumulate in the environment, and contaminate water and soil.
- They can enter food chains.
- They can trigger the production of free radicals.
- Nanoparticles may cross cell membranes.
- Nanoparticles can reach the blood and may reach other target sites such as the liver, heart, or blood cells and may cause damage to cells as they stay for a persistently long time.

99. Which of the following organizations brings out the publication known as 'World Economic Outlook'?

A The International Monetary Fund

B The United Nations Development Programme

C The World Economic Forum

D The World Bank

Solution

- The World Economic Outlook is published by the **International Monetary Fund** twice a year. (April and October)
- It analyses and predicts near and medium-term growth prospects.
- Countries are compared based on GDP growth rate, or absolute GDP.

World Economic Outlook

- According to the October update of the World Economic Outlook 2020, India's GDP will witness a contraction of over 10%.
- Global growth would contract by 4.4% in 2020 and bounce back to 5.2% in 2021.
- India is likely to bounce back with an 8.8% growth rate in 2021, thus regaining the position of the fastest-growing emerging

economy, surpassing China's projected growth rate of 8.2%.

- China is the only country to show a positive growth rate of 1.9% in 2020.

100. **With reference to Union Budget, which of the following, is/are covered under Non-Plan Expenditure?**

1. **Defence -expenditure**
2. **Interest payments**
3. **Salaries and pensions**
4. **Subsidiess,**

Select the correct answer using the code given below.

A 1 only

B 2 and 3 only

C 1, 2, 3 and 4

D None

Solution

- **All expenditures which are done in the name of planning were called plan expenditures while the rest are placed under non-plan expenditures.**
- **The government of India has now scrapped the plan and non-plan expenditures in budget exercise and are replaced by capital and revenue spending classifications.**

Non-plan expenditure is spread across:

- Expenditure incurred on Defence Services
- Interest payments for debt Subsidies (food, fertilisers, etc.)
- Salaries and pensions of employees in various government services
- Economic services by the government such as Agriculture, Industry, Power, Science & Technology,
- Loans and grants
- Social services such as healthcare, education, social security etc.
- Police



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