



1 Consider the following statements about India's forex reserves.

1. Foreign exchange reserves of India are RBI's holdings of cash, bank deposits, bonds, and other financial assets denominated in currencies other than India's national currency.
2. RBI can trade India's forex reserves in the market to cut down the fluctuation of Indian currency in the international market
3. The forex reserves help India maintain liquidity in case of a Balance of Payments (BoP) crisis.
4. RBI incurs no opportunity cost in maintaining or expanding the forex reserves.

◦ Select the correct answer using the codes below.

- A. 1, 2 and 3 only ✓
- B. 2, 3 and 4 only
- C. 2 and 3 only ✗
- D. 1 and 4 only

◦ Your Answer : C

◦ Correct Answer : A

◦ **Answer Justification :**

Justification: Statement 1: As of September 2017, India's foreign exchange reserves are mainly composed of US dollar in the forms of US government bonds and institutional bonds.[5] with nearly 5% of forex reserves in gold.

The FCAs also include investments in US Treasury bonds, bonds of other selected governments and deposits with foreign central and commercial banks.

Statement 2: We have covered this concept earlier.

Statement 3: Often there is a tendency to keep forex reserves equal to the value of six months of imports.

However, foreign exchange reserves, as Kaushik Basu emphasizes, are required to finance only the current account deficits, and not imports as a whole. By this yardstick, the foreign exchange reserves with the RBI are huge.

If we take current account deficit at 7.5% of GDP (which is extremely high), then there is a need of about \$85 billion of foreign exchange reserves. The actual reserves are \$400 billion.

Statement 4: India holds close to \$400 billion of forex reserves. Experts say that if instead of maintaining large forex reserves, the funds are used to finance, say, infrastructure projects, the returns will be much higher. So, the accumulation of forex, without investing in other opportunities, incurs a significant opportunity cost for India.

Q Source: Chapter 3: 11th NCERT: Economics

2 The government has recently banned imports of petcoke, apart from certain exemptions, on account of

1. Diversion of petcoke for non-industrial purpose
2. Rising pollution levels in major cities



3. Indiscriminate use of petcoke by cement companies

- Which of the above is/are correct?

- A. 1 only
- B. 2 and 3 only ✖
- C. 2 only ✔
- D. 1, 2 and 3

- Your Answer : B

- Correct Answer : C

- **Answer Justification :**

Background: As the world's largest consumer of petcoke, India imports over half its annual petcoke consumption of about 27 million tonnes, mainly from the United States. Local producers include Indian Oil Corp, Reliance Industries and Bharat Petroleum Corp.

India is the world's biggest consumer of petroleum coke, which is a dark solid carbon material that emits 11% more greenhouse gases than coal, according to the Carnegie-Tsinghua Center for Global Policy.

Justification: Statement 1: Such diversion is seen in the case of Urea, not petcoke.

Statement 2: Import of Petcoke is now allowed for only cement, lime kiln, calcium carbide and gasification industries, when used as the feedstock or in the manufacturing process on actual user condition.

Cement companies, which account for about three-fourths of the country's petcoke use, were impacted by petcoke-related policy flip-flops, which began with a Supreme Court judgment banning use of the fuel in and around New Delhi last year.

Usage of petcoke, a dirtier alternative to coal, in the energy-hungry country has come under scrutiny due to rising pollution levels in major cities.

India's imports of petcoke have declined this year as cement companies substituted some of their petcoke with coal to avoid production delays due to pollution-related policy changes.

Q Source

<https://www.livemint.com/Politics/QMz7m5wPxmNjIvrsCFR0LI/Government-bans-petcoke-import-for-use-as-fuel.html>

3 Consider the following statements. The Directive principles can lead to a constitutional conflict between

1. The President and the Parliament because the President is not obliged to sign an ordinary law sent by the Parliament which violates the Directive principles
2. Centre and the states if the latter tries to implement directive principles via executive schemes and programmes because states cannot implement directive principles



- Which of the above is/are correct?

A. 1 only ✓
B. 2 only
C. Both 1 and 2
D. None

- Your Answer : A
- Correct Answer : A

- **Answer Justification :**

Justification: Statement 2: Many states implement directive principles, for e.g. UP gives unemployment allowance to the youth; disburses financial support for the old aged and widows by several schemes. So, 2 is wrong.

K Santhanam has pointed out that the Directives can lead to a constitutional conflict also (a) between the President and the Prime Minister, and (b) between the governor and the chief minister.

When the Prime Minister gets a bill (which violates the Directive Principles) passed by the Parliament, the president may reject the bill on the ground that these principles are fundamental to the governance of the country and hence, the ministry has no right to ignore them.

The same constitutional conflict may occur between the governor and the chief minister at the state level.

Q Source: Chapter 8: Indian Polity: M Laxmikanth

- 4 Which of the following are related to Milankovitch oscillations of earth?

1. Shape of the Earth's orbit around the Sun
2. Glaciation cycles on earth

- Which of the above is/are correct?

A. 1 only
B. 2 only ✗
C. Both 1 and 2 ✓
D. None

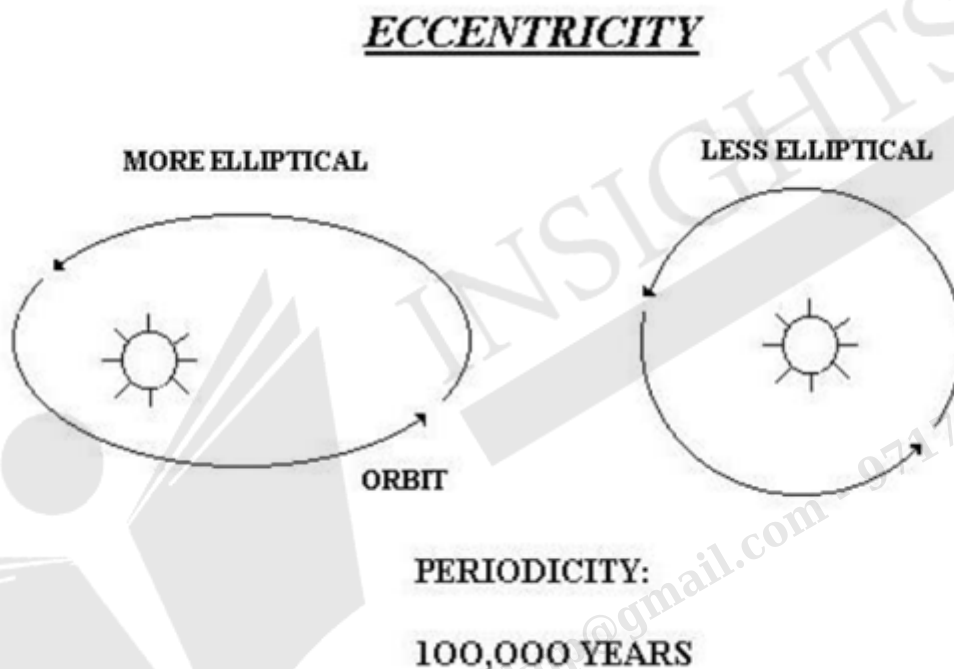
- Your Answer : B
- Correct Answer : C

- **Answer Justification :**

Justification: Milankovitch Cycles occur in three phases.

Statement 1: The first of the three Milankovitch Cycles is the Earth's eccentricity. Eccentricity is, simply, the shape of the Earth's orbit around the Sun. This constantly fluctuating, orbital shape ranges between more and less elliptical (0 to 5% ellipticity) on a cycle of about 100,000 years.

These oscillations, from more elliptic to less elliptic, are of prime importance to glaciation in that it alters the distance from the Earth to the Sun, thus changing the distance the Sun's short wave radiation must travel to reach Earth, subsequently reducing or increasing the amount of radiation received at the Earth's surface in different seasons.

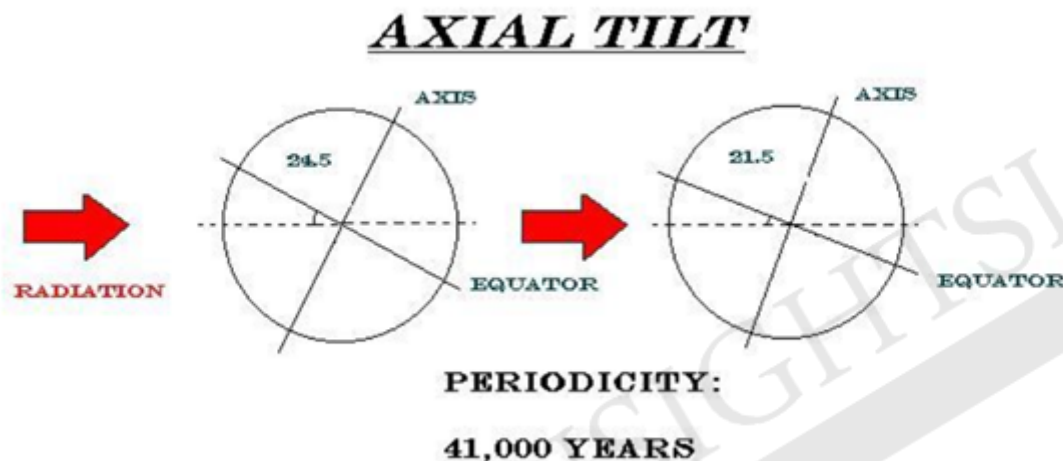


Statement 2: The episodic nature of the Earth's glacial and interglacial periods within the present Ice Age (the last couple of million years) have been caused primarily by cyclical changes in the Earth's circumnavigation of the Sun.

Variations in the Earth's eccentricity, axial tilt, and precession comprise the three dominant cycles, collectively known as the Milankovitch Cycles for Milutin Milankovitch, the Serbian astronomer and mathematician who is generally credited with calculating their magnitude.

Taken in unison, variations in these three cycles creates alterations in the seasonality of solar radiation reaching the Earth's surface. These times of increased or decreased solar radiation directly influence the Earth's climate system, thus impacting the advance and retreat of Earth's glaciers.

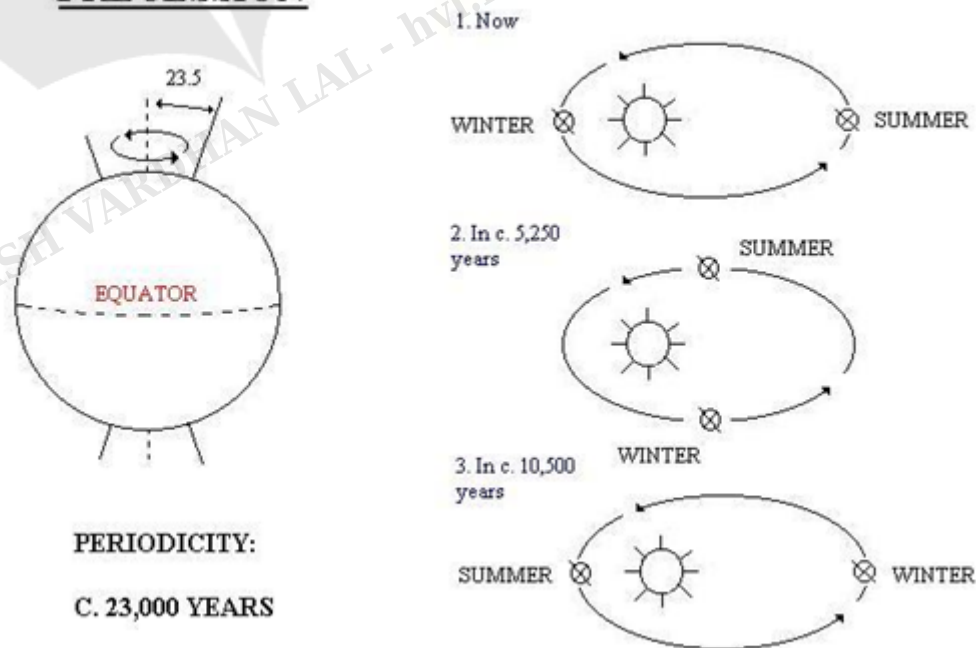
Learning: Axial tilt, the second of the three Milankovitch Cycles, is the inclination of the Earth's axis in relation to its plane of orbit around the Sun. Oscillations in the degree of Earth's axial tilt occur on a periodicity of 41,000 years from 21.5 to 24.5 degrees.



The third and final of the Milankovitch Cycles is Earth's precession. Precession is the Earth's slow wobble as it spins on axis. This wobbling of the Earth on its axis can be likened to a top running down, and beginning to wobble back and forth on its axis.

The precession of Earth wobbles from pointing at Polaris (North Star) to pointing at the star Vega. When this shift to the axis pointing at Vega occurs, Vega would then be considered the North Star. This top-like wobble, or precession, has a periodicity of 23,000 years.

PRECESSION



Q Source: Revision: Previous test syllabus: 11th NCERT: Fundamentals of Physical Geography

5 Consider the following about the Trade Receivables Discounting System (TReDS).

1. A primary objective of the TReDS is to increase access to fresh sources of funding for the MSMEs



from domestic and foreign corporate.

2. TReDS would facilitate e-marketing for MSME products in India and abroad by improving the supply chain and last-mile product risk management.

- Which of the above is/are correct?

A. 1 only
B. 2 only
C. Both 1 and 2
D. None ✓

- Your Answer : D

- Correct Answer : D

- **Answer Justification :**

Background: MSMEs, despite the important role played by them in the economic fabric of the country, continue to face constraints in obtaining adequate finance, particularly in terms of their ability to convert their trade receivables into liquid funds.

In order to address this pan-India issue through setting up of an institutional mechanism for financing trade receivables, the Reserve Bank of India had published a concept paper on "Micro, Small & Medium Enterprises (MSME) Factoring-Trade Receivables Exchange" in March 2014.

Learning: The scheme for setting up and operating the institutional mechanism for facilitating the financing of trade receivables of MSMEs from corporate buyers through multiple financiers will be known as Trade Receivables Discounting System (TReDS).

The objective of the TReDS is to facilitate financing of invoices / bills of MSMEs drawn on corporate buyers by way of discounting by financiers.

The TReDS will facilitate the discounting of both invoices as well as bills of exchange. Further, as the underlying entities are the same (MSMEs and corporate buyers) the TReDS could deal with both receivables factoring as well as reverse factoring so that higher transaction volumes come into the system and facilitate in better pricing.

Q Source: https://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=2860

<https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/treds-platform-gets-going-47-private-companies-banks-psus-on-board/articleshow/62431874.cms>

- 6 Which of the following is considered absolutely morally corrupted by the ideology of Pacifism?

1. Any form of coercion or violence to achieve good ends
2. Raising and maintaining armed forces on one's soil

- Which of the above is/are correct?

A. 1 only ✗
B. 2 only
C. Both 1 and 2



D. None ✓

- Your Answer : A
- Correct Answer : D

◦ **Answer Justification :**

Justification: Pacifism preaches opposition to war or violence as a means of settling disputes. But, it covers a spectrum of views ranging from a preference for diplomacy in resolving international disputes to absolute opposition to the use of violence, or even force, in any circumstance. So, both 1 and 2 are wrong.

Pacifism may be based on principle or pragmatism.

Principled pacifism springs from the belief that war, deliberate lethal force, violence or any form of coercion is morally wrong. Pragmatic pacifism does not adhere to such an absolute principle but holds that there are better ways of resolving a dispute than war, or considers the benefits of a war to be outweighed by the costs.

'Dove' or 'dovish' are informal terms used to describe people who seek to avoid war. The terms allude to the placid nature of the dove. Some people termed dovish would not view their position as pacifist, for they would consider war to be justifiable in some circumstances. The opposite of a dove is a 'hawk' or a warmonger.

Some pacifists, while opposing war, are not opposed to all use of coercion, physical force against people or destruction of property. Anti-militarists, for example, are specifically opposed to the modern nation-states' military institutions rather than to 'violence' in general. Other pacifists follow principles of non-violence, believing that only non-violent action is acceptable.

Q Source: Chapter 9: 11th NCERT: Political Theory

7 Consider the following statements.

1. In the Champakam Dorairajan case (1951), the Supreme Court ruled that in case of any conflict between the Fundamental Rights and the Directive Principles, the latter would prevail.
2. In the Golaknath case (1967). In that case, the Supreme Court ruled that the Parliament cannot take away or abridge any of the Fundamental Rights, even for the implementation of the Directive principles, which are 'sacrosanct' in nature.

- Which of the above is/are correct?
 - A. 1 only
 - B. 2 only ✓
 - C. Both 1 and 2
 - D. None

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**



Justification: Statement 1: In the Champakam Dorairajan case (1951), the Supreme Court ruled that in case of any conflict between the Fundamental Rights and the Directive Principles, the former would prevail. It declared that the Directive Principles have to conform to and run as subsidiary to the Fundamental Rights.

Statement 2: The above situation underwent a major change in 1967 following the Supreme Court's judgement in the Golaknath case (1967). In that case, the Supreme Court ruled that the Parliament cannot take away or abridge any of the Fundamental Rights, which are 'sacrosanct' in nature. In other words, the Court held that the Fundamental Rights cannot be amended for the implementation of the Directive Principles.

Statement 3: In the Kesavananda Bharati case (1973), the Supreme Court declared a particular provision of Article 31C as unconstitutional and invalid on the ground that judicial review is a basic feature of the Constitution and hence, cannot be taken away.

Statement 4: In this landmark judgment, the Supreme Court declared that the rights of citizens to move the court for violation of Articles 14, 21 and 22 would remain suspended during emergencies.

Q Source: Chapter 8, 9 and 10: Indian Polity: M Laxmikanth

8 Which of these is NOT typical of Western version of Secularism?

- A. The state does not usually aid any religious institution.
- B. The state does not hinder the activities of religious communities, as long as they are within the broad limits set by the law of the land.
- C. No policy of the state can have an exclusively religious rationale.
- D. The state does not stop any kind of discrimination meted by a member of a religious community to other citizens of the state. ✓

- Your Answer : D
- Correct Answer : D

◦ **Answer Justification :**

Justification: Option D: If purely religious matters are involved, the state may not intervene; for e.g. if Sikhs ban the entry of Europeans in their shrines, the state of Canada may not consider it a violation of the fundamental rights of its citizens. But, if suppose a Sikh meets a European with violence, the state of Canada has the right to intervene in this matter.

Learning: All secular states have one thing in common: they are neither theocratic nor do they establish a religion. However, in most commonly prevalent conceptions, inspired mainly by the American model, separation of religion and state is understood as mutual exclusion: the state will not intervene in the affairs of religion and, in the same manner, religion will not interfere in the affairs of the state.

- No religious classification can be the basis of any public policy. If this happened there is illegitimate intrusion of religion in the state.



- The state cannot give financial support to educational institutions run by religious communities. Nor can it hinder the activities of religious communities, as long as they are within the broad limits set by the law of the land.
- For example, if a religious institution forbids a woman from becoming a priest, then the state can do little about it. If a religious community excommunicates its dissenters, the state can only be a silent witness.
- If a particular religion forbids the entry of some of its members in the sanctum of its temple, then the state has no option but to let the matter rest exactly where it is. On this view, religion is a private matter, not a matter of state policy or law.
- This common conception interprets freedom and equality in an individualist manner.

Q Source: Chapter 8: 11th NCERT: Political Theory

9 If Nation A grants Nation B the status of “Most favoured Nation (MFN)”, then

1. Both nations will be bound to allow free movement of labour and capital between them.
2. Nation A will be bound to reduce all tariffs to zero on goods imported from Nation B.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None ✓

◦ Your Answer : D

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Under the WTO agreements, countries cannot normally discriminate between their trading partners – a treatment which is known as “Most favoured Nation (MFN)” status.

In general, MFN means that every time a country lowers a trade barrier or opens up a market, it has to do so for the same goods or services from all its trading partners — whether rich or poor, weak or strong. It is one of the core principles of WTO.


Even if Nation A allows Nation B to be a MFN partner, it does not mean they will come under free trade regime, or will merge to be a common market. It just implies that now Nation A will be treating Nation B in the same way as it treats its other WTO partners.

Q Source: Additional Research: Chapter 11: Shankar Ganesh: Economics

10 With reference to the Kanyashree scheme of the West Bengal government, consider the following statements.

1. It is a conditional cash transfer scheme aiming at improving the status and well being of the girl child.
2. It aims at reduction in child marriage.
3. It received the United Nations Public Service Award in 2017.

◦ Select the correct answer using the codes below.

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3 

◦ Your Answer :

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Kanyashree is a conditional cash transfer scheme aiming at improving the status and well being of the girl child by incentivising schooling of teenage girls and delaying their marriages until the age of 18. It received the United Nations Public Service Award last year.

Performance of the scheme: Through the initiative, cash was deposited into the bank account of girls for every year they remained in school and were unmarried. This initiative led to a “drastic reduction in child marriage, increase in female education and female empowerment.”

West Bengal government has announced that there would not be any ceiling for a family’s annual earnings to be a beneficiary under the UN award winning Kanyashree scheme. Currently, girls who belong to families with annual family income not more than Rs 1.20 lakh is entitled to get the benefits.



Q Source:

<http://www.insightsonindia.com/2018/08/16/insights-daily-current-affairs-16-august-2018/>

11 With reference to Laboratory for the Conservation of Endangered Species (LaCONES), consider the following statements.

1. It is India’s only research facility engaged in conservation and preservation of wildlife and its resources.
2. LaCONES has developed universal DNA based marker for identification of wild animals from parts and remains.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only 
- C. Both 1 and 2 
- D. None

◦ Your Answer : B



- Correct Answer : C

- **Answer Justification :**

Learning: In a step that would further the cause of conservation of endangered and protected animals, India has got its first scientific and most modern national wildlife genetic resource bank.

It is located in Hyderabad at the Laboratory for the Conservation of Endangered Species (LaCONES), a research wing of the Centre for Cellular and Molecular Biology (CCMB).

The state-of-the-art bank is equipped with sophisticated equipment to preserve the genetic resources that could be utilised to virtually resurrect an animal species in case it goes extinct.

The bank that contains genetic resources of about 250 wildlife species.

The Genetic Resource Bank will store genetic material of Indian species. It will also help in protecting India's biodiversity and environment.

Achievements of Laboratory for the Conservation of Endangered Species (LaCONES):

- It is India's only research facility engaged in conservation and preservation of wildlife and its resources. It was established in 1998 with the help of Central Zoo Authority of India, CSIR and the government of Andhra Pradesh.
- LaCONES has helped the Mouse Deer Conservation Breeding Centre at Nehru Zoological Park to increase the population of mouse deer in Telangana forests. Amrabad forest, for instance, ran out of mouse deer and through the efforts of LaCONES, the animal is now reintroduced in Amrabad Tiger Reserve.
- Earlier, LaCONES has developed universal DNA based marker for identification of wild animals from parts and remains. It has a DNA banking of more than 250 species of mammals, birds and reptiles.

Q Source:

<http://www.insightsonindia.com/2018/08/13/insights-daily-current-affairs-13-august-2018/>

12 Consider the following statements.

1. Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) between all the member nations of the WTO sets down minimum standards for the regulation by national governments of many forms of intellectual property (IP).
2. Agreement on Trade-Related Investment Measures (TRIMs) are rules that restrict preference of domestic firms and thereby enable international firms to operate more easily within foreign markets.

- Which of the above is/are correct?

- A. 1 only ✗
- B. 2 only
- C. Both 1 and 2 ✓
- D. None

- Your Answer : A
- Correct Answer : C

◦ **Answer Justification :**

Justification: The idea of TRIMS is to give equal footing to both foreign and domestic investment, and not discriminate unreasonably against foreign investment only because it is "foreign".

There are specific provisions in TRIMS to tackle such cases. Take the case of "Foreign exchange restrictions" that would be imposed on foreign investment if TRIMS was not there; meaning that the state could say that Firm X can only import upto say \$100 million worth of supplies or so. But, TRIMS is against such bias that is not applicable to domestic firms.

"The provision says that "Measures restricting the importation by an enterprise of products (parts and other goods) used in or related to its local Production by restricting its access to foreign exchange to an amount related to the foreign exchange inflows attributable to the enterprise would constitute violation of GATT Article XI:1"

Statement 1: Specifically, TRIPS requires WTO members to provide copyright rights, covering content producers including performers, producers of sound recordings and broadcasting organizations; geographical indications, including appellations of origin; industrial designs; integrated circuit layout-designs; patents; new plant varieties; trademarks; trade dress; and undisclosed or confidential information.

TRIPS also specifies enforcement procedures, remedies, and dispute resolution procedures. Protection and enforcement of all intellectual property rights shall meet the objectives to contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

Statement 2: The Agreement on Trade-Related Investment Measures (TRIMs) are rules that apply to the domestic regulations a country applies to foreign investors, often as part of an industrial policy.

TRIMs are rules that restrict preference of domestic firms and thereby enable international firms to operate more easily within foreign markets. Policies such as local content requirements and trade balancing rules that have traditionally been used to both promote the interests of domestic industries and combat restrictive business practices are now banned.

Q Source: Additional Research: Chapter 11: Shankar Ganesh: Economics

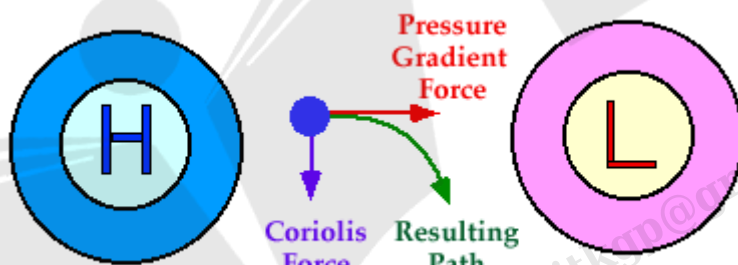
13 Geotrophic winds are generated when these two forces are balanced with each other:

- A. Frictional force and pressure gradient force
- B. Horizontal shear force and pressure gradient force
- C. Pressure gradient force and coriolis force ✓
- D. Coriolis force and horizontal shear force

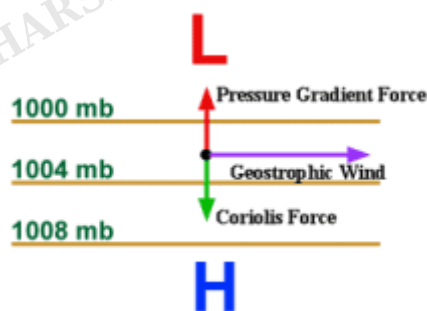
- Your Answer : C
- Correct Answer : C

◦ **Answer Justification :**

Learning: An air parcel initially at rest will move from high pressure to low pressure because of the pressure gradient force (PGF). However, as that air parcel begins to move, it is deflected by the Coriolis force to the right in the northern hemisphere (to the left on the southern hemisphere). As the wind gains speed, the deflection increases until the Coriolis force equals the pressure gradient force. At this point, the wind will be blowing parallel to the isobars. When this happens, the wind is referred to as geostrophic.



The movie below illustrates the process mentioned above, while the diagram at right shows the two forces balancing to produce the geostrophic wind. Winds in nature are rarely exactly geostrophic, but to a good approximation, the winds in the upper troposphere can be close. This is because winds are only considered truly geostrophic when the isobars are straight and there are no other forces acting on it -- and these conditions just aren't found too often in nature.



Q Source: Revision: 11th NCERT: Fundamentals of Physical Geography

14 Which of these is/are the advantages of the Zero-tillage system?

1. No nitrogen needs to be applied to the soil.
2. Mineralization of the soil increases significantly improving soil productivity.
3. Surface runoff is reduced due to presence of mulch.



- Select the correct answer using the codes below.

- A. 1 and 2 only
- B. 2 only ❌
- C. 3 only ✅
- D. 1, 2 and 3 only

- Your Answer : B
- Correct Answer : C

- **Answer Justification :**

Justification: No-till farming (also called zero tillage or direct drilling) is a way of growing crops or pasture from year to year without disturbing the soil through tillage.

No-tillage (also zero tillage) is a minimum tillage practice in which the crop is sown directly into soil not tilled since the harvest of the previous crop.

Advantages are:

- Zero tilled soils are homogenous in structure with more number of earthworms.
- Organic matter content increases due to less mineralization (decomposition or oxidation of the chemical compounds in organic matter into plant-accessible forms). So, 2 is wrong.
- Surface runoff is reduced due to presence of mulch.

Disadvantages are:

- Higher amount of nitrogen has to be applied for mineralization of organic-matter in zero tillage. So, 1 is wrong.
- Perennial weeds may be a problem
- High number of volunteer plants and build-up of pests.

Q Source: Based on the topics of tillage and mulching covered in previous tests

15 The Lok Sabha has passed the Arbitration and Conciliation (Amendment) Bill, 2018. Consider the following about it.

1. The Act contains provisions to deal with domestic and international arbitration.
2. The Bill seeks to establish an independent body called the Arbitration Council of India (ACI) for the promotion of arbitration.



3. Under the Bill, the judiciary is now prohibited from designating arbitral institutions for the appointment of arbitrators, which was allowed in the Arbitration and Conciliation Act, 1996.

◦ Select the correct answer using the codes below.

- A. 1 only ✗
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1 and 2 only ✓

◦ Your Answer : A

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: It will amend the Arbitration and Conciliation Act, 1996. The Act contains provisions to deal with domestic and international arbitration, and defines the law for conducting conciliation proceedings.

Key features of the Bill are:

- Arbitration Council of India: The Bill seeks to establish an independent body called the Arbitration Council of India (ACI) for the promotion of arbitration, mediation, conciliation and other alternative dispute redressal mechanisms.
- Its functions include: (i) framing policies for grading arbitral institutions and accrediting arbitrators, (ii) making policies for the establishment, operation and maintenance of uniform professional standards for all alternate dispute redressal matters, and (iii) maintaining a depository of arbitral awards (judgments) made in India and abroad.
- Composition of the ACI: The ACI will consist of a Chairperson who is either: (i) a Judge of the Supreme Court; or (ii) a Judge of a High Court; or (iii) Chief Justice of a High Court; or (iv) an eminent person with expert knowledge in conduct of arbitration. Other members will include an eminent arbitration practitioner, an academician with experience in arbitration, and government appointees.
- Appointment of arbitrators: Under the 1996 Act, parties were free to appoint arbitrators. In case of disagreement on an appointment, the parties could request the Supreme Court, or the concerned High Court, or any person or institution designated by such Court, to appoint an arbitrator.
- Role of courts: Under the Bill, the Supreme Court and High Courts may now designate arbitral institutions, which parties can approach for the appointment of arbitrators. For international commercial arbitration, appointments will be made by the institution designated by the Supreme Court. For domestic arbitration, appointments will be made by the institution designated by the concerned High Court. In case there are no arbitral institutions available,



the Chief Justice of the concerned High Court may maintain a panel of arbitrators to perform the functions of the arbitral institutions. An application for appointment of an arbitrator is required to be disposed of within 30 days.

- Relaxation of time limits: Under the 1996 Act, arbitral tribunals are required to make their award within a period of 12 months for all arbitration proceedings. The Bill proposed to remove this time restriction for international commercial arbitrations.

Learning: Arbitration is a settlement of dispute between two parties to a contract by a neutral third party i.e. the arbitrator without resorting to court action. The process can be tailored to suit parties' particular needs.

Arbitrators can be chosen for their expertise. It is confidential and can be speedier and cheaper than court. There are limited grounds of appeal. Arbitral awards are binding and enforceable through courts.

Q Source:

<http://www.insightsonindia.com/2018/08/13/insights-daily-current-affairs-13-august-2018/>

16 The world's largest 3-D printed reef has been submerged at Summer Island Maldives. The purpose of doing so was primarily

- A. To promote tourism in the region
- B. To help coral reefs survive climate change
- C. To fight invasive seaweed species
- D. To improve coastal management

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Learning: This is hoped to be a new technology-driven method to help coral reefs survive a warming climate.

The artificial reef, assembled with hundreds of ceramic and concrete modules, was submerged at Summer Island's 'Blue Lagoon' — a sandy part of the lagoon, where the resort hopes to create a new coral reef ecosystem.

The technology allows to mimic the complexity of natural reef structures, so as to design artificial reefs that closely resemble those found in nature. This will be a more effective way of growing and restoring corals.

The experiment was aimed at increasing their resilience and longevity against the ongoing environmental rampage.

The ceramic structures built closely resemble the original structures found in the Maldives. Ceramic



itself is made of calcium carbonate, the same inert substance that occurs in abundance in corals.

Bleaching poses the most potent danger to corals, which used to abound in the Pacific Ocean and colour its waters in different hues. With imminent threats like increasing temperatures of water bodies and disposal of chemical wastes in oceans, 3D printing technology is hoped to offer a safety net for corals, for posterity.

Q Source:

<https://www.prnewswire.com/news-releases/worlds-largest-3-d-printed-reef-installed-at-summer-island-maldives-300698533.html>

17 Consider the following statements.

Assertion (A): Volcanism can induce long-term climate change.

Reason (R): Volcanic eruption injects considerable amount of ash in the atmosphere.

- In the context of the above, which of these is correct?
 - A. A is correct, and R is an appropriate explanation of A. ✗
 - B. A is correct, but R is not an appropriate explanation of A. ✓
 - C. A is correct, but R is incorrect.
 - D. Both A and R are incorrect.

- Your Answer : A
- Correct Answer : B

◦ **Answer Justification :**

Justification: Volcanoes can impact climate change. During major explosive eruptions huge amounts of volcanic gas, aerosol droplets, and ash are injected into the stratosphere. Injected ash falls rapidly from the stratosphere -- most of it is removed within several days to weeks -- and has little impact on climate change.

But volcanic gases like sulfur dioxide can cause global cooling, while volcanic carbon dioxide, a greenhouse gas, has the potential to promote global warming.

Sulfate aerosols can cool the climate and deplete Earth's ozone layer.

Volcanic gases react with the atmosphere in various ways; the conversion of sulfur dioxide to sulfuric acid has the most significant impact on climate.

Volcanic gases react with the atmosphere in various ways; the conversion of sulfur dioxide (SO₂) to sulfuric acid (H₂SO₄) has the most significant impact on climate.

The most significant climate impacts from volcanic injections into the stratosphere come from the conversion of sulfur dioxide to sulfuric acid, which condenses rapidly in the stratosphere to form fine sulfate aerosols. The aerosols increase the reflection of radiation from the Sun back into space, cooling the Earth's lower atmosphere or troposphere.

Several eruptions during the past century have caused a decline in the average temperature at the Earth's surface of up to half a degree (Fahrenheit scale) for periods of one to three years.



The climactic eruption of Mount Pinatubo on June 15, 1991, was one of the largest eruptions of the twentieth century and injected a 20-million ton (metric scale) sulfur dioxide cloud into the stratosphere at an altitude of more than 20 miles.

Q Source: Revision: 11th NCERT: Fundamentals of Physical Geography

18 Two nations at "Purchasing Power Parity" are likely to have

1. Equal currency value in International market
2. Equal Forex reserves
3. Equal national income when measured in a common currency

◦ Select the correct answer using the codes below.

- A. 1 and 2 only
- B. 3 only ✓
- C. 1 and 3 only
- D. 2 and 3 only

◦ Your Answer : B

◦ Correct Answer : B

◦ **Answer Justification :**

Concept: Purchasing power parity is used worldwide to compare the income levels in different countries. PPP thus makes it easy to understand and interpret the data of each country.

The PPP theory aims to determine the adjustments needed to be made in the exchange rates of two currencies to make them at par with the purchasing power of each other.

In other words, the expenditure on a similar commodity must be same in both currencies when accounted for exchange rate. The purchasing power of each currency is determined in the process.

Justification: Statement 3: Suppose sandwich is the only good made in both India and USA.

- It costs Rs. 120 in India and \$2 in USA.
- Suppose the rupee-dollar exchange rate is 60. If that is the case, then the market value of sandwich in both nations is the same. You can buy the same amount of sandwich from 2 dollars as you can with 120 rupees.
- If sandwich was too cheap in India, say Rs. 50, then the two nations had different purchasing power.
- If income levels in both India and USA are same, a US national can actually buy less sandwiches than an Indian national, as Sandwich is relatively costlier in USA than India.



Statement 1 and 2: In the above case, even though India and USA are at purchasing power parity, they need not have equal exchange rates or equal forex reserves. So, both 1 and 2 are wrong.

Q Source: Additional Research: Page 2: Xth Economics NCERT: Understanding Economic Development

19 Which of these technologies is at the core of Google's Project Navlekha?

- A. Geographical Information System
- B. Artificial Intelligence ✓
- C. Nano-technology
- D. Self-combustion Engines

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Learning: Navlekha in Sanskrit means "a new way to write."

Google is using its expertise in artificial intelligence for Project Navlekha, using which, it will quickly render any PDF with Indian language content into editable text, overcoming issues that usually occur when you try to copy text in Indian languages from a PDF.

The project aims to bring 135,000 local language publishers online by making web hosting smooth and simple.

- It will allow local publishers who do not have websites to make their offline content fit for online publishing in less than a minute. It also comprises tool that uses Artificial Intelligence (AI) to allow publishers to simply scan documents or PDFs and create instant web pages on the platform.
- The project will provide a handy online publishing tool for local language newspapers and content companies—90% of which do not have a website.
- The registered publishers on Navlekha will also be provided with free web hosting, along with a branded domain for three years. They'll also have AdSense support to begin monetising their content.
- Under Navlekha project, Google will help these publishers to receive training and support and a branded page domain for the first three years.

Q Source:

<http://www.insightsonindia.com/2018/08/30/insights-daily-current-affairs-30-august-2018/>



20 National Clean Air Program has which of the following objectives/strategies?

1. Augmentation of existing air quality monitoring network by increasing number of existing manual and continuous monitoring stations
2. Introducing rural monitoring stations and identifying alternative technology for real-time monitoring network in existing monitoring air-quality monitoring stations

◦ Which of the above is/are correct?

- A. 1 only ✗
- B. 2 only
- C. Both 1 and 2 ✓
- D. None

◦ Your Answer : A

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: The intended goal of the programme is to meet the “annual average air quality standards at all locations in the country in a stipulated timeframe”. In order to achieve this, all the 100 non-attainment cities would have to design city-specific action plans with specific timelines for implementation of listed initiatives.

The NCAP aspires to overcome the deficits of the ongoing government initiatives targeted towards air pollution control. It lays down a comprehensive strategy framework for enhanced management of air quality. Augmentation of existing air quality monitoring network by increasing number of existing manual and continuous monitoring stations, introducing rural monitoring stations, identifying alternative technology for real-time monitoring network and augmenting capabilities of existing monitoring stations to measure PM_{2.5} concentration, are integral components of the strategy framework.

Q Source:

<https://www.downtoearth.org.in/news/moefcc-releases-details-of-national-clean-air-programme-but-no-clarity-on-emission-reduction-targets-60239>

21 Wolbachia, which was recently in news, is

- A. One of the world's rarest parasitic microbes
- B. One of the rarest reproductive parasite in the biosphere
- C. Both (a) and (b) ✗
- D. None ✓

◦ Your Answer : C

◦ Correct Answer : D

◦ **Answer Justification :**

Learning: It is a genus of Gram-negative bacteria that infects arthropod species, including a high



proportion of insects, but also some nematodes.

It is one of the world's most common parasitic microbes and is possibly the most common reproductive parasite in the biosphere. Its interactions with its hosts are often complex, and in some cases have evolved to be mutualistic rather than parasitic. Some host species cannot reproduce, or even survive, without Wolbachia colonisation.

One study concluded that more than 16% of neotropical insect species carry bacteria of this genus, and as many as 25 to 70% of all insect species are estimated to be potential hosts.

The AP state government has launched an experimental project to control the spread of dengue fever through genetically modified mosquitoes. It launched the project in Paderu in Visakhapatnam, where the vector-borne diseases, including dengue, are being reported every year.

As part of the 18-month project, researchers will infect *Aedes aegypti* mosquito with Wolbachia, a bacteria. The mosquitoes will be released into the wild where they breed with local mosquitoes and pass the bacteria to their offspring.

The Wolbachia controls the multiplication of the virus in its host — *Aedes aegypti*, which is primarily responsible for the cause of dengue fevers. It is necessary to infect the *Aedes aegypti* mosquitoes in a laboratory with bacteria of the genus Wolbachia, which naturally infect many insects but not mosquitoes that cause dengue. The bacteria can inhibit the growth of other microbes in its hosts.

Q Source:

<https://www.thehindu.com/news/cities/Vijayawada/govt-relies-on-wolbachia-to-control-dengue/article24742129.ece>

22 Which of these ideals or values can be found both in Directive Principles and Fundamental Duties?

1. Conservation of environment
2. Promoting harmony and the spirit of fraternity
3. Cherishing and upholding noble ideals that inspired the national struggle for freedom

◦ Select the correct answer using the codes below.

- A. 1 only ✓
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1 and 3 only

◦ Your Answer : A

◦ Correct Answer : A

◦ **Answer Justification :**

Justification: Of the above, only environmental conservation and child education can be found in the DPSP. So, all other than statement 1 are wrong.

According to Article 51 A, it shall be the duty of every citizen of India:



- to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- to cherish and follow the noble ideals that inspired the national struggle for freedom;
- to uphold and protect the sovereignty, unity and integrity of India;
- to defend the country and render national service when called upon to do so;
- to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities and to renounce practices derogatory to the dignity of women;
- to value and preserve the rich heritage of the country's composite culture;
- to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures;
- to develop scientific temper, humanism and the spirit of inquiry and reform;
- to safeguard public property and to abjure violence;
- to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement; and
- to provide opportunities for education to his child or ward between the age of six and fourteen years. This duty was added by the 86th Constitutional Amendment Act, 2002

Q Source: Chapter 8 and 9: Indian Polity: M Laxmikanth

23 Election Commission of India (ECI) will be using Braille-enabled signboards for the first time in by-elections conducted in which of these states?

- A. West Bengal ☒
- B. Maharashtra
- C. Gujarat
- D. Andhra Pradesh

- Your Answer :
- Correct Answer : A



◦ **Answer Justification :**

Learning: Election Commission of India for the first time will start the use of Braille-enabled signboards for visually challenged voters in the upcoming Maheshtala Assembly by-election in West Bengal.

The initiative of Braille-enabled signboards was part of the drive to make elections more accessible to persons with disabilities (PWD). The decision to use Braille-enabled signboards is a State-specific measure to ensure hassle-free polling experience for visually impaired voters.

Q Source: In news recently

24 The doctrine of Anatta in Buddhism means that

1. There is no permanent and independent essence in a human being
2. The sense of self as perceived by beings is illusory

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only ✗
- C. Both 1 and 2 ✓
- D. None

◦ Your Answer : B

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: Anatta, (Pali: “non-self” or “substanceless”) Sanskrit anatman, in Buddhism, the doctrine that there is in humans no permanent, underlying substance that can be called the soul. Instead, the individual is compounded of five factors (Pali khandha; Sanskrit skandha) that are constantly changing.

Buddhism does not totally deny the existence of a personality in an empirical sense. It only attempts to show that it does not exist in an ultimate sense. The Buddhist philosophical term for an individual is santana, i.e., a flux or a continuity. It includes the mental and physical elements as well.

The kammic force of each individual binds the elements together. This uninterrupted flux or continuity of psycho-physical phenomenon, which is conditioned by kamma, and not limited only to the present life, but having its source in the beginningless past and its continuation in the future — is the Buddhist substitute for the permanent ego or the immortal soul of other religions.

The concept of anatta, or anatman, is a departure from the Hindu belief in atman (“the self”). The absence of a self, anicca (the impermanence of all being), and dukkha (“suffering”) are the three characteristics of all existence (ti-lakkhana). Recognition of these three doctrines—anatta, anicca, and dukkha—constitutes “right understanding.”

Q Source: Surprise questions: Based on past year UPSC papers



25 The Directive Principles are non-justiciable in nature. This implies that

1. They cannot be legally enforceable by the courts or the governments.
2. Their amendment can be done by a simple majority in the Parliament because they do not form a substantive part of the constitution.

◦ Select the correct answer using the codes below.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None ✓

◦ Your Answer : D

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Statement 1 and 2: If they are violated one cannot approach the court and seek their enforcement. Therefore, the government (Central, state and local) cannot be compelled to implement them.

The Directive Principles, though non-justiciable in nature, help the courts in examining and determining the constitutional validity of a law.

There are several instance in Chapter 8 where the government has legally enforced the DPSP, for e.g. banning the slaughter of cows or establishing Lok Adalats for speedy and affordable justice to poor. The same goes for the Supreme Court. Several judgments on protection of livelihood or environment are inspired from DPSP. DPSP are legally enforceable by both.

What non-justiciability means is that the courts cannot declare a law as invalid if it violates some principles of DPSP. In that sense, DPSP are not mandatory provisions of the constitution and acts only as guidelines to the state which may or may not be followed.

The Supreme Court has ruled many a times that in determining the constitutionality of any law, if a court finds that the law in question seeks to give effect to a Directive Principle, it may consider such law to be 'reasonable' in relation to Article 14 (equality before law) or Article 19 (six freedoms) and thus save such law from unconstitutionality.

Statement 2: They are subject to amendment under A368 by the Parliament by a special majority. Moreover, the term non-justiciable has a different connotation and not applicable here.

Q Source: Chapter 8: Indian Polity: M Laxmikanth

26 The Ease of Living Index was recently published by

- A. Ministry of Finance
- B. Ministry of Social Justice and Empowerment
- C. Ministry of Rural Development
- D. Ministry of Housing and Urban Affairs ✓



- Your Answer : D
- Correct Answer : D

◦ **Answer Justification :**

Learning: The index has been developed to allow city managers to get a grip on the city's baseline and compare its performance across key indicators.

The index covers 111 cities that are smart city contenders, capital cities, and cities with population of 1 million plus.

The index captures the quality of life based on the data collected from the urban local bodies on four parameters, which were further broken down into 15 categories.

The four parameters include institutional (governance), social (identity, education, health, security), economic (economy, employment) and physical factors (waste water and solid waste management, pollution, housing/ inclusiveness, mixed land use, power and water supply, transport, public open spaces).

Institutional and social parameters carry 25 points each, physical factors have a weightage of 45 points and economic factors five points totalling to a 100 mark scale on which cities were evaluated.

Performance of states:

- Pune has ranked first while two more Maharashtra cities — Navi Mumbai and Greater Mumbai — figure in the second and third spots.
- Tirupati, Chandigarh, Thane, Raipur, Indore, Vijaywada and Bhopal also figure in the top 10 list in that order. Among other major cities, Chennai holds 14th rank, Ahmedabad 23rd, Hyderabad 27th, and Bengaluru 58th.
- Rampur in Uttar Pradesh has ranked the worst on the scale with Kohima and Patna on the bottom two and three ranks while Varanasi stands at 33.
- Kolkata is excluded from the index.

Q Source: Recently in news

27 Which of these are Maharatna Central Public Sector Undertakings (CPSEs)?

1. Hindustan Aeronautics Limited
2. Shipping Corporation of India Limited
3. Bharat Heavy Electricals Limited
4. Power Grid Corporation of India Limited
5. Steel Authority of India Limited

- Select the correct answer using the codes below.

- A. 1, 3, 4 and 5 only
- B. 3 and 5 only ✓
- C. 2, 3, 4 and 5 only ✗
- D. 1 and 4 only

- Your Answer : C
- Correct Answer : B

◦ **Answer Justification :**

Justification: PSUs may be classified as central public sector enterprises (CPSEs) or state level public enterprises (SLPEs).

CPSEs are companies in which the direct holding of the Central Government or other CPSEs is 51% or more. They are administered by the Ministry of Heavy Industries and Public Enterprises.

Guidelines for awarding *Ratna*^[11] status are as follows:

	Maharatna	Navratna	Miniratna Category-I	Miniratna Category-II
Eligibility	Three years with an average annual net profit of over Rs. 5000 crore, OR Average annual Net worth of Rs. 10,000 crore for 3 years, OR Average annual Turnover of Rs. 20,000 crore for 3 years (against Rs 25,000 crore prescribed earlier) ^[12]	A score of 60 (out of 100), based on six parameters which include net profit, net worth, total manpower cost, total cost of production, cost of services, PBDIT (Profit Before Depreciation, Interest and Taxes), capital employed, etc., AND A company must first be a Miniratna and have 4 independent directors on its board before it can be made a Navratna.	Have made profits continuously for the last three years or earned a net profit of Rs. 30 crore or more in one of the three years	Have made profits continuously for the last three years and should have a positive net worth.
Benefits for investment	Rs. 1,000 crore - Rs. 5,000 crore, or free to decide on investments up to 15% of their net worth in a project	up to Rs. 1,000 crore or 15% of their net worth on a single project or 30% of their net worth in the whole year (not exceeding Rs. 1,000 crores).	up to Rs. 500 crore or equal to their net worth, whichever is lower.	up to Rs. 300 crore or up to 50% of their net worth, whichever is lower.

Please refer to <https://dpe.gov.in/about-us/management-division/maharatna-navratna-miniratna-cpse> for a full list of all such CPSEs.

Q Source: Additional Research: Chapter 3: 11th NCERT: Economics

28 With reference to India, consider the following statements.

- Methane was the largest contributor to greenhouse gas emissions by volume in India.
- Energy sector contributes the most to greenhouse gas emissions in India.

- Which of the above is/are correct?

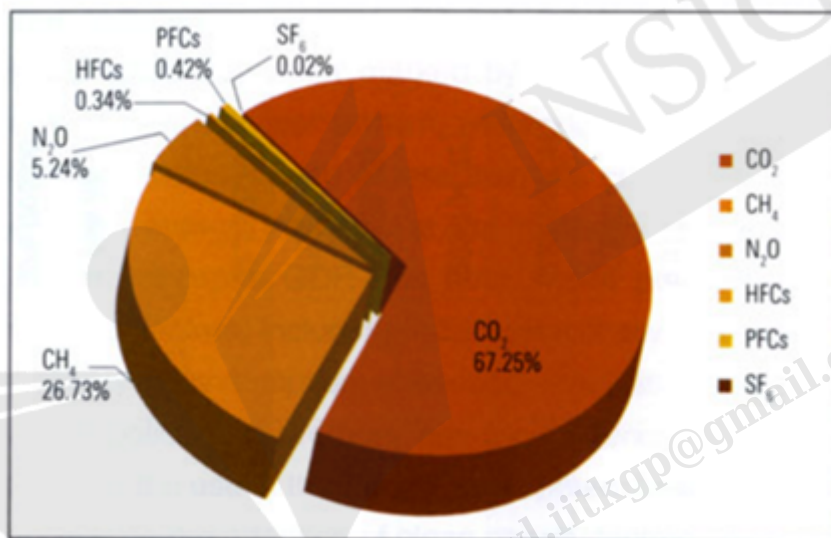
- A. 1 only
- B. 2 only ✓
- C. Both 1 and 2

D. None

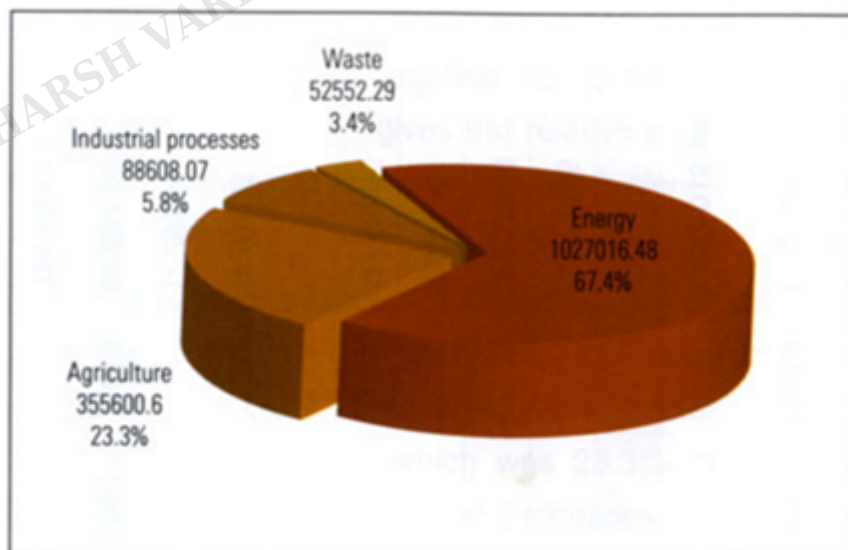
- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Justification: Statement 1: Although data is quite old, the trends are likely to be the same. Source: <http://www.downtoearth.org.in/news/energy-sector-biggest-greenhouse-gas-emitter-in-india-says-national-communication-to-unfccc---38150>



Statement 2: The energy sector accounts for two-thirds the total emissions, followed by agriculture, industrial processes and waste. The forestry sector was a net absorber.



Q Source: Revision: 8th NCERT Geography (Test 8)

29 The Uighurs are a Muslim ethnic minority mostly based in



- A. China's Xinjiang province ✓
- B. Western Afghanistan
- C. Close to international borders of Punjab, India
- D. Central Myanmar

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Learning: They make up around 45% of the population there. Xinjiang is officially designated as an autonomous region within China, like Tibet to its south.

A UN human rights committee has heard there are credible reports that China is holding a million Uighurs in "counter-extremism centres".

Human rights groups including Amnesty International and Human Rights Watch have submitted reports to the UN committee documenting claims of mass imprisonment, in camps where inmates are forced to swear loyalty to China's President Xi Jinping.

The World Uyghur Congress said in its report that detainees are held indefinitely without charge, and forced to shout Communist Party slogans.

Q Source:

<http://www.insightsonindia.com/2018/08/13/insights-daily-current-affairs-13-august-2018/>

30 Consider the following statements.

1. The Giant Metrewave Radio Telescope (GMRT) is an array of several steerable parabolic radio telescopes observing at metre wavelengths.
2. Radio galaxies are colossal galaxies with are at equidistant from two supermassive black holes and are usually devoid of inert gases.

- Which of the above is/are correct?

- A. 1 only ✓
- B. 2 only
- C. Both 1 and 2
- D. None

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Justification: Statement 1: The Giant Metrewave Radio Telescope (GMRT), located near Pune in India, is an array of thirty fully steerable parabolic radio telescopes of 45 metre diameter, observing at metre wavelengths.

It is operated by the National Centre for Radio Astrophysics, a part of the Tata Institute of



Fundamental Research, Mumbai.

At the time it was built, it was the world's largest interferometric array offering a baseline of up to 25 kilometres (16 mi).

One of the aims for the telescope during its development was to search for the highly redshifted 21-cm line radiation from primordial neutral hydrogen clouds in order to determine the epoch of galaxy formation in the universe.

Statement 2: Radio galaxies are very rare objects in the universe. They are colossal galaxies with a supermassive black hole in their centre that actively accretes gas and dust from its surroundings.

This activity initiates the launch of high-energy jet streams, which are capable of accelerating charged particles around the supermassive black hole to almost the speed of light.

The discovery of such galaxies at extremely large distances is important for our understanding of the formation and evolution of galaxies.

Q Source:

<http://www.insightsonindia.com/2018/08/13/insights-daily-current-affairs-13-august-2018/>

31 In WTO terminology, subsidies in general are identified by “boxes” which are given the colours of traffic lights. Consider the following about it.

1. Most domestic support measures considered to distort production and trade fall into the amber box.
2. Green box subsidies are allowed even if they distort trade.
3. At present there are no limits on spending on blue box subsidies.

◦ Select the correct answer using the codes below.

- A. 1 and 2 only ✖
- B. 2 and 3 only
- C. 1 and 3 only ✔
- D. 1, 2 and 3

◦ Your Answer : A

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: Statement 1: All domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box, which is defined as all domestic supports except those in the blue and green boxes.

These include measures to support prices, or subsidies directly related to production quantities.

These supports are subject to limits: “de minimis” minimal supports are allowed (5% of agricultural production for developed countries, 10% for developing countries)

Statement 2: In order to qualify, green box subsidies must not distort trade, or at most cause minimal distortion. They have to be government-funded (not by charging consumers higher prices)



and must not involve price support.

Statement 3: Blue Box is the “amber box with conditions” — conditions designed to reduce distortion. Any support that would normally be in the amber box, is placed in the blue box if the support also requires farmers to limit production.

At present there are no limits on spending on blue box subsidies. In the current negotiations, some countries want to keep the blue box as it is because they see it as a crucial means of moving away from distorting amber box subsidies without causing too much hardship.

Q Source: Additional Research: Chapter 11: Shankar Ganesh: Economics

32 Which of the following is vital for a country to reap its demographic dividend?

- A. Withdrawing food and energy subsidies given to poor citizens
- B. Investing in Universal Health Care (UHC) systems ✓
- C. Inviting Foreign Institutional Investment (FII)
- D. Operating as a Command Economy

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Justification: One of India’s competitive advantages is its demographic dividend. Demographic dividend occurs when the proportion of working people in the total population is high because this indicates that more people have the potential to be productive and contribute to growth of the economy.

Option A: Withdrawing such critical support systems may make the poor worse off and likely to lead to greater impoverishment than enhanced demographic dividend.

Option B: UHC systems can be crucial to building a healthy workforce and augment human capital. So, B is correct.

Option C: FII is short-term in nature and doesn’t contribute to permanent capital formation in the nation. So, C is wrong.

Option D: A command economy is characterized by state control and state-led planning. Many East Asian nations have been able to reap demographic dividend without resorting to such a strict control system. So, D is wrong.

Q Source: Additional Research: Chapter 1: Standard Xth Economics NCERT: Understanding Economic Development

33 Strait of Malacca is a waterway

1. Connecting the Andaman Sea in the Indian Ocean and the South China Sea
2. Running between the Malay Peninsula and Sumatran Island in Indonesia



- Which of the above is/are correct?
 - A. 1 only
 - B. 2 only
 - C. Both 1 and 2 ✓
 - D. None

- Your Answer : C
- Correct Answer : C

◦ **Answer Justification :**

Justification: It is a narrow, 850 km stretch of water between the Malay Peninsula and the Indonesian island of Sumatra.

It is a strategic choke point for shipping supplies from East Asia heading to South Asia. The strait is the main shipping channel between the Indian Ocean and the Pacific Ocean, linking major Asian economies such as India, China, Japan, Taiwan, and South Korea.

About a quarter of all oil carried by sea passes through the Strait, mainly from Persian Gulf suppliers to Asian markets

Q Source: South-east Asia: Map-based questions

- 34** With reference to 'Parens patriae' doctrine, in news recently, consider the following statements.
1. The doctrine grants the court inherent power and authority to act as guardian for those who are unable to take care for themselves.
 2. The Supreme Court has never taken cognizance of the doctrine of Parens Patriae.
- Which of the above is/are correct?
 - A. 1 only ✓
 - B. 2 only
 - C. Both 1 and 2
 - D. None

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Justification: Parens patriae in Latin means 'parent of the country' and is a doctrine that grants the court inherent power and authority to act as guardian for those who are unable to take care for themselves.

Statement 2: The SC has mentioned this doctrine several times in their judgments, for e.g. please check <http://medind.nic.in/jal/t11/i2/jalt11i2p98.pdf> where the SC said that the High court can invoke this doctrine to take decisions for a mentally ill subject.

The article (aforementioned) gives a brief background of the doctrine. It is a good read.



The Uttarakhand high court would henceforth act as the legal guardian of cows in the state. It has also issued some directions to the state government in this regard.

This is the first time in India that a court has had invoked the 'parens patriae' doctrine for "cow protection". It has been invoked at other times for other reasons.

Implications of the judgment:

The court can now act as the legal guardian of the cows in the state and keep a tab on all issues related to cows especially its directions with regard to their protection. If there are any violations in laws and rules regarding cows, the court can take suo moto cognisance and issue directions to the state.

Q Source <http://www.insightsonindia.com/2018/08/15/insights-daily-current-affairs-15-august-2018/>

35 If you draw a line between Vladivostok and Macau on a map, which of these will lie on the right hand side (east) of the line?

1. Spartly Islands
2. Paracel Islands
3. Phillipines Sea

◦ Select the correct answer using the codes below.

- A. 1 only ✗
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3 ✓

◦ Your Answer : A

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Vladivostok is one of the easternmost points of Russia. Macau is located near Hong Kong.

Use elimination here. Islands (Spartly and Paracel) are disputed islands between China and other South-east Asian nations.

Phillipines Sea lies to the East to these islands. So, if an option contains these islands, it must also contain the Sea. In this case, the only answer possible can be option D.

Learning: Map is below.



Q Source: East Asia: Map-based questions

36 Genetic Engineering can be used to modify

1. Plant cells
 2. Animals cells
 3. Microorganisms including Virus
- Select the correct answer using the codes below.
- A. 1 and 2 only
 - B. 1 only
 - C. 2 and 3 only
 - D. 1, 2 and 3 ☒

◦ Your Answer : D

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Statement 1: Plants have been modified for insect protection, herbicide resistance, virus resistance, enhanced nutrition, tolerance to environmental pressures and the production of edible vaccines, for e.g. Bt cotton, Bt Mustard etc.

Statement 2: Genetic engineering is used to create animal models of human diseases. Genetically modified mice are the most common genetically engineered animal model.



Statement 3: Bacteria were the first organisms to be genetically modified.

In medicine, genetic engineering has been used in manufacturing drugs, to create model animals and do laboratory research, and in gene therapy. Genetically engineered viruses are being developed that can still confer immunity, but lack infectious sequences.

Q Source: The topic is frequently in news

37 Nanoflares are related to

- A. Hazards of developments of nanotechnology ✖
- B. Corona of the Sun ✔
- C. Nano coating used in Anti UV glasses
- D. Bouncing back of the Solar insolation

- Your Answer : A
- Correct Answer : B

◦ **Answer Justification :**

Justification: A nanoflare is a very small episodic heating event which happens in the corona, the external atmosphere of the Sun.

According to Parker a nanoflare arises from an event of magnetic reconnection which converts the energy stored in the solar magnetic field into the motion of the plasma.

Telescopic observations suggest that the solar magnetic field, which theoretically is "frozen" into the gas of the plasma in the photosphere, expands into roughly semicircular structures in the corona.

Q Source: Additional Research

<http://www.insightsonindia.com/2018/08/15/insights-daily-current-affairs-15-august-2018/>

38 Fragile Five was a term coined in August of 2013 by a research analyst at Morgan Stanley to represent emerging market economies that have become too dependent on unreliable foreign investment to finance their growth ambitions. It does NOT include which of these countries?

- A. India
- B. China ✔
- C. Brazil
- D. South Africa

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Justification: The Fragile Five include Turkey, Brazil, India, South Africa, and Indonesia.



The Fragile Five came into focus in 2013 and 2014 as emerging market economies that relied on foreign investments to cover current account deficits and finance growth began to see capital outflows as a result of improvements in developed economies.

As capital flows out of emerging markets to developed markets, many of their currencies experienced significant weakness and made it difficult to finance current account deficits. The lack of new investment also made it impossible to finance many growth projects, which contributed to a slowdown in their respective economies. This created a potential issue for certain vulnerable economies.

Q Source: Additional Research

<http://www.insightsonindia.com/2018/08/15/insights-daily-current-affairs-15-august-2018/>

39 Consider the following statements about various organizations dealing with statistics in India.

1. NSSO is an organisation under the Ministry of Statistics, Planning and Programme Implementation.
2. National Statistical Commission (NSC) was setup on the recommendations of the Rangarajan Commission.
3. Central Statistical Office (CSO) conducts Annual Survey of Industries.

◦ Select the correct answer using the codes below.

- A. 1 and 2 only
- B. 2 only
- C. 3 only
- D. 1, 2 and 3

◦ Your Answer : D

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Statement 1: It is the largest organisation in India conducting regular socio-economic surveys. It was established in 1950.

Statement 2: The Commission (setup in 2005) has a part-time Chairperson, four part-time Members and an ex-officio Member. The Chief Statistician of India, the post created specifically as the Head of the National Statistical Office is the Secretary of the Commission

Statement 3: Activities of CSO include compilation of National Accounts; conduct of Annual Survey of Industries and Economic Censuses, compilation of Index of Industrial Production, as well as Consumer Price Indices. It also deals with various social statistics, training, international cooperation, Industrial Classification etc.

The ASI extends to the entire country. It covers all factories registered under particular sections of the Factories Act, 1948 i.e. those factories employing 10 or more workers using power; and those employing 20 or more workers without using power.

Q Source: Topics covered in previous tests



40 Consider the following statements about cyber security.

1. A virus is a program that can infect other programs by modifying them to include a possible evolved copy of itself.
2. A network worm can make copies of itself throughout a network disrupting an entire network.
3. Trojan horse is a program that generally impairs the security of a system as the program is self-replicating.
4. Spyware invades a computer and monitors a user's activities without consent.

◦ Select the correct answer using the codes below.

- A. 1, 2 and 3 only
- B. 1, 2 and 4 only ✓
- C. 2 and 4 only
- D. 1, 3 and 4 only

◦ Your Answer : B

◦ Correct Answer : B

◦ **Answer Justification :**

Justification: Malware is defined as a software designed to perform an unwanted illegal act via the computer network. It could be also defined as software with malicious intent. Malware can be classified based on how they get executed, how they spread, and/or what they do. Some of them are discussed below.

a) Virus: A virus is a program that can infect other programs by modifying them to include a possible evolved copy of itself. A virus can spread throughout a computer or network using the authorization of every user using it to infect their program. Every program so infected may also act as a virus and thus the infection grows. Viruses normally affect program files, but in some cases they also affect data files disrupting the use of data and destroying them completely.

b) Worms: Worms are also disseminated through computer networks, unlike viruses, computer worms are malicious programs that copy themselves from system to system, rather than infiltrating legitimate files. For example, a mass mailing e-mail worm is a worm that sends copies of itself via e-mail. A network worm, on the other hand makes copies of itself throughout a network, thus disrupting an entire network.

c) Trojans: Trojan is another form of Malware, trojans do things other than what is expected by the user. Trojan or trojan horse is a program that generally impairs the security of a system. Trojans are used to create back-doors (a program that allows outside access into a secure network) on computers belonging to a secure network so that a hacker can have access to the secure network.

Unlike viruses, Trojan horses do not replicate themselves but they can be just as destructive. One of the most insidious types of Trojan horse is a program that claims to rid your computer of viruses but instead introduces viruses onto your computer.

d) Hoax: Hoax is an e-mail that warns the user of a certain system that is harming the computer. The message thereafter instructs the user to run a procedure (most often in the form of a download) to correct the harming system. When this program is run, it invades the system and deletes an

important file.

e) Spyware: Spyware invades a computer and, as its name implies, monitors a user's activities without consent. Spywares are usually forwarded through unsuspecting e-mails with bonafide e-mail i.ds. Spyware continues to infect millions of computers globally.

Q Source:

<http://www.insightsonindia.com/2018/08/16/insights-daily-current-affairs-16-august-2018/>

41 The Great Barrier Reef is the largest living thing on Earth and even visible from outer space. It is located

- A. At Soloman Islands
- B. Off the coast of Queensland in Northeastern Australia ✓
- C. Near Timor Sea in Southern Australia
- D. South of Kimberley Plateau

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Justification: The Great Barrier Reef is the world's largest coral reef system composed of over 2,900 individual reefs and 900 islands stretching for over 2,300 kilometres!

It supports a wide diversity of life and was selected as a World Heritage Site in 1981. CNN labelled it one of the seven natural wonders of the world.



Q Source: Adjunct questions: South-east Asia: Map-based questions

42 The Economist Intelligence Unit (EIU), which has released the Global Liveability Index 2018 ranking global cities based on their living conditions, is affiliated to which of these famous parent organizations?

- A. World Economic Forum ✗
- B. Financial Action Task Force



- C. The Economist Group ✓
D. World Bank

- Your Answer : A
- Correct Answer : C

◦ **Answer Justification :**

Justification: Statement 1: Founded in 1946 its parent organization is Economist Group, The Economist Newspaper Group, Inc.

The liveability index quantifies the challenges that might be presented to an individual's lifestyle in 140 cities worldwide, and assesses which locations provide the best living conditions.

The list ranks 140 cities on a range of factors, including:

- Political and social stability.
- Crime
- Education
- Access to healthcare.

The survey rates cities worldwide based on 30 qualitative and quantitative criteria, which fall into five general categories:

- Stability
- Health care
- Culture and environment.
- Education
- Infrastructure

Q Source:

<http://www.insightsonindia.com/2018/08/17/insights-daily-current-affairs-17-august-2018/>



43 Consider the following statements.

Assertion (A): Most living organisms can only make use of reactive nitrogen, and not the diatomic nitrogen present in the atmosphere.

Reason (R): Breaking the triple bond holding the two nitrogen atoms together requires a large amount of energy which can be mustered only by select microorganisms or processes.

- In the context of the above, which of these is correct?
 - A. A is correct, and R is an appropriate explanation of A. ✓
 - B. A is correct, but R is not an appropriate explanation of A.
 - C. A is correct, but R is incorrect.
 - D. Both A and R are incorrect.

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Justification and learning: Nitrogen is one of the five major chemical elements that are necessary for life. While nitrogen is the most abundant of these, more than 99% of it occurs as molecular nitrogen, or N_2 , which cannot be used by most organisms. This is because breaking the triple bond holding the two nitrogen atoms together requires a large amount of energy, which can be mustered only through high-temperature processes or by a small number of nitrogen-fixing microbes.

Most living organisms can only make use of reactive nitrogen, which includes inorganic forms of nitrogen like ammonia, ammonium, nitrogen oxide, nitric acid, nitrous oxide, and nitrate, and organic compounds like urea, amines, proteins, and nucleic acids. It includes any nitrogen compound that is radiatively, chemically or biologically active.

In the prehuman world, a small amount of usable reactive nitrogen was created from N_2 by lightening and biological nitrogen fixation, but the spread of reactive nitrogen was held in check by denitrification, a process that converts reactive N back to N_2 .

Q Source:

<http://www.insightsonindia.com/2018/08/17/insights-daily-current-affairs-17-august-2018/>

44 Which of these tribes can be found in the Eastern Himalayan region?

1. Rabhas
2. Hajongs
3. Khamti
4. Chakmas

- Select the correct answer using the codes below.
 - A. 1, 2 and 3 only
 - B. 3 and 4 only ✗
 - C. 1 and 2 only
 - D. 1, 2, 3 and 4 ✓

- Your Answer : B



- Correct Answer : D

- **Answer Justification :**

Justification: Statement 1: Rabha is a Scheduled Tribe community of Assam, Meghalaya and West Bengal. The language/dialect spoken by the Rabha people is also of the same name.

The Rabhas belong to the Indo Mongoloid group of people and have similarities with other members of Koch group such as Garos.

Statement 2: They are one of the largest ethnicities in Meghalaya. Hajong people are spread out across North East India West Bengal and Bangladesh.

Hajongs are predominantly rice farmers. Hajong have the status of a Scheduled Tribe in India.

Statement 3: They can be found in northwestern Burma as well as Lohit district of Arunachal Pradesh in India. Smaller numbers can be found in parts of Assam.

The Tai-Khamti are followers of Theravada Buddhism.

Statement 4: Chakmas are spread across Bangladesh and parts of northeastern India, western Burma etc.

They have their own language, customs and culture, and profess Theravada Buddhism.

Q Source: Based on issues covered in previous tests

45 Consider the following statements.

Prompt Corrective Action (PCA) framework

1. Is applicable only to private sector banks
2. Allows RBI to supersede a bank's board
3. Can cap a bank's lending limit to a single entity or single sector

- Select the correct answer using the codes below.

- A. 1 only
- B. 2 and 3 only ✓
- C. 1 and 3 only
- D. 1, 2 and 3

- Your Answer : B
- Correct Answer : B

- **Answer Justification :**

Justification: PSU banks are expected to come out of the Prompt Corrective Action (PCA) framework by the end of this year. Currently, 11 out of a total of 21 state-owned banks are under the RBI's Prompt Corrective Action (PCA) framework. It is applicable both to public and private sector banks.



The PCA is invoked when certain risk thresholds are breached. There are three risk thresholds which are based on certain levels of asset quality, profitability, capital and the like. The third such threshold, which is maximum tolerance limit, sets net NPA at over 12% and negative return on assets for four consecutive years.

PCA norms allow the regulator to place certain restrictions such as halting branch expansion and stopping dividend payment. It can even cap a bank's lending limit to one entity or sector. Other corrective action that can be imposed on banks include special audit, restructuring operations and activation of recovery plan. Banks' promoters can be asked to bring in new management, too. The RBI can also supersede the bank's board, under PCA.

What are the types of sanctions?

There are two type of restrictions, mandatory and discretionary. Restrictions on dividend, branch expansion, directors compensation, are mandatory while discretionary restrictions could include curbs on lending and deposit. In the cases of two banks where PCA was invoked after the revised guidelines were issued — IDBI Bank and UCO Bank — only mandatory restrictions were imposed. Both the banks breached risk threshold 2.

What will a bank do if PCA is triggered?

Banks are not allowed to re new or access costly deposits or take steps to increase their fee-based income. Banks will also have to launch a special drive to reduce the stock of NPAs and contain generation of fresh NPAs. They will also not be allowed to enter into new lines of business. RBI will also impose restrictions on the bank on borrowings from interbank market.

Q Source:

<http://www.insightsonindia.com/2018/08/18/insights-daily-current-affairs-18-august-2018/>

46 Fall Armyworm (FAW), which can cause significant damage to crops, was recently in news. Consider the following statements about it.

1. This insect is native to tropical and subtropical regions of Asia, including India.
2. FAO has proposed a five-year programme of action to help smallholder farmers cope with FAW infestation of their farms.

- Which of the above is/are correct?
 - A. 1 only
 - B. 2 only ✓
 - C. Both 1 and 2 ✗
 - D. None

- Your Answer : C
- Correct Answer : B

◦ **Answer Justification :**

Justification: FAW or *Spodoptera frugiperda*, is an insect that is native to tropical and subtropical regions of the Americas.



In its larva stage, it can cause significant damage to crops, if not well managed. It prefers maize, but can feed on more than 80 additional species of plants, including rice, sorghum, millet, sugarcane, vegetable crops and cotton.

FAW was first detected in Central and Western Africa in early 2016 and has quickly spread across virtually all of Sub-Saharan Africa.

Because of trade and the moth's strong flying ability, it has the potential to spread further. Farmers will need great support through Integrated Pest Management to sustainably manage FAW in their cropping systems.

FAO has proposed a five-year programme of action to help smallholder farmers, their organizations, their public institutions, national governments and development partners quickly respond to the challenges of FAW infestation across Africa.

Q Source: <http://www.fao.org/fall-armyworm/en/>

47 Which of these are Directive principles explicitly provided for in the constitution?

1. To secure the right to adequate means of livelihood for all citizens
2. To establish a socialistic model of economy
3. Prevention of concentration of wealth and means of production
4. To promote equal justice and to provide free legal aid to the poor

◦ Select the correct answer using the codes below.

- A. 1, 3 and 4 only ✓
- B. 1 and 4 only
- C. 2 and 3 only
- D. 1, 2, 3 and 4

◦ Your Answer : A

◦ Correct Answer : A

◦ **Answer Justification :**

Learning: Statement 2 There is no such explicit provision.

Other important socialist provisions are:

- To promote the welfare of the people by securing a social order permeated by justice— social, economic and political—and to minimise inequalities in income, status, facilities and opportunities (Article 38).
- To secure (a) the right to adequate means of livelihood for all citizens; (b) the equitable distribution of material resources of the community for the common good; (c) prevention of concentration of wealth and means of production; (d) equal pay for equal work for men and women; (e) preservation of the health and strength of workers and children against forcible abuse; and (f) opportunities for healthy development of children (Article 39).



- To promote equal justice and to provide free legal aid to the poor (Article 39 A).
- To secure the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement (Article 41).
- To make provision for just and humane conditions for work and maternity relief (Article 42).

Q Source: Chapter 8: Indian Polity: M Laxmikanth

48 Consider the following about markers on vehicles.

1. Green number plate on vehicles depict that they are eco-friendly and indigenously manufactured.
2. Coloured holograms will be introduced on vehicles soon to help depict the polluting potential of a vehicle.

◦ Which of the above is/are correct?

A. 1 only

B. 2 only ✓

C. Both 1 and 2 ✗

D. None

◦ Your Answer : C

◦ Correct Answer : B

◦ **Answer Justification :**

Justification: Statement 1: To promote electric vehicles in India, the government has approved green licence plates bearing numbers in white fonts for private e-vehicles and yellow for taxis.

The government also plans to allow youth in the age bracket of 16-18 years to drive electric scooters, besides mandating taxi aggregators to have a certain percentage of e-vehicle fleet.

The purpose behind distinctive number plates is their easy identification for preferential treatment in parking, free entry in congested zones besides other proposed benefits like concessional toll.

Statement 2: The Supreme Court recently accepted the suggestions of the Ministry of Road Transport and Highways (MoRTH) to have hologram-based coloured stickers on vehicles which would indicate the nature of fuel being used. The nature of fuel has a clear bearing on the pollution levels of a vehicle. Diesel is considered more polluting than petrol.

The MoRTH told a bench headed by Justice M B Lokur that hologram-based sticker of light-blue colour will be used for petrol and CNG run vehicles while similar sticker of orange colour would be placed on diesel vehicles.

The bench also comprising justices S Abdul Nazeer and Deepak Gupta asked the ministry to implement the use of coloured stickers on vehicles plying in Delhi-National Capital Region (NCR) by September 30.


The apex court also asked Additional Solicitor General A N S Nadkarni, who was representing MoRTH, to consider having green number plates for electric and hybrid vehicles.

Q Source:

https://www.business-standard.com/article/current-affairs/sc-approves-coloured-stickers-on-vehicles-to-indicate-nature-of-fuel-118081300512_1.html

https://www.business-standard.com/article/economy-policy/govt-approves-green-licence-plates-for-electric-vehicles-118050900951_1.html

49 Which of these is/are non-tariff barrier(s) to international trade?

1. Import quotas
 2. Rules of origin
 3. Phytosanitary standards
- Select the correct answer using the codes below.
 - A. 1 and 2 only
 - B. 1 and 3 only
 - C. 2 and 3 only
 - D. 1, 2 and 3 
 - Your Answer : D
 - Correct Answer : D

Answer Justification :

Justification: Non-tariff barriers to trade (NTBs) or sometimes called "Non-Tariff Measures (NTMs)" are trade barriers that restrict imports or exports of goods or services through mechanisms other than the simple imposition of tariffs.

Non-tariff barriers can be classified into three categories

Policy	Purpose	Examples	Potential Consequences
Protectionist policies	To help domestic firms and enterprises at the expense of other countries.	Import quotas; local content requirements; public procurement practices; anti-dumping laws;	Challenges levied at WTO and other trade forums
Assistance policies	To help domestic firms and enterprises, but not at the expense of other countries.	Domestic subsidies; industry bailouts.	Adversely affected countries may respond to protect themselves (i.e., imposing countervailing duties and subsidies).
Nonprotectionist policies	To protect the health and safety of people, animals, and plants; to protect or improve the environment.	Licensing, packaging, and labeling requirements; sanitary and phytosanitary (SPS) rules; food, plant and animal inspections; import bans based on objectionable fishing or harvesting methods.	Limited formal consequences lead to efforts to establish common standards or mutual recognition of different standards.

Phytosanitary measures deal with bacterial contaminants, pesticides, inspection and labelling) as well as animal and plant health with respect to imported pests and diseases.



Q Source: Additional Research: Chapter 3: 11th NCERT: Economics

50 A nation's Balance of Payments (BoP) is NOT affected by which of the following?

- A. Foreign Investment Received
- B. Demand for currency abroad
- C. Remittance received by the residents
- D. It is affected by all of the above ✓

- Your Answer : D
- Correct Answer : D

◦ **Answer Justification :**

Justification: A country's balance of payments and its net international investment position together constitute its international accounts.

The balance of payments divides transactions in two accounts: the current account and the capital account (sometimes the capital account is called the financial account, with a separate, usually very small, capital account listed separately). The current account includes transactions in goods, services, investment income and current transfers.

The capital account, broadly defined, includes transactions in financial instruments and central bank reserves. Narrowly defined, it includes only transactions in financial instruments. The current account is included in calculations of national output, while the capital account is not.

Q Source: Chapter 3: 11th NCERT: Economics

51 The Directive Principles resemble the 'Instrument of Instructions' enumerated in the

- A. Nehru Report, 1928
- B. Morley Minto Act 1909
- C. Objectives Resolution, 1946
- D. Government of India Act of 1935 ✓

- Your Answer : D
- Correct Answer : D

◦ **Answer Justification :**

Learning: Dr B R Ambedkar had said 'the Directive Principles are like the instrument of instructions, which were issued to the Governor-General and to the Governors of the colonies of India by the British Government under the Government of India Act of 1935.'

What is called Directive Principles is merely another name for the instrument of instructions.

The only difference is that they are instructions to the legislature and the executive.



Q Source: Chapter 8: Indian Polity: M Laxmikanth

52 The Agulhas current acts as an oceanic convergence zone. This zone has higher primary productivity than surrounding waters. This is because

1. The zone is a meeting point of all major ocean currents of the Indian Ocean.
2. There is upwelling of cold ocean water from the lower layers of the ocean.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only ✓
- C. Both 1 and 2
- D. None

◦ Your Answer : B

◦ Correct Answer : B

◦ **Answer Justification :**

Justification: Agulhas current is a major Indian ocean current.

Statement 1: A convergence zone is a region in the atmosphere where two prevailing flows meet. It is not a meeting of all major ocean currents. So, 2 is incorrect.

Statement 2: There is upwelling of cold, nutrient rich water south of the current. Additionally, the convergence tends to increase the concentration of plankton in and around the Agulhas.

Both of these factors result in the area being one of enhanced primary productivity as compared to the surrounding waters. This is especially notable in the Agulhas Retroflection waters, where chlorophyll-a concentrations tend to be significantly higher than the surrounding South Indian Ocean and South Atlantic Ocean waters.

Q Source: Improvisation: Page 83: Fundamentals of Physical Geography: 11th NCERT

53 In a commendable feat, scientists last week announced the sequencing of sugarcane genome. Why is this step so significant?

1. Sugarcane is a C4 plant and is considered one of the most efficient biomass producer of all cultivated crops.
2. These insights into sugarcane genome can help develop new molecular screening techniques that could hasten field trials of newer varieties.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2 ✓
- D. None

◦ Your Answer : C



◦ Correct Answer : C

◦ **Answer Justification :**

Concept: The perennial grasses can be classified as either C3 or C4 plants. These terms refer to the different pathways that plants use to capture carbon dioxide during photosynthesis. All species have the more primitive C3 pathway, but the additional C4 pathway evolved in species in the wet and dry tropics.

C3 plants are adapted to cool season establishment and growth in either wet or dry environments. On the other hand, C4 plants are more adapted to warm or hot seasonal conditions under moist or dry environments. A feature of C3 grasses is their greater tolerance of frost compared to C4 grasses. C3 species also tend to generate less bulk than C4 species; however, feed quality is often higher than C4 grasses.

Background: Cultivated sugarcane is grown throughout the tropics and sub tropic regions of the world and it produces 80% of the world's sugar. Sugarcane is a C4 plant and is considered the most efficient biomass producer of all cultivated crops.

Commercial cultivars are hybrids between two species, *Saccharum officinarum* which is the high sugar producing phenotype and *S. spontaneum*, a wild relative with low sucrose but which has contributed abiotic and biotic resistance. This project proposes to complete the first draft genome sequence of a cultivated sugarcane variety R570.

Few months before, no *Saccharum* species have been sequenced due to their large complex polyploid genomes.

Justification: In a commendable feat, scientists last week announced the sequencing of sugarcane genome.

Belonging to the perennial grass family, sugarcane was one of the last crop plants to be genome-mapped. In comparison, the rice genome was cracked nearly 14 years ago, followed by many other important agricultural crops.

It wasn't that sugarcane — which yields 80 per cent of sugar consumed globally — wasn't on scientists' radar. But its genome was too complex and cracking it with conventional sequencing techniques was rather impossible.

Now that its reference genome is created, sugarcane breeding would be able to enter the age of molecular biology. The newly-acquired insights into sugarcane genome can help develop new molecular screening techniques that could hasten field trials of newer varieties.

More importantly, the reference sequence can come in handy in analysing and comparing variations between various sugarcane varieties more effectively. It can quickly identify, using molecular markers or by sequencing, whether a species has picked up a desired trait.

Q Source: <https://jgi.doe.gov/first-sugarcane-genome-sequence/>

<https://www.thehindubusinessline.com/opinion/editorial/sweet-success/article24718638.ece>



54 Which of these bodies are not bound by the procedure laid down under the Code of Civil Procedure, but guided by principles of natural justice?

1. Central Administrative Tribunal
2. National Green Tribunal
3. National Human Rights Commission
4. National Commission for Scheduled Castes

◦ Select the correct answer using the codes below.

- A. 2 and 3 only
- B. 2, 3 and 4 only
- C. 1, 2, 3 and 4 ✓
- D. 1 and 4 only

◦ Your Answer : C

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: These Tribunals and commissions follow the principles of natural justice in deciding cases and the procedure prescribed by Evidence Act or CPC [Civil Procedure Code] does not apply. Natural justice implies fairness, equity and equality. These principles keep these bodies flexible in approach and allow them to deal with cases in an expedited manner.

In India, the principles of natural justice are firmly grounded in Article 14 & 21 of the Constitution.

The universally accepted principles of natural justice encompass the following two rules:-

Nemo judex in causa sua - No one should be made a judge in his own cause or the Rule against bias.

Audi alteram partem - Hear the other party or the rule of fair hearing or the Rule that no one should be condemned unheard.

Q Source: Additional Research Chapter 8: Indian Polity: M Laxmikanth

55 The 97th Constitutional Amendment Act of 2011 is related to

- A. Empowering the Governor of Karnataka to take steps to develop the Hyderabad-Karnataka Region
- B. Exchange of certain enclave territories with Bangladesh
- C. Extension of reservation of seats for SCs and STs in the Lok Sabha and states assemblies ✗
- D. Governance of co-operative societies ✓

◦ Your Answer : C

◦ Correct Answer : D

◦ **Answer Justification :**

Learning: The 97th amendment added a new Directive Principle relating to co-operative societies.



It requires the state to promote voluntary formation, autonomous functioning, democratic control and professional management of co-operative societies (Article 43B).

The amendment objective is to encourage economic activities of cooperatives which in turn help progress of rural India. It is expected to not only ensure autonomous and democratic functioning of cooperatives, but also the accountability of the management to the members and other stakeholders.

We will be covering more on this in later tests.

Q Source: Chapter 8: Indian Polity: M Laxmikanth

56 Which of these Foreign Institutional Investors (FII) are allowed to invest in Indian markets?

1. Merchant bankers
2. Mutual funds
3. Pension funds

◦ Select the correct answer using the codes below.

- A. 1, 2 and 3
- B. 1 only
- C. 2 and 3 only
- D. 2 only

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Justification: Following foreign entities / funds are eligible to get registered as FII:

- Pension Funds
- Mutual Funds
- Investment Trusts
- Banks
- Insurance Companies / Reinsurance Company
- Foreign Central Banks
- Foreign Governmental Agencies



- Sovereign Wealth Funds
- International/ Multilateral organization/ agency
- University Funds (Serving public interests)
- Endowments (Serving public interests)
- Foundations (Serving public interests)
- Charitable Trusts / Charitable Societies (Serving public interests)

Foreign Institutional Investor (FII) means an institution established or incorporated outside India which proposes to make investment in securities in India. They are registered as FIIs in accordance with the SEBI (FII) Regulations 1995. FIIs are allowed to subscribe to new securities or trade in already issued securities.

You can read a detailed description here

[http://www.arthapedia.in/index.php?title=Foreign_Institutional_Investor_\(FII\)](http://www.arthapedia.in/index.php?title=Foreign_Institutional_Investor_(FII))

Q Source: Chapter 3: 11th NCERT: Economics

57 Consider the following statements.

1. In Strategic disinvestment, significant proportion of a Public Sector Unit's (PSU) share and the management control goes to a private sector which is as strategic partner.
2. DIPAM is the nodal agency of Union Finance Ministry mandated to advise the Union Government in the matters of financial restructuring of PSUs and also for attracting investment through capital markets

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only ✗
- C. Both 1 and 2 ✓
- D. None

◦ Your Answer : B

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: Statement 1: It is different from the ordinary disinvestment in which management of PSU is retained with Government.

Usually, over 50% of stake is sold alongwith management control.



We will cover more on this later.

Statement 2: It also deals with all matters relating to sale of Union Government's equity in PSUs through private placement or offer for sale or any other mode in the erstwhile Central PSUs.

Q Source: Additional Research: Chapter 3: 11th NCERT: Economics

58 The project O-SMART, as recently approved by the Cabinet Committee on Economic Affairs, has a bearing on

1. Sustainable exploitation of marine resources
2. Disaster management
3. Welfare of coastal fishing communities

◦ Select the correct answer using the codes below.

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only ✗
- D. 1, 2 and 3 ✓

◦ Your Answer : C

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: The Cabinet Committee on Economic Affairs has given its approval for the umbrella scheme "Ocean Services, Technology, Observations, Resources Modelling and Science (O-SMART)", for implementation during the period from 2017-18 to 2019-20.

Highlights of the scheme:

- The scheme encompasses a total of 16 sub-projects addressing ocean development activities such as Services, Technology, Resources, Observations and Science.
- The services rendered under the O-SMART will provide economic benefits to a number of user communities in the coastal and ocean sectors, namely, fisheries, offshore industry, coastal states, Defence, Shipping, Ports etc.

Significance and benefits of the scheme:

- Currently, five lakhs fishermen community are receiving the related information daily through mobile which includes allocation of fish potential and local weather conditions in the coastal waters. The scheme will help in reducing the search time for fishermen resulting savings in the fuel cost.



- Implementation of O-SMART will help in addressing issues relating to Sustainable Development Goal-14, which aims to conserve use of oceans, marine resources for sustainable development. This scheme (O-SMART) also provide necessary scientific and technological background required for implementation of various aspects of Blue Economy.
- The ocean advisory services and technologies being rendered and developed under the scheme play a pivotal role in the development activities over dozen sectors, working in the marine environment including the coastal states of India, contributing significantly to the GDP.
- The State of Art Early Warning Systems established under the O-SMART Scheme will help in effectively dealing with ocean disasters like Tsunami, storm surges. The technologies being developed under this Scheme will help in harnessing the vast ocean resources of both living and non-living resources from the seas around India.

Q Source:

<http://www.insightsonindia.com/2018/08/30/insights-daily-current-affairs-30-august-2018/>

59 Which of these features have been considered a part of the 'basic structure' of Constitution by the Supreme Court in its various judgments?

1. Free and fair elections
 2. Effective access to Justice
 3. Principle of equality
 4. Supremacy of the Constitution
- Select the correct answer using the codes below.
 - A. 1 and 2 only
 - B. 1, 3 and 4 only ❌
 - C. 2 and 4 only
 - D. 1, 2, 3 and 4 ✅
 - Your Answer : B
 - Correct Answer : D

◦ **Answer Justification :**

Justification: Even though the basic structure doctrine was given by the SC, it is yet to define or clarify as to what constitutes the 'basic structure' of the Constitution.

It is not mentioned anywhere in the constitution, and our understanding of the basic structure comes from the various judgements of the court. So, all statements are wrong. Answer is D.

Learning: The following have emerged as 'basic features' of the Constitution

- Supremacy of the Constitution; Sovereign, democratic and republican nature of the Indian



polity; Secular character of the Constitution

- Separation of powers between the legislature, the executive and the judiciary; Federal character of the Constitution; Unity and integrity of the nation; Welfare state (socio-economic justice)
- Judicial review; Freedom and dignity of the individual; Parliamentary system; Rule of law; Harmony and balance between Fundamental Rights and Directive Principles; Principle of equality
- Free and fair elections; Independence of Judiciary; Limited power of Parliament to amend the Constitution; Effective access to justice; Principle of reasonableness; Powers of the Supreme Court under Articles 32, 136, 141 and 142

Q Source: Chapter 8 and 9: Indian Polity: M Laxmikanth

60 The “Full Faith and Credit” clause under the Constitution implies that

1. Public acts, records and judicial proceedings of the Centre and every state will be considered as authentic and credible throughout India.
 2. All final judgements and orders of civil and criminal courts in any part of India are capable of execution anywhere within India.
- Which of the above is/are correct?
- A. 1 only ✓
 - B. 2 only
 - C. Both 1 and 2 ✗
 - D. None

- Your Answer : C
- Correct Answer : A

◦ **Answer Justification :**

Justification: Statement 1: Under the Constitution, the jurisdiction of each state is confined to its own territory. Hence, it is possible that the acts and records of one state may not be recognised in another state.

To remove any such difficulty, the Constitution contains the “Full Faith and Credit” clause which lays down that Full faith and credit is to be given throughout the territory of India to public acts, records and judicial proceedings of the Centre and every state.

The expression ‘public acts’ includes both legislative and executive acts of the government. The expression ‘public record’ includes any official book, register or record made by a public servant in the discharge of his official duties.



Statement 2: Final judgements and orders of civil courts in any part of India are capable of execution anywhere within India (without the necessity of a fresh suit upon the judgement). The rule applies only to civil judgements and not to criminal judgements. In other words, it does not require the courts of a state to enforce the penal laws of another state. So, 2 is partially wrong.

Q Source: Additional Research: Chapter 8: Indian Polity: M Laxmikanth

61 'Constitutional Emergency', as popularly known, is a situation when

- A. External aggression or armed rebellion has been declared against the State of India
- B. Constitutional machinery in the state(s) of India has failed ✓
- C. Council of Ministers is dissolved without the possibility of formation of another government
- D. Any of the above occurs ✗

- Your Answer : D
- Correct Answer : B

◦ **Answer Justification :**

Learning: The Constitution stipulates three types of emergencies:

- An emergency due to war, external aggression or armed rebellion (Article 352). This is popularly known as 'National Emergency'. However, the Constitution employs the expression 'proclamation of emergency' to denote an emergency of this type.
- An Emergency due to the failure of the constitutional machinery in the states (Article 356). This is popularly known as 'President's Rule'. It is also known by two other names—'State Emergency' or 'constitutional Emergency'. However, the Constitution does not use the word 'emergency' for this situation.
- Financial Emergency due to a threat to the financial stability or credit of India (Article 360).

Q Source: Revision: Indian Constitution at Work: 11th NCERT

62 The direction of wind around a low pressure in northern hemisphere is

- A. Clockwise
- B. Perpendicular to isobars
- C. Anti-clock wise ✓
- D. Parallel to isobars

- Your Answer : C
- Correct Answer : C

◦ **Answer Justification :**

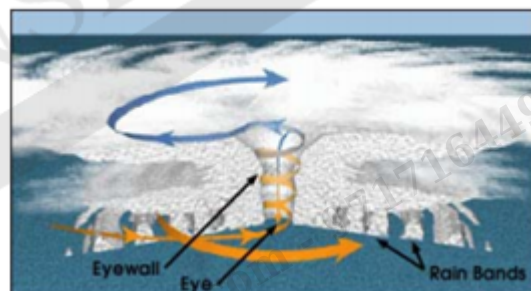
Learning: If a low-pressure area forms in the atmosphere, air flows towards this region, but will be deflected perpendicular to its velocity by the Coriolis force.

Instead of flowing straight towards the low pressure area, the air ends up circulating around it. This pattern of air flow is called a cyclone. In the Northern Hemisphere the direction of rotation around a low-pressure area is counter-clockwise.

The Coriolis force is due to the rotation of the Earth. In the Northern Hemisphere, the Coriolis force deflects towards the right (and in the Southern Hemisphere to the left).



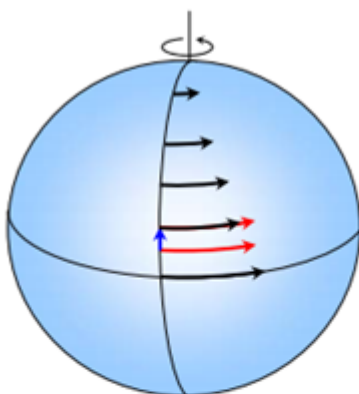
Storm system over Iceland showing a counter-clockwise rotation around a the low pressure.



Schematic of a Hurricane:

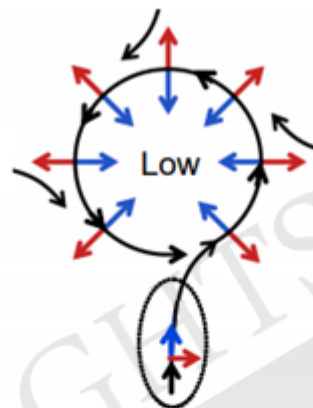
Moist air is pulled into the low pressure region at the center, rises and condenses into clouds at the eyewall. It then gets expelled outwards at the top into high cirrus clouds. The low rain clouds rotate counter-clockwise, and the high cirrus clouds clockwise (inward flow instead of outward flow).

Qualitative explanation:



The Coriolis force causes a deflection to the right in the Northern Hemisphere:

The surface of the Earth rotates faster near the Equator. If an air mass moves towards the North (blue arrow), its rotation speed is higher than the ground speed (red arrow vs. black arrow). The difference causes a deflection to the right.



Counter-clockwise rotation around low pressure in the Northern Hemisphere:

It is caused by *two* forces, the attraction towards low pressure (blue arrows) and the Coriolis force (red arrows). These forces are balanced when the motion is circular. The Coriolis force alone would produce a clockwise rotation, but the combination of the two forces makes it counter-clockwise.

Q

Source: Revision: Previous test syllabus: 11th NCERT: Fundamentals of Physical Geography

63 Uruguay round is often related with the founding of which of these international organizations?

- A. World Bank
- B. WTO ✓
- C. International Monetary Fund
- D. World Economic Forum

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Learning: The Uruguay Round was the 8th round of multilateral trade negotiations (MTN) conducted within the framework of the General Agreement on Tariffs and Trade (GATT), spanning from 1986 to 1994 and embracing 123 countries as "contracting parties". The Round led to the creation of the World Trade Organization, with GATT remaining as an integral part of the WTO agreements.

The broad mandate of the Round had been to extend GATT trade rules to areas previously exempted as too difficult to liberalize (agriculture, textiles) and increasingly important new areas previously not included (trade in services, intellectual property, investment policy trade distortions).

The Round came into effect in 1995 with deadlines ending in 2000 (2004 in the case of developing country contracting parties) under the administrative direction of the newly created World Trade



Organization (WTO).

The Doha Development Round was the next trade round, beginning in 2001 and still unresolved after missing its official deadline of 2005

Q Source: Chapter 11: Shankar Ganesh: Economics

64 The Indian model of Secularism would stand violated if

1. The state participates in religious reforms.
2. The state supports or facilitates religious activities.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None ✓

◦ Your Answer : D

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Both are wrong assertions.

Statement 1: The banning of untouchability or the intrusion of state in triple talaq matter clearly shows that the state has and will keep intervening in religious matter as and when needed. Indian model of secularism does not demand strict separation of religion and state.

Statement 2: Facilitating Haz pilgrims through subsidies or managing Shrine management boards at temples (for e.g. Vaishno Devi Shrine committee is managed by government) and mosques does not constitute violation of Indian model of secularism.

Q Source: Chapter 8: 11th NCERT: Political Theory

65 Consider the following about Gandhian ideas of non-violence or Ahimsa.

1. Non-violence meant not just refraining from causing physical or mental harm to someone but also the thought of harming someone.
2. The practice of non-violence is not a practice of passive spiritualism but that of conscious compassion.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only ✗
- C. Both 1 and 2 ✓
- D. None

◦ Your Answer : B



◦ Correct Answer : C

◦ **Answer Justification :**

Justification: We usually understand non-violence to mean non-injury. A non-violent act is thought to be one that does not cause physical injury. Gandhi changed this meaning in two fundamental ways.

For him non-violence meant not just refraining from causing physical harm, mental harm or loss of livelihood. It also meant giving up even the thought of harming someone. For him 'causing' did not mean doing the harm oneself. For Gandhi, "I would be guilty of violence, if I helped someone in harming someone else or if I benefited from a harmful act."

In this sense Gandhi's notion of violence was close to 'structural violence'.

The second major change that Gandhi introduced was to give the idea of nonviolence a positive meaning. Not causing harm was not enough. Ahimsa required an element of conscious compassion. Gandhi was opposed to passive spiritualism.

For him non-violence meant a positive and active pursuit of well-being and goodness. Therefore those who practise nonviolence must exercise physical and mental restraint under the gravest provocation.

Nonviolence is an extremely active force that has no room for cowardice or weakness. Gandhi in fact went to the extent of stating that if non-violence were inadequate to defend oneself, then it would be better to resort to violence than take refuge in passivity in the name of non-violence.

Q Source: Chapter 9: 11th NCERT: Political Theory

66 Which of the following is the major distinguishing characteristic between Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII)?

- A. Extent or quantum of investment in a firm ✓
- B. Source of investment
- C. Registration with SEBI ✗
- D. Institutional vs non-institutional investment

◦ Your Answer : C

◦ Correct Answer : A

◦ **Answer Justification :**

Learning: In order to remove the ambiguity that prevails on what is Foreign Direct Investment (FDI) and what is Foreign Institutional Investment (FII), in 2014, the government proposed to follow the international practice and lay down a broad principle that, where an investor has a stake of 10 percent or less in a company, it will be treated as FII and, where an investor has a stake of more than 10 percent, it will be treated as FDI.

In India, FDI and FII are defined in Schedule 1 and 2 respectively of the Foreign Exchange



Management (Transfer or Issue of Security by a Person Resident Outside India) Regulations 2000.

There are certain myths / beliefs about FIIs which are not necessarily true.

Myth -1:- FIIs do not invest in unlisted entities. They participate only through stock exchanges

Myth -2:- FIIs cannot invest at the time of initial allotment. Foreign investors investing in initial allotment of shares (say IPOs or when a group of entities come together to float a company) are categorized as FDIs.

Truth on 1 and 2:- As per Section 15 (1) (a) of the SEBI FII Regulations, 1995, a Foreign Institutional Investor (FII) could invest in the securities in the primary and secondary markets including shares, debentures and warrants of companies unlisted, listed or to be listed on a recognized stock exchange in India. In fact FIIs are very active in the over the counter (OTC) markets and in the IPO market in India. However, subsequent to SEBI (FPI) regulations, FIIs are allowed to invest only in listed or to-be listed entities and only through stock exchanges.

Myth 3:- FDI has more direct involvement in technology, management etc while FIIs are interested in capital gain and momentary price differences. Generally direct investment involves a lasting interest in the management of an enterprise and includes reinvestment of profits. In contrast, FIIs do not generally influence the management of the enterprise.

Truth on 3:- To some extent this notion is true and is emphasized in policy documents. For instance, consolidated FDI Policy of Department of Industrial Policy and Promotion (DIPP) states that "foreign Direct Investment, as distinguished from portfolio investment (FII), has the connotation of establishing a 'lasting interest' in an enterprise that is resident in an economy other than that of the investor".

However, of late, there have been occasions where FIIs come together to influence decisions in companies where they hold shares. The difference between FDI and FII, except for the fact that the latter necessarily has to be an institution (FDI can come from an individual also), rather lies in the registration or approval process and to some extent in the individual investment limits or lock-in conditions specified for each category.

Q Source: Additional Research: Chapter 3: 11th NCERT: Economics

67 Consider the following about the famous "Objectives Resolution" proposed by Jawahar Lal Nehru.

1. It was proposed to the Constituent Assembly of India before the enactment of the Constitution.
2. It contained clear provisions to abolish Privy Purse from India.
3. It became the basis for adding the words "Socialist" and "Secular" to the Constitution in 1950.

◦ Select the correct answer using the codes below.

- A. 1 only ☒
- B. 2 and 3 only
- C. 3 only
- D. None of the above

◦ Your Answer : A



◦ Correct Answer : A

◦ **Answer Justification :**

Justification: Statement 1: It was proposed in 1946, and later passed by the Constituent assembly shaping the Preamble of the constitution.

Statement 2: There was no such provision.

Statement 3: It was added later by the 42nd amendment to the Indian constitution.

This resolution enshrined the aspirations and values behind the Constitution making. On the basis of the Objectives Resolution, India's Constitution gave institutional expression to the fundamental commitments: equality, liberty, democracy, sovereignty and a cosmopolitan identity.

Q Source: Chapter 2: Revision: Indian Polity: M Laxmikanth

68 With reference to the Swadesh Darshan Scheme, consider the following statements.

1. The scheme is 100% centrally funded for the project components undertaken for public funding.
2. It aims to leverage the voluntary funding available for Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and corporate sector.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2 ✓
- D. None ✗

◦ Your Answer : D

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: Funding of individual project will vary from state to state and will be finalised on the basis of detailed project reports prepared by PMC (Programme Management Consultant).

A National Steering Committee (NSC) will be constituted with Minister in charge of M/O Tourism as Chairman, to steer the mission objectives and vision of the scheme.

A Mission Directorate headed by the Member Secretary, NSC as a nodal officer will help in identification of projects in consultation with the States/ UTs governments and other stake holders.

PMC will be a national level consultant to be appointed by the Mission Directorate.

Q Source:

<http://www.insightsonindia.com/2018/08/14/insights-daily-current-affairs-14-august-2018/>

69 Consider the following statements.



1. The passage of extra tropical cyclone related fronts causes abrupt changes in the weather conditions over the area in the middle and high latitudes.
2. Extra tropical cyclones do not form along the polar front due to the stable and low temperature.

◦ Select the correct answer using the codes below.

- A. 1 only ✓
- B. 2 only
- C. Both 1 and 2
- D. None of the above

◦ Your Answer : A

◦ Correct Answer : A

◦ **Answer Justification :**

Justification: Statement 1: The systems developing in the mid and high latitude, beyond the tropics are called the middle latitude or extra tropical cyclones. Formed due to air fronts, they significantly alter the region where they blow in.

Statement 2: Extra tropical cyclones form along the polar front. Initially, the front is stationary. In the northern hemisphere, warm air blows from the south and cold air from the north of the front. When the pressure drops along the front, the warm air moves northwards and the cold air move towards, south setting in motion an anticlockwise cyclonic circulation. The cyclonic circulation leads to a well developed extra tropical cyclone, with a warm front and a cold front.

Q Source: Revision: Previous test syllabus: 11th NCERT: Fundamentals of Physical Geography

70 Which of these signify the difference between direct and indirect democracy?

- A. The former is representative whereas as the latter is not representative of people.
- B. Rule of law is a key feature of direct but not indirect democracy.
- C. Direct democracy operates through an elected government whereas anarchy and complete decentralization is a core principle of indirect democracy.
- D. Major decisions are taken by elected governments in a direct democracy whereas people choose their representative in an indirect democracy who take major decisions. ✓

◦ Your Answer : D

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: This is an easy question and does not require an elaborated discussion.

Democracy is rule by the people. The basic idea is that people rule themselves by participating in the making of these rules.

Democratic governments in our times are usually referred to as representative democracies. In representative democracies people do not participate directly but, instead, choose their



representatives through an election process who make decisions. In direct democracies major decisions are made directly by the people through referendum, plebiscite etc.

Q Source: Chapter 3: 6th NCERT: Polity

71 Which of the following forest types is common to Andaman and Nicobar Islands, parts of North-Eastern states and a narrow strip of the Western slope of the Western Ghats?

- A. Mangrove forests
- B. Temperate forests
- C. Tropical moist forests ✓
- D. Coral forests

- Your Answer : C
- Correct Answer : C

◦ **Answer Justification :**

Justification: Option (a): Mangroves are found in A&N islands and even near the western coast of India, but not in NE states, or on the Western slope of Western Ghats.

Option (b): Temperate forests are found in temperate latitudes or at higher altitudes. A&N islands do not host temperate forests.

Option (d): Corals are found largely in A&N, Lakshadweep, Gulf of Mannar (near TN) and Gulf of Kutch.

Option (c): Tropical moist forests include evergreen forests; Tropical Semi-Evergreen Forests, Tropical Moist Deciduous Forests and Littoral and Swamp Forests.

- The Middle Andamans harbours mostly moist deciduous forests. North Andamans is characterised by the wet evergreen type.
- Western Ghats and NE states harbour both deciduous and evergreen forests.
- We will be covering more questions specific to vegetation in various parts of India in later tests.

Q Source: Page 58: NCERT 6th Geography: The Earth Our Habitat

72 Special safeguard mechanism (SSM) of the WTO has an important bearing on which of these sectors of the Indian economy?

- A. Manufacturing
- B. Information Technology



- C. Agriculture ✓
- D. Pharmaceuticals

- Your Answer : C
- Correct Answer : C

◦ **Answer Justification :**

Learning: WTO's Special Safeguard Mechanism (SSM) is a protection measure allowed for developing countries to take contingency restrictions against agricultural imports that are causing injuries to domestic farmers. The contingency measure is imposition of tariff if the import surge causes welfare loss to the domestic poor farmers. The design and use of the SSM is an area of conflict under the WTO.

In WTO's terms, safeguards are contingency or emergency restrictions on imports taken temporarily to deal with special circumstances such as a surge in imports. Contingency restriction means imposition of an import tax if the imports are causing injuries to domestic agricultural sector. The original GATT itself allows such restrictions to protect domestic economy.

Q Source: Chapter 11: Shankar Ganesh: Economics

73 Consider the naming of tropical cyclones in various parts of the world.
#5218

1. Willy-willies: Western Australia
2. Typhoons: South China Sea
3. Hurricanes: Atlantic Ocean

- Select the correct answer using the codes below.
 - A. 1 only
 - B. 2 and 3 only
 - C. 1, 2 and 3 ✓
 - D. 1 and 3 only

- Your Answer : C
- Correct Answer : C

◦ **Answer Justification :**

Justification: Tropical cyclones are violent storms that originate over oceans in tropical areas and move over to the coastal areas bringing about large scale destruction caused by violent winds, very heavy rainfall and storm surges.

They are known as Cyclones in the Indian Ocean, Hurricanes in the Atlantic, Typhoons in the Western Pacific and South China Sea, and Willy-willies in the Western Australia.

Since 1953, Atlantic tropical storms have been named from lists originated by the National Hurricane Center. They are now maintained and updated by an international committee of the World Meteorological Organization.



Q Source: Revision: 11th NCERT: Fundamentals of Physical Geography

74 If body weight of a person is given, his Body Mass Index (BMI) value can reveal his

- A. Height ✓
- B. Age
- C. Nutritional Status
- D. Both (a) and (b)

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Justification: One way to find out if adults are undernourished is to calculate Body Mass Index (BMI).

Take the weight of the person in kg. Then take the height in metres. Divide the weight by the square of the height. If this figure is less than 18.5 then the person would be considered undernourished. However, if this BMI is more than 25, then a person is overweight.

Option C: This criterion is not applicable to growing children. So, if we know the age of the person, he can be classified in categories of overweight or underweight.

Option A: By basic mathematics you can derive the height of a person from his BMI if weight is given.

Q Source: Revision: Page 13: Standard Xth Economics NCERT: Understanding Economic Development

75 Consider the following statements.

1. Solar winds are a flow of ionized gases from the sun that streams past Earth at speeds nearly close to that of light.
2. Disturbances in the solar wind shake Earth's magnetic field and pump energy into the radiation belts.
3. Space weather can change the orbits of satellites and even shorten their lifetimes.

◦ Select the correct answer using the codes below.

- A. 1 only ✗
- B. 2 and 3 only ✓
- C. 1 and 3 only
- D. 2 only

- Your Answer : A
- Correct Answer : B

◦ **Answer Justification :**



Justification and Learning: The corona gives rise to the solar wind, a continuous flow of charged particles that permeates the solar system. Unpredictable solar winds cause disturbances in our planet's magnetic field and can play havoc with communications technology on Earth. Nasa hopes the findings will enable scientists to forecast changes in Earth's space environment.

Why do we study the sun and the solar wind?

- The sun is the only star we can study up close. By studying this star we live with, we learn more about stars throughout the universe.
- The sun is a source of light and heat for life on Earth. The more we know about it, the more we can understand how life on Earth developed.
- The sun also affects Earth in less familiar ways. It is the source of the solar wind; a flow of ionized gases from the sun that streams past Earth at speeds of more than 500 km per second (a million miles per hour).
- Disturbances in the solar wind shake Earth's magnetic field and pump energy into the radiation belts, part of a set of changes in near-Earth space known as space weather.
- Space weather can change the orbits of satellites, shorten their lifetimes, or interfere with onboard electronics. The more we learn about what causes space weather – and how to predict it – the more we can protect the satellites we depend on.
- The solar wind also fills up much of the solar system, dominating the space environment far past Earth. As we send spacecraft and astronauts further and further from home, we must understand this space environment just as early seafarers needed to understand the ocean.

Q Source:

<http://www.insightsonindia.com/2018/08/13/insights-daily-current-affairs-13-august-2018/>

76 Consider the following about the Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGNREGA).

1. The Village Panchayat issues job cards to every registered individual.
 2. The cost of the scheme is shared between the Centre and the States.
 3. Rural construction projects are generally handed over to private contractors who are made responsible to the Gram Panchayat.
- Select the correct answer using the codes below.
- A. 1 and 2 only ✓
 - B. 2 only
 - C. 1 and 3 only ✗
 - D. 1, 2 and 3



- Your Answer : C
- Correct Answer : A

◦ **Answer Justification :**

Justification: The Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGNREGA) guarantees 100 days of employment in a financial year to any rural household whose adult members are willing to do unskilled manual work.

Statement 3: Use of contractors in commissioning works is strictly banned under the Act.

Learning: The objective of the Act is to create durable assets and strengthen the livelihood resource base of the rural poor.

- The choice of works suggested in the Act address causes of chronic poverty like drought, deforestation, soil erosion, so that the process of employment generation is on a sustainable basis.
- Works suggested in the Act addresses causes of chronic poverty like drought, deforestation and soil erosion, so that the process of employment generation is maintained on a sustainable basis.

Q Source: Revision: Chapter 2: Standard Xth Economics NCERT: Understanding Economic Development

77 The classification of Organised and unorganized sector in India is mainly based on

- A. Employment conditions ✓
- B. Working duration of the firm
- C. Gross output of the firm ✗
- D. Net profits of the firm after paying taxes

- Your Answer : C
- Correct Answer : A

◦ **Answer Justification :**

Learning: Sectors are majorly divided into three categories primary, secondary and tertiary. Based on the employment conditions these are further classified as organised and unorganised sector.

The sector, which is registered with the government is called an organised sector. The sector which is not registered with the government and whose terms of employment are not fixed and regular is considered as unorganised sector.

BASIS FOR COMPARISON	ORGANISED SECTOR	UNORGANISED SECTOR
Meaning	The sector in which the employment terms are fixed and employees have assured work is Organised sector.	The sector that comprises of small scale enterprises or units and are not registered with the government.
Governed by	Various acts like Factories Act, Bonus Act, PF Act, Minimum Wages Act etc.	Not governed by any act.
Government rules	Strictly followed	Not followed
Remuneration	Regular monthly salary.	Daily wages
Job security	Yes	No
Working hours	Fixed	Not fixed
Overtime	Workers are paid remuneration for overtime.	No provision for overtime.
Salary of workers	As prescribed by the government.	Less than the salary prescribed by the government.
Contribution to Provident fund by the employer	Yes	No
Increment in salary	Once in a while	Rarely
Benefits and perquisites	Employees get add-on benefits like medical	Not provided.

Q Source: Page 31: Standard Xth Economics NCERT: Understanding Economic Development

78 Consider the following about National Initiative on Climate Resilient Agriculture (NICRA).

1. It is a joint project of World Bank and FAO in India.
 2. It aims to demonstrate site specific technologies on farmer's fields for adapting to current climate risks.
 3. It works towards the capacity building of scientists in climate resilient agricultural research and its application.
- Select the correct answer using the codes below.
- A. 1 and 2 only
 - B. 2 and 3 only ☒
 - C. 3 only



D. 1, 2 and 3

- Your Answer : B
- Correct Answer : B

◦ **Answer Justification :**

Justification: Statement 1: ICAR launched National Initiative on Climate Resilient Agriculture (NICRA) during 2010-11 for the XIth Plan. S, 1 is wrong.

Statement 2 and 3: It has following objectives:

- To enhance the resilience of Indian agriculture covering crops, livestock and fisheries to climatic variability and climate change through development and application of improved production and risk management technologies
- To demonstrate site specific technology packages on farmers' fields for adapting to current climate risks
- To enhance the capacity building of scientists and other stakeholders in climate resilient agricultural research and its application.

Learning: It follows the following approach to attain the same:

- Strengthening the existing net-work research on adaptation and mitigation (food crops, horticulture, livestock and fishery) with more infrastructure and capacity building
- Setting up of high through put phenotyping platforms and temperature, CO₂, ozone gradient facilities at identified locations/ institutions including North East region.
- Strengthening research on climate sensitive crops like cotton, maize, sugarcane, onion, etc. which are critical for India's farm GDP/exports but not covered in the XI Plan

Q Source: Surprise questions: ICAR Website: <http://www.icar.org.in/en/node/5915>

79 Consider the following terminologies used in Medieval India and its depiction.

1. Parwana was an order issued by higher authorities.
2. Siyaha huzur was proceedings of the provincial court.
3. Andarz-o-chihra were documents on personnel and horses.
4. Roznamcha-i-waqai was daily news report.

- Select the correct answer using the codes below.



- A. 1 and 3 only
- B. 2 and 4 only
- C. 1, 2 and 3 only
- D. 1, 2, 3 and 4 ✓

- Your Answer :
- Correct Answer : D

◦ **Answer Justification :**

Justification: The Telangana Archives and Research Institute holds a whopping 1.55 lakh documents — all on handmade paper — including 5,000 from the period of Shah Jahan (1628-1658) and another 1.5 lakh of Aurangzeb (1658-1707). Written in Persian in Shikasta script, cursive style, the documents are linked and arranged in chronological order — date, month and regional year-wise.

- Farman- order of the emperor.
- Nishan- order of a member of the royal family.
- Yaddasht-i-ahkam-i-muqaddas- Memorandum containing imperial orders.
- Parwana- orders issued by higher authorities.
- Siyaha huzur- proceedings of the provincial court.
- Roznamcha-i-waqai- daily news report.
- Qabzul wasil- bill payments.
- Andarz-o-chihra- documents on personnel and horses.
- Daftar-i-Diwani- the administrative wing of Hyderabad State.
- Theyaddasht-i-ahkam-i-muqaddas- Reports on recommendations of pay hikes for staff sent to the emperor.

Q Source:

<http://www.insightsonindia.com/2018/08/13/insights-daily-current-affairs-13-august-2018/>



80 Consider the following about Earth Summit.

1. It was convened for the first time in 1972 after the publication of the "Limits to Growth Thesis".
2. It is convened each year to address urgent environmental protection and socio-economic development at the global level.

◦ Which of the above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2 ✗
- D. None ✓

◦ Your Answer : C

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Statement 2: In 1992, more than 100 heads of states met in Rio de Janeiro in Brazil, for the first International Earth Summit. The Summit was convened for addressing urgent problems of environmental protection and socioeconomic development at the global level. So, 1 is wrong.

The assembled leaders signed the Declaration on Global Climatic Change and Biological Diversity.

Statement 1: Earth Summit 2012 was held 20 years after the 1992 Summit. So, 2 is wrong.

Q Source: Mentioned in various readings

81 The Mahadayi Water Disputes Tribunal has been hearing the tussle over sharing of the Mahadayi or Mandovi river between

- A. Goa, Karnataka and Maharashtra ✓
- B. Karnataka, Tamil Nadu and Kerala
- C. Kerala, Maharashtra and Andhra Pradesh
- D. Goa, Andhra Pradesh and Kerala

◦ Your Answer : A

◦ Correct Answer : A

◦ **Answer Justification :**

Learning: The Mahadayi river basin drains an area of 2032 square kilometres of which 375 square km lies in Karnataka, 77 sq km in Maharashtra and the remaining in Goa.

The dispute arose since Goa was opposed to Karnataka's plans to divert waters from the tributaries of the river, which Karnataka justified was for drinking water purposes. The tribunal was constituted in November 2010.

The tribunal has given the final verdict.



The tribunal has allowed Karnataka access to 13.4 tmc of water for its consumptive use (5.4 tmc) and power generation (8.02 tmc).

The share of Goa was pegged at 24 tmc with the Tribunal allowing it for the state's municipal water needs, irrigation water requirements and industrial water demands.

Maharashtra got the lowest share of 1.33 tmc for meeting its in-basin needs with respect to five projects.

The tribunal also directed the Centre to set up the Mahadayi Water Management Authority to implement its report and final decision.

Q Source <http://www.insightsonindia.com/2018/08/15/insights-daily-current-affairs-15-august-2018/>

82 Arrange these physical features of Asia from North to South.

1. Kunlun Shan Mountains
2. Gobi Desert
3. Arakan mountains

◦ Select the correct answer using the codes below.

- A. 231
- B. 132
- C. 123
- D. 213

◦ Your Answer : D

◦ Correct Answer : D

◦ **Answer Justification :**

Learning: The Arakan Mountains is located in western Myanmar, between the coast of Rakhine State and the Central Burma Basin, in which flows the Irrawaddy River.

Since Myanmar lies further south of the statements 1 and 2, only option C or D can be the answer. If you know the location of Kunlun shan mountains, the answer can be easily market as D.



Q Source: East Asia: Map-based questions

83 Gross Domestic Product of India is

- A. Total capital investment made in the country within an year
- B. Total value of goods and services produced by its nationals
- C. Total consumption expenditure of all residents of India
- D. None of the above ✓

- Your Answer : D
- Correct Answer : D

◦ **Answer Justification :**

Justification: It is the value of the final goods and services produced within a country within an year.

Option C is wrong, since consumption also include imports from abroad, and all residents are not citizens. Moreover, consumption expenditure is only one component of GDP.

Option B is wrong, since Indian nationals living abroad do not contribute to India's GDP. They do however contribute to India's GNP.

Option A is wrong as investment is just one component of GDP.

Q Source: Revision: Concepts covered in previous tests

84 Consider the following statements about Aerogels.

1. They are some of the densest and lightest aerosols.

2. It is often called blue smoke owing to its translucent nature and the way light scatters in the material.
3. Carbon nanotubes and Metals can be used in the manufacturing of aerogels.

◦ Select the correct answer using the codes below.

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only ✓
- D. 3 only

◦ Your Answer :

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: Aerogel is a synthetic porous ultralight material derived from a gel, in which the liquid component for the gel has been replaced with a gas.

The result is a solid with extremely low density and low thermal conductivity. Nicknames include frozen smoke, solid smoke, solid air, solid cloud, blue smoke owing to its translucent nature and the way light scatters in the material.

It feels like fragile expanded polystyrene to the touch. Aerogels can be made from a variety of chemical compounds.

In fact, the lowest density solid materials that have ever been produced are all aerogels, (which range from 0.0011 to ~0.5 g cm⁻³) including a silica aerogel that as produced was only three times heavier than air, and could be made lighter than air by evacuating the air out of its pores.



The term aerogel does not refer to a particular substance, but rather to a geometry which a substance can take on—the same way a sculpture can be made out of clay, plastic etc., aerogels can be made of a wide variety of substances, including:

- Silica



- Most of the transition metal oxides (for example, iron oxide)
- Most of the lanthanide and actinide metal oxides (for example, praseodymium oxide)
- Several main group metal oxides (for example, tin oxide)
- Organic polymers (such as resorcinol-formaldehyde, phenol-formaldehyde, polyacrylates, polystyrenes, polyurethanes, and epoxies)
- Biological polymers (such as gelatin, pectin, and agar agar)
- Semiconductor nanostructures (such as cadmium selenide quantum dots)
- Carbon
- Carbon nanotubes and Metals (such as copper and gold)

Q Source: Additional Research

<http://www.insightsonindia.com/2018/08/15/insights-daily-current-affairs-15-august-2018/>

85 Which of the following neighbouring countries performs better in terms of Human Development Index (HDI) than India?

1. Bangladesh
2. Sri Lanka
3. Nepal
4. Pakistan

◦ Select the correct answer using the codes below.

- A. 1 and 2 only ❌
- B. 1 and 4 only
- C. 2 only ✅
- D. 1, 2 and 3 only

◦ Your Answer : A

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: HDI of these nations are:

- Sri Lanka 0.757



- India 0.609
- Pakistan 0.538
- Nepal 0.548
- Bangladesh 0.570

Bangladesh, Nepal and Pakistan are classified under “Low Human Development” category. India and SL are under the “Medium Human Development” category.

India is placed at 130th rank and Pakistan, 147th. As for the growth rate during 1990-2014, South Asia’s figure was 1.38, the highest among all regions.

Q Source: Frequently in news

86 Despite India being the largest producer of Pulses in the World, India imports Pulses to meet domestic demand. Why India can’t produce enough to meet domestic demand?

1. Pulses are one-season crop and thus can be grown only in Rabi season which severely reduces availability in other seasons.
 2. Pulses require intensive irrigation facilities and heavy rainfall, which are not fulfilled due to shortage of Monsoon rainfall and irrigation bottlenecks.
- Which of the above is/are correct?
 - A. 1 only ❌
 - B. 2 only
 - C. Both 1 and 2
 - D. None ✔
 - Your Answer : A
 - Correct Answer : D

◦ **Answer Justification :**

Justification: The shortage of pulses and its spiralling prices has been a major food security issue in India.

Statement 1: Pulses are grown in both Seasons – Kharif and Rabi. So, 1 is wrong.

Statement 2: Pulses need less moisture and survive even in dry conditions. So, 2 is clearly wrong.

Learning: Some of the reasons why domestic production is not enough.

- Huge demand due to high population



- Pulses are exported despite a shortfall in domestic production and higher consumption.
- Incentive structure is distorted against pulses by high government subsidies for cereals (e.g. MSP).
- Pulses are risky crops as per farmers. For e.g. in UP, Nilgai destroys huge pulse crops within hours. Little protection is offered by the local government.
- Productivity of pulses is lower than world average, and just one-third of that in US and Canada. Poor quality of seeds and input are

Q Source: Frequently In news

87 Consider the following statements.

1. Water and oil molecules are not attracted to each other because water is polar and oil is nonpolar in nature.
2. The lower are the Total Polar Compounds (TPC) in cooking oil higher is the risk of health issues like hypertension and liver diseases upon consuming them.
3. FSSAI has recently launched RUCO (Repurpose Used Cooking Oil) to enable collection and conversion of used cooking oil to bio-diesel.

◦ Select the correct answer using the codes below.

- A. 1 and 2 only
- B. 2 and 3 only ❌
- C. 1 and 3 only ✅
- D. 3 only

◦ Your Answer : B

◦ Correct Answer : C

◦ **Answer Justification :**

Justification: Statement 1: Polar solvents have large dipole moments (aka “partial charges”); they contain bonds between atoms with very different electronegativities, such as oxygen and hydrogen. Non polar solvents contain bonds between atoms with similar electronegativities, such as carbon and hydrogen (think hydrocarbons, such as gasoline)

The molecules of a polar solvent like water are attracted to other polar molecules, such as those of sugar. This explains why sugar has such a high solubility in water and why oil does not dissolve in water.

Statement 3: Under this initiative, 64 companies at 101 locations have been identified to enable collection of used cooking oil. For instance: McDonald’s has already started converting used cooking oil to biodiesel from 100 outlets in Mumbai and Pune.



FSSAI wants businesses using more than 100 litres of oil for frying, to maintain a stock register and ensure that UCO is handed over to only registered collecting agencies.

FSSAI believes India has the potential to recover 220 crore litres of used cooking oil for the production of biodiesel by 2022 through a co-ordinated action. While biodiesel produced from used cooking oil is currently very small, but a robust ecosystem for conversion and collection is rapidly growing in India and will soon reach a sizable scale.

Statement 2: The initiative has been launched nearly a month after the food safety regulator notified standards for used cooking oil. According to FSSAI regulations, the maximum permissible limits for Total Polar Compounds (TPC) have been set at 25%, beyond which the cooking oil is unsafe for consumption.

What is Total Polar Compounds (TPC)?

In many countries, TPC is used to measure the quality of oil. The level of TPC increases every time oil is re-heated. Some of the studies show that TPC accumulation in oil without food is slower than that in oil frying with food.

Higher level of TPC in cooking oil leads to health issues like hypertension, atherosclerosis, Alzheimer's disease and liver disease. One of the studies also noticed high levels of glucose, creatinine and cholesterol with declined levels of protein and albumin in cooking oil.

Q Source: Additional Research

<http://www.insightsonindia.com/2018/08/16/insights-daily-current-affairs-16-august-2018/>

88 Which of the following countries are member(s) of G-20?

1. Australia
2. Saudi Arabia
3. Canada
4. China
5. Japan

◦ Select the correct answer using the codes below.

- A. 1, 3 and 5 only
- B. 1, 2 and 4 only
- C. 2, 3 and 5 only
- D. 1, 2, 3, 4 and 5



◦ Your Answer : D

◦ Correct Answer : D


◦ **Answer Justification :**

Justification: Use elimination. China is an influential member of G-20. So, options A and C can be discarded right away.

There is no reason why Japan, being a major developed economy, should not be a member of G-20.

This clearly leads to the answer option D.

Learning: Members are:

Group 1	Group 2	Group 3	Group 4	Group 5
 Australia	 India	 Argentina	 France	 China
 Canada	 Russia	 Brazil	 Germany	 Indonesia
 Saudi Arabia	 South Africa	 Mexico	 Italy	 Japan
 United States	 Turkey		 United Kingdom	 South Korea

- G20 is an international forum for the governments and central bank governors from 20 major economies.
- It was founded in 1999 with the aim of studying, reviewing, and promoting high-level discussion of policy issues pertaining to the promotion of international financial stability.
- It seeks to address issues that go beyond the responsibilities of any one organization.
- The G20 heads of government or heads of state have periodically conferred at summits since their initial meeting in 2008, and the group also hosts separate meetings of finance ministers and central bank governors.

Q Source: Last G-20 summit

89 South Korea lies between

- A. Yellow Sea and Sea of Japan ✓
- B. Sea of Japan and Pacific Ocean
- C. Korean Strait and Bungo channel
- D. South China Sea and Pacific Ocean

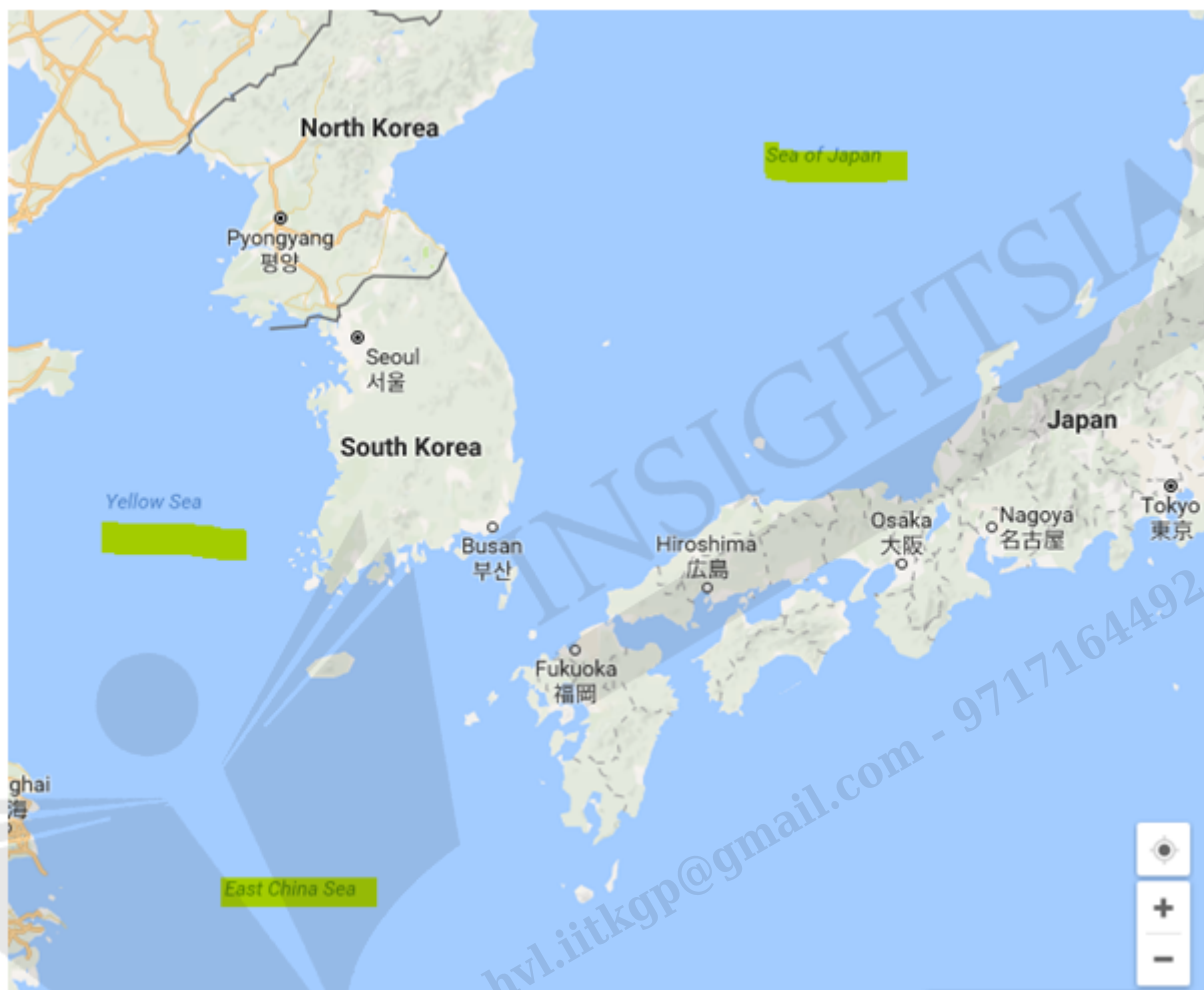
- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Learning: Answer cannot be South China Sea as it lies down South. So, D is eliminated.


Bungo channel lies near Japan. So, C is also eliminated.

Map is as follows.



Q Source: East Asia: Map-based questions

90 Which of the following is NOT an example of a trade barrier?

- A. Allowing only a fixed amount of commodities to be exported or imported irrespective of supply-demand situations
- B. Capping foreign direct investment in sensitive sectors 
- C. Imposing unreasonable standards on quality of imports
- D. Tax on imports

◦ Your Answer : B

◦ Correct Answer : B

◦ **Answer Justification :**

Justification: Option C: A barrier to trade is a government-imposed restraint on the flow of international goods or services. The most common barrier to trade is a tariff—a tax on imports. Tariffs raise the price of imported goods relative to domestic goods (goods produced at home). So, D is correct.

Option A: An import quota is a type of protectionist trade restriction that sets a physical limit on the

quantity of a good that can be imported into a country in a given period of time. So, A is correct.

Option B: FDI is related to the capital sector and overall investment policy of the nation. FDI is not considered a trade component. So, B is wrong.

Option C: Such standards can effectively clog imports from competitor nations, for e.g. China in case of India.

Q Source: Additional Research: Chapter 11: Shankar Ganesh: Economics

91 Kutiyattam is a traditional performing artform in the state of

- A. Tamil Nadu
- B. Andhra Pradesh
- C. Kerala ✓
- D. Telangana

- Your Answer : C
- Correct Answer : C

◦ **Answer Justification :**

Justification: Koodiyattam, also transliterated as Kutiyattam, is a traditional performing artform in Kerala. It is a combination of ancient Sanskrit theatre with elements of Koothu, a Tamil performing art which is as old as Sangam era. It is officially recognised by UNESCO as a Masterpiece of the Oral and Intangible Heritage of Humanity.

Koodiyattam, meaning "combined acting" as it combines dramas in Sanskrit theatre with elements of traditional Koothu.

It is traditionally performed in temple theatres known as Koothambalams of Kerala. It is the only surviving artform that uses dramas from ancient Sanskrit theatre. It has an attested history of a thousand years in Kerala

Q Source:

<https://www.thehindu.com/entertainment/dance/setting-the-record-straight-on-kutiyattam/article23835995.ece>

92 Lack of "Internal democracy" within political parties implies

1. Concentration of power at the top in the party
2. Provincial decentralization of the party

- Which of the above is/are correct?
 - A. 1 only ✓
 - B. 2 only
 - C. Both 1 and 2
 - D. None



- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Justification:

- All over the world there is a tendency in political parties towards the concentration of power in one or few leaders at the top. Parties do not keep membership registers, do not hold organisational meetings, and do not conduct internal elections regularly.
- Ordinary members of the party do not get sufficient information on what happens inside the party.
- They do not have the means or the connections needed to influence the decisions. As a result the leaders assume greater power to make decisions in the name of the party.
- Since one or few leaders exercise paramount power in the party, those who disagree with the leadership find it difficult to continue in the party. More than loyalty to party principles and policies, personal loyalty to the leader becomes more important.

Q Source: Page 83: Democratic Politics: Class Xth NCERT

93 The following were in news for some time. Consider their matches with what they are associated with.

1. Tiangong-2 : World's fastest Supercomputer
2. Cassini-Huygens : NASA's Spacecraft to study Saturn
3. NASA's New Horizons : Interplanetary space probe
4. NASA's Odyssey : Exploration of Jupiter

- Select the correct answer using the codes below.

- A. 1 and 2 only
- B. 2, 3 and 4 only
- C. 2 and 3 only ✓
- D. 1 and 4 only ✗

- Your Answer : D
- Correct Answer : C

◦ **Answer Justification :**

Justification: Statement 1: China has successfully launched Tiangong-2 space lab to develop expertise for a future space station and conduct science experiments.

Statement 2: NASA's Cassini spacecraft after studying Saturn, its rings and moons for more than 12 years, has entered in the final year of its epic voyage. It will make the closest-ever observations of



the planet. It is the first to enter successfully in its orbit.

Statement 3: New Horizons is an interplanetary space probe that was launched as a part of NASA's New Frontiers program. It was launched on January 19, 2006.

The primary mission is to perform a flyby study of the Pluto system. The secondary mission to fly by and study one or more other Kuiper belt objects (KBOs).

Statement 4: It is a Mars exploration spacecraft.

Q Source: Recently in news

94 The Roaring Forties are

- A. Strong westerly winds found in the Southern Hemisphere ✓
- B. Feeble easterly winds found in the Northern Hemisphere
- C. Thunderstorms often found near the equator
- D. Equatorial counter-currents that move near the eastern coastal shores in lower latitudes

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Learning: They are generally found between the latitudes of 40 and 50 degrees.

- The strong west-to-east air currents are caused by the combination of air being displaced from the Equator towards the South Pole and the Earth's rotation, and there are few landmasses to serve as windbreaks.
- The Roaring Forties were a major aid to ships sailing the Brouwer Route from Europe to the East Indies or Australasia during the Age of Sail, and in modern usage are favoured by yachtsmen on round-the-world voyages and competitions.
- The boundaries of the Roaring Forties are not consistent, and shift north or south depending on the season.
- Similar but stronger conditions occur in more southerly latitudes and are referred to as the Furious Fifties and Shrieking or Screaming Sixties.

Q Source: Based on issues covered in previous tests

95 In order to promote 'millets', India has recently notified these climate resilient crops as "Nutri-Cereals" and allowed its inclusion in the Public Distribution System (PDS) for improving nutritional support. This category of "Nutri-Cereals" include



1. Bajra
2. Ragi
3. Kakun
4. Kuttu

◦ Select the correct answer using the codes below.

- A. 1 and 2 only ✗
- B. 2, 3 and 4 only
- C. 1, 2 and 4 only
- D. 1, 2, 3 and 4 ✓

◦ Your Answer : A

◦ Correct Answer : D

◦ **Answer Justification :**

Justification: Recognising millets' anti-diabetic properties, this government notification called it a "powerhouse of nutrients" and identified several varieties of millets for promotion.

The millets in the category of "Nutri-Cereals" include Sorghum (Jowar), Pearl Millet (Bajra), Finger Millet (Ragi), Foxtail Millet (Kangani/Kakun) and Buckwheat (Kuttu) among others.

Besides, the government had in July substantially hiked the minimum support price (MSP) of millets so that more and more farmers may opt for cultivation of these less water consuming crops.

Millet is a common term to categorize small-seeded grasses that are often termed nutri-cereals or dryland-cereals, and includes sorghum, pearl millet, ragi, small millet, foxtail millet, proso millet, barnyard millet, kodo millet and other millets.

Q Source:

<http://www.insightsonindia.com/2018/08/17/insights-daily-current-affairs-17-august-2018/>

96 In India, the largest contributor to energy generation is

- A. Coal-based power plants ✓
- B. Nuclear plants
- C. Natural gas based plants
- D. Hydel power plants

◦ Your Answer : A

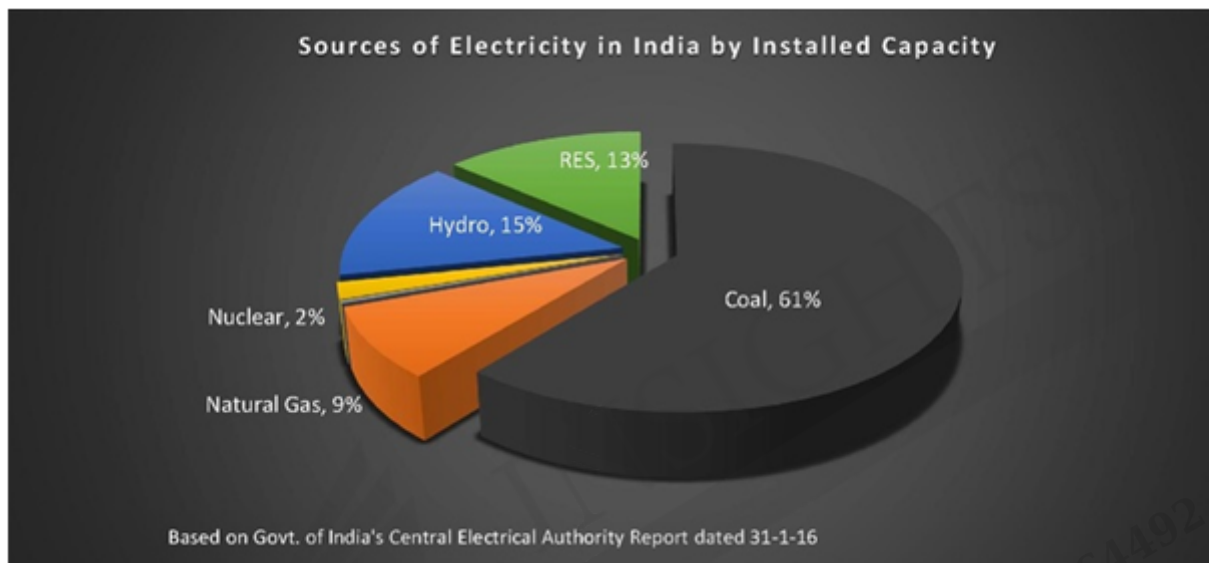
◦ Correct Answer : A

◦ **Answer Justification :**

Learning: India became the world's third largest producer of electricity in the year 2013 with 4.8% global share in electricity generation surpassing Japan and Russia.

India's electricity sector consumes about 72% of the coal produced in the country. The high ash

content in India's coal affects the thermal power plant's potential emissions.



Q Source: A common issue seen in news frequently

97 The objective of the Rotterdam Convention is to promote shared responsibility and cooperative efforts among Parties in the international trade of

- A. Hazardous chemicals ✓
- B. Rare species
- C. Environmental antiques
- D. Carbon credit

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Learning: The Convention covers pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons by Parties and which have been notified by Parties for inclusion.

The convention has roots in initiatives of UNEP and FAO.

FAO launched the International Code of Conduct on the Distribution and Use of Pesticides in 1985 and UNEP established the London Guidelines for the Exchange of Information on Chemicals in International Trade in 1987.

On the lines of these initiatives, the convention entered into force in 2004 and became legally binding for its Parties.

Q Source: <http://www.pic.int/TheConvention/Overview/tabid/1044/language/en-US/Default.aspx>



98 What do you understand by the Dual nature of light?

- A. Light is both a wave and a particle. ✓
- B. Light cannot travel on two paths at the same time.
- C. Light travels without being refracted through a transparent medium.
- D. Light can exhibit wavelengths from both ends of the electromagnetic spectrum.

- Your Answer : A
- Correct Answer : A

◦ **Answer Justification :**

Learning: Light has a dual nature

- Sometimes it behaves like a particle (called a photon), which explains how light travels in straight lines
- Sometimes it behaves like a wave, which explains how light bends (or diffracts) around an object. So, option B is wrong.

Together Max Planck and Albert Einstein explained the photoelectric effect by assuming that light was actually a stream of little particles, or packets of energy known as photons or quanta.

Scientists now believe that light is both a wave and a particle – a property which they term the wave-particle duality.

Q Source: Based on questions asked by UPSC from topics related to science

99 The Namami Gange Scheme builds over the older Ganga Action Plan. The stated objective(s) of the Ganga Action Plan was to

- A. Restore the river water quality to the 'Bathing Class' standard ✓
- B. Restoring the river water quality to the 'Drinking Class' standard ✗
- C. Bring the major tributaries to 'Industrial Class' Standard
- D. Bring the major tributaries to 'Near Source' standard

- Your Answer : B
- Correct Answer : A

◦ **Answer Justification :**

Learning: The other objectives of the Ganga Action Plan were as under:

- Control of non-point pollution from agricultural run-off, human defecation, cattle wallowing etc



- Research and Development to conserve the biotic diversity of the river to augment its productivity.
- New technology of sewage treatment like Up-flow Anaerobic Sludge Blanket (UASB) and sewage treatment through afforestation
- Rehabilitation of soft-shelled turtles for pollution abatement of river
- Resource recovery options like production of methane for energy generation and use of aquaculture for revenue generation
- To act as trend setter for taking up similar action plans in other grossly polluted stretches in other rivers.

Q Source: IN news frequently

100 Which of the following is/are the key features of Federalism?

1. Different tiers of government govern the same citizens, but each tier has its own jurisdiction.
2. Each tier of government must draw all its financial resources independent of the other tier.
3. The existence and authority of each tier of government generally is constitutionally guaranteed.
4. Division of powers between State units cannot be arbitrarily manipulated by any one tier of government alone.

◦ Select the correct answer using the codes below.

- A. 1, 2 and 3 only ❌
- B. 1, 3 and 4 only ✅
- C. 3 and 4 only
- D. 1 and 2 only

◦ Your Answer : A

◦ Correct Answer : B

◦ **Answer Justification :**

Justification: Statement 1: Each tier has its own jurisdiction in specific matters of legislation, taxation and administration; for e.g. in India states legislate in matters of police, and Centre legislates in areas of national security as a whole.

Statement 2: Tiers may be dependent upon each other; however not completely, else it erodes autonomy. So, 2 is incorrect.

Statement 4: The fundamental provisions of the constitution cannot be unilaterally changed by one level of government. Such changes require the consent of both the levels of government.



Q Source: Page 15: Democratic Politics: Class Xth NCERT



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