

# **10 PM Current Affairs Quiz Monthly Compilation**

---

*For UPSC CSE Prelims*

**February, 2024**

## 10 PM Compilation for the Month of February 2024

### Index

Art & Culture, Ancient and Medieval History .....	2
Answer Key .....	5
Answers & Explanations .....	5
Modern Indian History .....	9
Answer Key .....	10
Answers & Explanations .....	11
Geography .....	12
Answer Key .....	17
Answers & Explanations .....	17
Polity .....	24
Answer Key .....	30
Answers & Explanations .....	31
Acts & Policies .....	38
Answer Key .....	45
Answers & Explanations .....	45
Index & Reports.....	53
Answer Key .....	54
Answers & Explanations .....	54
International Relations/Organizations .....	55
Answer Key .....	61
Answers & Explanations .....	61
Economy.....	67
Answer Key .....	78
Answers & Explanations .....	78
Environment.....	90
Answer Key .....	101
Answers & Explanations .....	101
Science & Technology .....	113
Answer Key .....	123
Answers & Explanations .....	123

## Art & Culture, Ancient and Medieval History

Q.1) Consider the following statements:

1. Madhika language is spoken by Kattunayakan community.
2. Madhika language does not have its own script.
3. As per UNESCO, any language spoken by less than 10,000 persons is considered “potentially endangered”.

Which of the statements given above are correct?

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

Q.2) With reference to Bharat Ratna Award, consider the following statements:

1. It acknowledges individuals for exceptional service in any field of human endeavor.
2. It is the highest civilian Award of the country.
3. The award carries a monetary grant of Rs 5 lakhs.
4. In terms of Article 18 (1) of the Constitution, the award cannot be used as a prefix or suffix to the recipient's name.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.3) With reference to the Padma awards, consider the following statements:

1. The awards come under the aegis of the Ministry of Home Affairs.
2. Padma Vibhushan is highest in the hierarchy of Padma Awards.
3. All nominations received for the Padma Awards are placed before the Padma Awards Committee constituted by the Prime Minister every year.
4. Government servants including those working with Public Sector Undertakings (PSUs) are eligible for these Awards.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.4) Which one of the following categories represent the classifications of UNESCO World Heritage Sites?

- a) Cultural, natural, and mixed cultural and natural.
- b) Historical, archaeological, and architectural.
- c) Tangible and intangible heritage.
- d) Religious, secular, and military.

## 10 PM Compilation for the Month of February 2024

Q.5) With reference to Subika painting, consider the following statements:

1. It is a style of painting which is linked to the Meitei community's cultural history.
2. These paintings traditionally use handmade paper created from the bark of specific trees.

Which of the statement(s) given above is/are correct?

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

Q.6) Consider the following statements regarding the Kamakhya Temple:

1. The temple has been constructed in Nilachal type of temple architecture.
2. The temple features Valabhi Shikhara architectural style.
3. Ahom Kingdom is associated with the construction and development of the Kamakhya Temple.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.7) With reference to the Grammy Awards, consider the following statements:

1. The Grammy Awards recognizes excellence in film and television.
2. Some Indian personalities have been honored with the Grammy Award.

Which of the statement(s) given above is/are correct?

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

Q.8) Consider the following statements with respect to Deepastambham (lamp post) pillar:

1. The pillar was dedicated to Kasi Viswanatha.
2. During the construction of the lamp post, the Nalgonda region was governed by the Qutb Shahi dynasty.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.9) Consider the following statements:

1. The paintings and sculptures in the Ajanta Caves illustrate the life and teachings of the Buddha.
2. Mosaic art painting has been used to create the intricate paintings found in the Ajanta and Ellora Caves.

Select the correct statements using the codes given below:

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

Q.10) Consider the following statements with respect to the 'Kokborok Language':

1. It is one of the state languages of Tripura.
2. It belongs to the Dravidian language family.

Which of the statement(s) given above is/are correct?

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

Q.11) With reference to the Bharat Ratna award, consider the following statements:

1. It is India's highest literary award.
2. The announcement of award recipients usually occurs annually on India's Independence Day.
3. The recommendations for Bharat Ratna are made by the Prime Minister to the President.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.12) With reference to the Dhokra Shilpkala sculptures, consider the following statements:

1. Dhokra Shilpkala sculptures often depict animals and everyday objects.
2. It is a traditional art form known for its clay casting methods.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.13) With reference to the Bochasanwasi Akshar Purushottam Swaminarayan Sanstha Mandir, recently inaugurated at Abhu Dhabi, consider the following statements:

1. It is built in traditional Vesara style of architecture.
2. Temple is surrounded by 'Dome of Harmony' and 'Dome of Peace.'
3. The temple has been built using cement.
4. The temple houses seven shrines.

Which of the statements given above are correct?

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

Q.14) With reference to the Pallava Dynasty, which of the following statement(s) is/are correct?

1. Narasimhavarman I is considered the founder of the Pallava Dynasty.
2. It is renowned for its contributions to maritime trade and navigation.
3. The rise of the Rashtrakutas led to the decline of the Pallava Dynasty.

Select the correct answer using the codes given below:

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

### Answer Key

1 - (b)	2 - (c)	3 - (c)	4 - (a)	5 - (c)	6 - (b)	7 - (b)
8 - (c)	9 - (a)	10 - (a)	11 - (a)	12 - (a)	13 - (d)	14 - (d)

### Answers & Explanations

1. Correct Answer is (B)
  - Statement 1 is incorrect. Madhika language is spoken by the Chakaliya community. It is a blend of Telugu, Tulu, Kannada, and Malayalam. It is largely influenced by Havyaka Kannada, an old form of Kannada. Chakaliya community have a nomadic origin. They worship gods like Thiruvekatramana and Mariamma. They have migrated to northern Malabar from the hilly regions of Karnataka centuries ago. Initially they were given the S.T.

## 10 PM Compilation for the Month of February 2024

status, but later they were brought under S.C. category. They were considered untouchables.

- Statements 2 and 3 are correct. Madhika is an unwritten language, meaning it doesn't have a formal writing system. This lack of a script contributes to the challenges of preserving the language. As per the UNESCO, languages spoken by fewer than 10,000 speakers are considered "potentially endangered."

Source: [Forum IAS](#)

2. Correct Answer is (C)

- Statements 1, 2 and 4 are correct. The Bharat Ratna recognizes individuals who have made exceptional contributions in any field, regardless of their profession or background. It is the highest civilian award in India, recognizing exceptional achievements across diverse fields. In terms of Article 18 (1) of the Constitution, the award cannot be used as a prefix or suffix to the recipient's name.
- Statement 3 is incorrect. The Bharat Ratna is an honorary award and does not include any monetary compensation.

Source: [Forum IAS](#)

3. Correct Answer is (C)

- Statements 1, 2 and 3 are correct. The Padma Awards are one of the highest civilian honours of India. They are announced annually on the eve of Republic Day. These Awards are conferred by the President of India at ceremonial functions which are held at Rashtrapati Bhawan usually around March / April every year. The awards come under the aegis of the Ministry of Home Affairs. The award acknowledges achievements in all fields of activities or discipline where element of public service is involved. Padma Vibhushan is highest in the hierarchy of Padma Awards followed by Padma Bhushan and Padma Shri. All persons without distinction of race, occupation, position or sex are eligible for these Awards. All nominations received for the Padma Awards are placed before the Padma Awards Committee constituted by the Prime Minister every year. The Padma Awards Committee is headed by the Cabinet Secretary and includes the Home Secretary, the Secretary to the President, and four to six eminent persons as members. The recommendations of the committee are submitted to the Prime Minister and the President of India for approval.
- Statement 4 is incorrect. All persons without distinction of race, occupation, position or sex are eligible for these awards. However, government servants including those working with Public Sector Undertakings (PSUs), except doctors and scientists, are not eligible for these Awards.

Source: [Forum IAS](#)

4. Correct Answer is (A)

- The UNESCO World Heritage List categorizes sites into three main categories based on their outstanding universal value. These categories are:

## 10 PM Compilation for the Month of February 2024

- Cultural Heritage Sites: Cultural heritage sites include monuments, buildings, structures, cities, and cultural landscapes that bear unique significance to human civilization.
- Natural Heritage Sites: Natural heritage sites comprise areas of exceptional natural beauty, geological formations, biodiversity, and ecological significance.
- Mixed Heritage Sites: Mixed heritage sites are properties that possess both cultural and natural significance, combining elements of both categories.

Source: [Forum IAS](#)

5. Correct Answer is (C)

- Statements 1 and 2 are correct. Subika painting is an early visual art form of Manipur. It is a style of painting which is linked to the Meitei community's cultural history. It is surviving through its six manuscripts – Subika, Subika Achouba, Subika Laishaba, Subika Choudit, Subika Cheithil and Thengrakhel Subika. It is a composition of cultural motifs made by pre-existing features and other influences encouraged by cultural world-views of the community. The illustrations of Subika Laishaba have visual language from the elements such as lines, shapes, forms, colours, and patterns. These visual images become Meitei's cultural motif, and structure to create visual effects as well as express cultural significance. The visual images are painted on handmade paper.

Source: [Forum IAS](#)

6. Correct Answer is (B)

- Statements 1 and 3 are correct. The temple has been constructed in the Nilachal type of temple architecture, which is a combination of the traditional nagara or North Indian and saracenic or Mughal styles. The Ahom Kingdom, which ruled over parts of present-day Assam from the 13th to the 19th century, played a significant role in the development of the Kamakhya Temple. The Ahom kings were patrons of the temple, and they contributed to its expansion and renovation over the centuries.
- Statement 2 is incorrect. The Valabhi Shikhara style is primarily found in temples of western India, particularly in Gujarat and Rajasthan. It's characterized by a rectangular shape and curved shikhara. The Kamakhya Temple's shikhara is more aligned with the beehive shape common to the Nilachal style.

Source: [Forum IAS](#)

7. Correct Answer is (B)

- Statement 1 is incorrect. The Grammy Awards do not recognize excellence in film and television. They are awarded for achievements in the music industry. It is a prestigious award presented annually by the Recording Academy to honour outstanding achievements in the music industry. The Grammy Awards were first established in 1959 to honour artistic and technical excellence across various music genres. It includes a wide range of categories covering such as pop, rock, rap, country, classical, jazz, and many more. It is held annually in Los Angeles, California, typically in January or February.
- Statement 2 is correct. There are 15 Indians who have won Grammy Awards such as A.R. Rahman, Zakir Hussain etc.

Source: [Forum IAS](#)



## 10 PM Compilation for the Month of February 2024

8. Correct Answer is (C)

- Statements 1 and 2 are correct. Recently, archaeologists discovered a 390-year-old Deepastambham (lamp post) on the banks of the River Krishna in Nalgonda district, Telangana. According to the inscription found on the lamp post, the pillar can be dated back to June 1635. The inscription, comprising a fusion of Telugu and Tamil languages which suggests that the pillar was dedicated to Kasi Viswanatha. The impressive height of the pillar hints at its possible role as a lighthouse, aiding ships along the riverine trade route in the early medieval era. During the construction of the lamp post, the Nalgonda region was governed by the Qutb Shahi dynasty. European travelers like the French diamond trader Tavernier, who visited the Hyderabad kingdom has also made note of these land trade routes.

Source: [Forum IAS](#)

9. Correct Answer is (A)

- Statement 1 is correct. The Ajanta Caves are primarily Buddhist in nature. The paintings and sculptures depict various scenes from the life of the Buddha, Jataka tales (stories of his previous lives), and other Buddhist iconography.
- Statement 2 is incorrect. The paintings in the Ajanta Caves are executed in the fresco-secco (also known as dry fresco) technique. The Ellora Caves are known more for their intricate rock-cut sculptures and architectural details.

Source: [Forum IAS](#)

10. Correct Answer is (A)

- Statement 1 is correct. Kokborok, also known as Tripuri or Tiprakok, is one of the official languages of Tripura. It was recognized as an official language in 1979, and it holds significant cultural importance in the region. Another official language of Tripura is Bengali.
- Statement 2 is incorrect. Kokborok language is a part of the Tibeto-Burman language group within the larger Sino-Tibetan language family.

Source: [Forum IAS](#)

11. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The Bharat Ratna award is not India's highest literary award. It is India's highest civilian award. Bharat Ratna awards are usually announced around the time of India's Republic Day, not Independence Day.
- Statement 3 is correct. The recommendations for the Bharat Ratna award are made by the Prime Minister to the President of India. There is no formal process for nominations, and the Prime Minister has the discretion to propose the names of potential recipients to the President.

Source: [Forum IAS](#)

12. Correct Answer is (A)

- Statement 1 is correct. The word "Dhokra" is believed to be derived from the Dhokra Damar tribes, the traditional metal smiths of Central India. The origins can be traced back to the

## 10 PM Compilation for the Month of February 2024

tribal communities residing in the regions of Chhattisgarh, Jharkhand, West Bengal, and Odisha. The beauty of Dhokra Shilpkala lies in its rustic charm and the organic nature of its designs. Artisans draw inspiration from nature, mythology, and everyday life. They incorporate motifs such as animals, birds, deities, and tribal symbols into their creations. Each piece displays a sense of timeless elegance and cultural richness.

- Statement 2 is incorrect. The sculptures are created using the lost wax casting technique, which involves a process of metal casting using a clay core, beeswax, and brass or bronze metal.

Source: [Forum IAS](#)

13. Correct Answer is (D)

- Statements 1 and 3 are incorrect. The temple is built in traditional Nagara style of architecture. The temple has been built by using fly ash instead of cement to reduce its carbon footprint. Nano tiles have been installed with designs to keep visitors comfortable even in extreme heat. It has not used any ferrous material.
- Statements 2 and 4 are correct. The temple complex is surrounded by two prominent domes: the 'Dome of Harmony' and the 'Dome of Peace,' symbolizing unity and coexistence among different religions and cultures. The temple houses seven shrines, each dedicated to different deities hailing from the North, East, West and South parts of India.

Source: [Forum IAS](#)

14. Correct Answer is (D)

- Statements 1 and 2 are incorrect. The Pallava Dynasty is considered to have been founded by Simhavishnu, who ruled from around 550 to 580 CE. The Pallava Dynasty is known for its contributions to art, literature, and architecture, rather than maritime trade and navigation. The Pallavas were great patrons of the arts and played a crucial role in the development of South Indian architecture, sculpture, and literature.
- Statement 3 is correct. The decline of the Pallava Dynasty is often attributed to the rise of the Rashtrakutas, a powerful dynasty that gained prominence in the Deccan region. The Rashtrakutas, under their king Govinda III, defeated the Pallavas in several battles, leading to the weakening and eventual decline of the Pallava Dynasty.

Source: [Forum IAS](#)

## Modern Indian History

Q.1) Who among the following is popularly known as 'Jan Nayak'?

- a) Jagannath Mishra
- b) Vishwanath Pratap Singh
- c) Karpooori Thakur
- d) Raman Singh

## 10 PM Compilation for the Month of February 2024

Q.2) Consider the following statements:

1. The Government of India Act 1919 granted limited voting rights to a small number of women based on property qualifications.
2. The Nehru Report of 1929 proposed equal civic rights for all.
3. During the British era, the North-West Frontier Province (NWFP) became the first province to grant women the right to vote.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.3) Which one of the following ideological differences distinguishes Subhas Chandra Bose's approach to Indian independence from that of Mahatma Gandhi?

- a) Bose believed in a gradual transition to self-rule, while Gandhi wanted immediate independence.
- b) Bose supported the use of violent resistance, if necessary, whereas Gandhi strictly adhered to non-violence.
- c) Bose was a proponent of Western-style democracy, while Gandhi advocated for a system based on ancient Indian traditions.
- d) Bose emphasized the importance of English education, while Gandhi promoted traditional Indian education.

Q.4) 'Bande Mataram', an English newspaper, was started by which one of the following?

- a) Gopal Krishna Gokhale
- b) Sri Aurobindo
- c) Bipin Chandra Pal
- d) Surendranath Banerjee

Q.5) Consider the following statements:

1. Gandhi's idea of 'Swaraj' only emphasized on achieving political freedom.
2. Ambedkar believed that the Constitution included liberty, equality, and fraternity as interlinked principles of life.

Which of the statement(s) given above are correct?

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

### Answer Key

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

## Answers & Explanations

1. Correct Answer is (C)

- Karpoori Thakur was a socialist leader and two-term Chief Minister of Bihar (1970-1971 and 1977-1979). He is remembered for fighting for the cause of the poor and marginalized, earning him the title "Jan Nayak" (leader of the people). He recently received the prestigious Bharat Ratna posthumously in January 2024.

Source: [Forum IAS](#)

2. Correct Answer is (B)

- Statements 1 and 2 are correct. The Government of India Act 1919 granted limited voting rights to a small number of women based on property qualifications. Under the Act, the qualifications for voting were: 1) They should have a property with rental value, taxable income or paid land revenue of at least Rs. 3000 in a year, 2) They must have past experience in the legislative council, 3) They must have membership of university senate, 4) They should hold certain offices in local bodies, 5) They should have some specified titles. The Nehru Report of 1929 proposed equal civic rights for all, including the right to vote, and it played a significant role in shaping the future of the Indian constitution and the rights of Indian citizens.
- Statement 3 is incorrect. The Madras Presidency became the first province in British India to grant voting rights to women in 1921.

Source: [Forum IAS](#)

3. Correct Answer is (B)

- Subhas Chandra Bose's approach to Indian independence differed from Mahatma Gandhi primarily in their stance on the use of violence. While Bose was open to violent resistance, if necessary, Gandhi strictly adhered to non-violence as the fundamental principle of his approach to achieving independence.

Source: [Forum IAS](#)

4. Correct Answer is (C)

- The Bande Mataram was an English language weekly newspaper published from Calcutta (now Kolkata) founded in 1905 by Bipin Chandra Pal and edited by Sri Aurobindo. Its aim was to prepare Indians to struggle for complete independence.
- Sri Aurobindo's philosophy: Aurobindo's life philosophy is a synthesis of idealism, realism, naturalism and pragmatism. According to him, Jnana (knowledge), Bhakti (devotion) and Karma (work ethics) can lead man to the divine path. His philosophy is also known as integral yoga.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

5. Correct Answer is (B)

- Statement 1 is incorrect. Gandhi's idea of 'Swaraj' did not only emphasize achieving political freedom, but also focused on self-governance, economic independence, and moral and spiritual development.
- Statement 2 is correct. Ambedkar believed that the Constitution included liberty, equality, and fraternity as interlinked principles of life. Ambedkar considered these principles to be inseparable and crucial for a just and equitable society. He argued that political freedom without social and economic equality was meaningless.

Source: [Forum IAS](#)

## Geography

Q.1) Consider the following pairs:

Lakes-----Location

1. Lake Baikal-----South America
2. Lake Retba-----Africa
3. Lake Victoria-----Europe
4. Lake Volta-----Africa

How many of the above pairs are correctly matched?

- a) Only one pair
- b) Only two pairs
- c) Only three pairs
- d) All four pairs

Q.2) Which one of the following country's coastlines is closest to the "Wadge Bank"?

- a) India
- b) Myanmar
- c) Maldives
- d) Bangladesh

Q.3) Consider the following features:

1. It is a type of lake typically characterized by a high pH level.
2. It represents some of the Earth's most productive aquatic environments due to the abundance of dissolved carbon dioxide.
3. They naturally occur in both arid and semi-arid regions.
4. Sambhar Lake in Rajasthan is an example of this type of lake.

Which one of the following lakes has the above characteristics?

- a) Soda Lakes
- b) Eutrophic Lakes
- c) Volcanic Lakes
- d) Glacial Lakes

## 10 PM Compilation for the Month of February 2024

Q.4) Which of the following rivers' surplus monsoon water is planned to be utilized in the Eastern Rajasthan Canal Project (ERCP)?

- a) Chambal, Betwa, Ken, Mahi
- b) Chambal, Kalisindh, Parvati, Mej
- c) Ganga, Yamuna, Ghaghara
- d) Betwa, Indus, Sutlej

Q.5) Which one of the following statements correctly defines the 'Alpenglow phenomenon', seen in the news recently?

- a) These are optical phenomena that create bright circles or arcs around the sun or moon.
- b) It is an optical phenomenon that appears as a horizontal reddish glow near the horizon opposite to the Sun when the solar disk is just below the horizon.
- c) These are beams of sunlight that appear to radiate from the point in the sky where the sun is located.
- d) It creates distorted and elongated images of distant objects, often appearing as castles or cities in the sky.

Q.6) With reference to the Hindukush Mountain Range, consider the following statements:

1. It has the largest concentration of frozen water on Earth after the North Pole and South Pole.
2. Nepal and Bhutan lie entirely within the Hindu Kush Mountain Range.
3. Mount Godwin-Austen (K2) is the highest peak of the Hindu Kush Mountain Range.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.7) With reference to the Kinnow fruit, which one of the following statements is correct?

- a) Kinnow trees require high humidity levels for growth.
- b) It has originated in North America.
- c) They are well adapted to alkaline soils.
- d) These are major fruit crops of Punjab.

Q.8) Which one of the following major waterways connects the Gulf of Aden to the Red Sea?

- a) Bab-el-Mandeb Strait
- b) Suez Canal
- c) Strait of Hormuz
- d) Strait of Malacca

## 10 PM Compilation for the Month of February 2024

Q.9) Consider the following statements with respect to the river Chenab:

1. The Chenab River originates from the Karakoram Range.
2. Thirot is one of its tributaries.
3. Ratle Hydroelectric Project is located on the river Chenab.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.10) With reference to the South China Sea, consider the following statements:

1. Nine-Dash Line, associated with the South China Sea, is a shipping route for international trade that is heavily regulated by China.
2. It is connected by Taiwan Strait with the East China Sea and by Luzon Strait with the Philippine Sea.

Which of the statements(s) given above is/are correct?

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

Q.11) Which one of the following demographic trends is indicated by India's Total Fertility Rate (TFR) decreasing to 2?

- a) A decrease in the working-age population
- b) A rise in infant mortality rates
- c) A decrease in life expectancy
- d) A decline in the dependency ratio

Q.12) Consider the following statements:

1. Hematite iron ore is often associated with sedimentary rocks.
2. Iron ore pellets are small, hard, spherical particles made from fine iron ore concentrate.
3. Sponge iron refers to a type of cast iron with high carbon content and brittle properties.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

## 10 PM Compilation for the Month of February 2024

Q.13) With reference to the Wheat crop, how many of the following statements are correct?

1. India is the world's largest producer of wheat.
2. It is the second most important cereal crop in India after rice.
3. It is a kharif crop.
4. It requires 50 cm to 100 cm of rainfall.

Select the correct answer using the codes given below:

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.14) Which of the following countries does the Mekong River flow through?

- a) China, Myanmar, Laos, Thailand, Cambodia, Vietnam
- b) India, Bangladesh, Nepal, Bhutan, Myanmar
- c) Indonesia, Malaysia, Philippines, Thailand, Singapore
- d) Egypt, Sudan, Ethiopia, South Sudan, Uganda

Q.15) Which of the following European countries has a coastline along the Mediterranean Sea?

- a) Spain, France, Italy, Malta
- b) Andorra, Austria, Czech Republic, Hungary
- c) Liechtenstein, Luxembourg, North Macedonia, Serbia
- d) Morocco, Algeria, Tunisia, Libya

Q.16) With reference to the Krishna River, which of the following statement(s) is/are correct?

1. It is the third-longest river in India.
2. Dudhaganga is its largest tributary on its left bank.
3. It rises in Brahmagiri hills of Karnataka.

Select the correct answer using the codes given below:

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

Q.17) Consider the following statements with respect to the Gomti River:

1. It joins river Ganga near Kanpur.
2. It is a perennial river.
3. Kalyani is one of its tributaries.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None



## 10 PM Compilation for the Month of February 2024

Q.18) Which of the following two countries were bordered by the 'Aral Sea'?

- a) Kazakhstan and Uzbekistan
- b) Russia and Turkmenistan
- c) Uzbekistan and Tajikistan
- d) Kyrgyzstan and Turkmenistan

Q.19) With reference to El Niño, consider the following statements:

1. It is a weather phenomenon caused by a shift in ocean currents and temperatures in the Pacific Ocean.
2. It leads to cooler temperatures throughout the India.
3. It leads to increased crop yields due to favorable weather conditions.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.20) Which one of the following statements is correct regarding the "Kaji Nemu", which holds a Geographical Indication (GI) tag?

- a) It is a non-citric fruit native to the Himalayan region.
- b) It is a commercially cultivated lemon variety with a unique aroma.
- c) It has been recently introduced to Assam from another country.
- d) It is primarily used for decorative purposes and not for consumption.

Q.21) Which one of the following presents the correct sequence of seas from North to South?

- a) Norwegian Sea, Baltic Sea, Adriatic Sea, Red Sea
- b) Mediterranean Sea, English Channel, Black Sea, Norwegian Sea
- c) Arabian Sea, Black Sea, Adriatic Sea, Tasman Sea
- d) Yellow Sea, Sea of Japan, Java Sea, Caribbean Sea

Q.22) In which one of the following ways does La Niña affect the winter temperatures in India?

- a) It leads to warmer winters in India due to increased cloud cover and humidity.
- b) It results in cooler winters in India due to enhanced cloud cover and increased rainfall.
- c) It has minimal impact on winter temperatures in India.
- d) It causes extreme cold spells and frost in northern regions of India.

Q.23) The Red Sea is known for its high salinity. Which one of the following factors contributes to this salinity?

- a) High evaporation rates and limited freshwater inflow
- b) Abundant rainfall diluting the salt content
- c) Discharge of industrial waste into the sea
- d) Cold currents from the Antarctic region

## 10 PM Compilation for the Month of February 2024

Q.24) Consider the following statements:

1. They are subjected to erosion on their upstream and deposition on the downstream.
2. They are devoid of any plant or animal life.
3. These are desert region characterized by sand dunes.

Which of the above statement(s) is/are correct regarding “Char Areas”?

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

### Answer Key

1 - (b)	2 - (a)	3 - (a)	4 - (b)	5 - (b)	6 - (a)	7 - (d)	8 - (a)
9 - (b)	10 - (b)	11 - (d)	12 - (b)	13 - (b)	14 - (a)	15 - (a)	16 - (a)
17 - (b)	18 - (a)	19 - (a)	20 - (b)	21 - (a)	22 - (b)	23 - (a)	24 - (a)

### Answers & Explanations

1. Correct Answer is (B)
  - 2 and 4 are correctly matched.
  - Lake Baikal is located in Siberia, Russia, and it is the deepest freshwater lake in the world.
  - Lake Retba, also known as Lac Rose, is located in Senegal, Africa. It is known for its distinctive pink color due to the presence of microorganisms and high salt content. It is separated only by some narrow dunes from the Atlantic Ocean. It is under threat of extinction due to increase in Nitrate level and pollution.
  - Lake Victoria is located in East Africa and is shared by three countries: Tanzania, Uganda, and Kenya. It is the largest lake in Africa and one of the largest freshwater lakes in the world.
  - Lake Volta is located in Ghana, West Africa. It is one of the largest artificial reservoirs in the world, created by the Akosombo Dam on the Volta River.

Source: [Forum IAS](#)

2. Correct Answer is (A)
  - The coastline closest to the Wadge Bank is that of India. The Wadge Bank is located in the southeastern part of the Arabian Sea, off the coast of India, near the state of Tamil Nadu. It

## 10 PM Compilation for the Month of February 2024

is a 10,000 square kilometers area, located approximately 50 kilometers south of Kanyakumari. It features shallow waters, a nearly flat bottom topography, and a continental shelf. This area is rich in biodiversity and is considered India's most valuable fishery resource. The low intensity of currents, waves, and tides makes it an ideal location for the accumulation of nutrients and fish food.

Source: [Forum IAS](#)

3. Correct Answer is (A)

- Soda lakes are known for their high pH levels, typically ranging from 9 to 12, making them highly alkaline. The high pH in soda lakes promotes the conversion of dissolved carbon dioxide into bicarbonate and carbonate ions, creating an abundance of carbon dioxide readily available for primary producers like algae. Soda lakes frequently form in areas with limited rainfall and high evaporation, such as deserts and steppes. Sambhar Lake in Rajasthan, India, is a well-known example of a soda lake. These lakes may also have lots of sodium chloride and other salts, making it a salty or hypersaline lake. These ecosystems are notably productive compared to freshwater lakes. Biodiversity in soda lakes is primarily led by prokaryotes like bacteria and archaea, particularly in lakes with elevated alkalinity levels. Africa and Asia host the largest number of soda lakes due to their extensive desert conditions, which favor the formation of such lakes. The majority of soda lakes in Africa are situated in Eastern Africa, notably in Kenya, Tanzania, and Ethiopia.

Source: [Forum IAS](#)

4. Correct Answer is (B)

- The Eastern Rajasthan Canal Project (ERCP) aims to utilize surplus monsoon water available in Chambal and its tributaries like Kalisindh, Parvati, Mej, and Chakan sub-basins and divert it into water deficit sub-basins of Banas, Gambhiri, Banganga, and Parbati to provide drinking and industrial water to 13 districts of eastern Rajasthan. It aims to meet drinking and industrial water needs of the southern and south eastern Rajasthan, for humans and livestock till the year 2051. According to the state Water Resources Department, Rajasthan has only 1.16% of India's surface water and 1.72% of groundwater. Among the state's water bodies, only the Chambal River basin has surplus water.

Source: [Forum IAS](#)

5. Correct Answer is (B)

- The Alpenglow phenomenon is an optical phenomenon that creates a horizontal reddish glow near the horizon opposite to the Sun when the solar disk is just below the horizon. It can occur during the twilight hours before sunrise or after sunset. Alpenglow occurs when direct sunlight around sunrise or sunset is reflected off airborne precipitation, ice crystals or particulates in the lower atmosphere, as the sunlight has no direct path to reach a mountain. In simple terms, the Alpenglow phenomenon is like a beautiful sunset or sunrise, but instead of coloring the sky, it paints the tops of mountains with a soft, reddish glow. Alpenglow specifically involves the reddish glow on mountain peaks during sunrise or

## 10 PM Compilation for the Month of February 2024

sunset, while rainbows are multicolored arcs caused by the refraction and dispersion of sunlight by water droplets in the atmosphere.

Source: [Forum IAS](#)

6. Correct Answer is (A)

- Statement 1 is correct. The Hindu Kush Mountain Range, due to its extensive snow and ice coverage, holds the largest concentration of frozen water on Earth after the North and South Poles. It plays a crucial role in the regional hydrology and climate, often referred to as the 'Water Tower of Asia.'
- Statements 2 and 3 are incorrect. Nepal and Bhutan do not lie entirely within the Hindu Kush Mountain Range. Nepal falls partly within the Himalayas, which is a separate mountain range, while Bhutan is situated in the eastern Himalayas. The Hindu Kush Mountain Range stretches over 3500 kilometers across eight countries – Afghanistan, Bangladesh, Bhutan, China, India, Nepal, Myanmar and Pakistan. K2 is a part of the Karakoram Range, which is a separate mountain range adjacent to the Hindu Kush. The highest peak in the Hindu Kush Range is Tirich Mir, with an elevation of 7,708 meters (25,289 feet).

Source: [Forum IAS](#)

7. Correct Answer is (D)

- Citrus fruit consists of Kinnow, Oranges, Lime and Lemon. In India, Citrus is the third-largest fruit crop after Banana and Mango. Kinnow has originated in South East Asia. In India, these are major fruit crops of Punjab. They require temperature-13-37°C and rainfall-300-400 mm. It can be grown on wide range of soil ranging from sandy loam soils to clay loam or deep clay loam or acidic soils with good drainage facility. Crop does not thrive well in saline and alkaline soils. Also, it cannot withstand in waterlogged soils. Kinnow trees prefer semi-arid conditions and cannot tolerate high humidity.

Source: [Forum IAS](#)

8. Correct Answer is (A)

- The Bab-el-Mandeb Strait is the major waterway that connects the Gulf of Aden to the Red Sea. Gulf of Aden is an extension of the Indian Ocean, situated between the Arabian Peninsula and the African continent. Borders: In the North- Yemen, In the South- Somalia and Socotra Island (Part of Yemen), In the East- Arabian Sea, In the West- Djibouti. It is a critical part of the Suez Canal shipping route, which connects the Red Sea and the Mediterranean Sea.

Source: [Forum IAS](#)

9. Correct Answer is (B)

- Statement 1 is incorrect. The Chenab River does not originate from the Karakoram Range. It arises from the confluence of Chandra and Bhaga rivers in the Himalayas. These headwaters rise in the upper Himalayas in the Lahaul region of Himachal Pradesh, India.

## 10 PM Compilation for the Month of February 2024

- Statements 2 and 3 are correct. Thirot is a tributary of the Chenab River. It joins the main river in the Kishtwar district of Jammu and Kashmir. Other tributaries are: Miyar Nalla, Sohal, Bhut Nalla, Marusudar, and Lidrari. The Ratle Hydroelectric Project is being built on the Chenab River in the Kishtwar district of Jammu and Kashmir. It's currently under construction and will be an 850 MW run-of-river power station. Other major dams: Dul Hasti-near near Drabshalla in Kishtwar District. Pakal Dul Dam – a proposed dam on a tributary Marusadar River in Kishtwar District.

Source: [Forum IAS](#)

10. Correct Answer is (B)

- Statement 1 is incorrect. The Nine-Dash Line associated with the South China Sea is not a shipping route regulated by China. Instead, it is a demarcation line used by China to assert its territorial claims over a large portion of the South China Sea.
- Statement 2 is correct. The South China Sea is connected by the Taiwan Strait with the East China Sea and by the Luzon Strait with the Philippine Sea. It contains numerous shoals, reefs, atolls and islands.

Source: [Forum IAS](#)

11. Correct Answer is (D)

- Total Fertility Rate (TFR) represents the average number of children a woman would have throughout her childbearing years. A TFR of 2 corresponds to replacement-level fertility, meaning each generation replaces itself with the next. As fertility declines, the proportion of children in the population falls and the proportion of the population of working age increases, resulting in a lower dependency ratio. The Total Fertility Rate (TFR) in India has decreased to 2. Some states like Bihar (2.98), Meghalaya (2.91), Uttar Pradesh (2.35), Jharkhand (2.26), and Manipur (2.17) have TFRs above 2.1.

Source: [Forum IAS](#)

12. Correct Answer is (B)

- Statements 1 and 2 are correct. Hematite is commonly found in sedimentary rocks and is one of the primary iron ores. Iron ore pellets are small, hard, spherical particles made from fine iron ore concentrate, and they are the principal raw material for blast furnaces.
- Statement 3 is incorrect. Sponge iron, also known as direct-reduced iron (DRI), is a high-quality iron ore product made from iron ore fines and is used in the production of steel. It is not a type of cast iron with high carbon content and brittle properties. Sponge iron is produced from the direct reduction of iron ore (in the form of lumps, pellets, or fines) into iron by a reducing gas which either contains elemental carbon (produced from natural gas or coal) or hydrogen.

Source: [Forum IAS](#)

13. Correct Answer is (B)

- Wheat: It is the main cereal crop in India. It is the second most important cereal crop in India after rice. It is a Rabi Crop which is sown in October–December and harvested during

## 10 PM Compilation for the Month of February 2024

April-June. The optimum temperature range for ideal germination of wheat seed is 20-25 C. about 50 to 100 cm of rainfall is needed for the cultivation of wheat. Soils with a clay loam or loam texture, good structure and moderate water holding capacity are ideal for wheat cultivation. Uttar Pradesh, Punjab, Haryana, Madhya Pradesh, Rajasthan, Bihar and Gujarat are the major wheat growing region in India. China is the world's largest producer of wheat. India is the second-largest producer of wheat.

Source: [Forum IAS](#)

14. Correct Answer is (A)

- Mekong River is a trans-boundary river in East Asia and Southeast Asia. It is the world's twelfth-longest river and the third-longest in Asia. It originates from the Sanjanyuang in the Tibetan Plateau in China. The river drains into the South China Sea. It flows through six Asian countries: China, Myanmar, Laos, Thailand, Cambodia and Vietnam. It covers a total length of 2700 km. It is the second most biodiverse river basin in the world, after Amazon River Basin. The Mekong Ganga Cooperation (MGC) is an initiative by six countries – India and five ASEAN countries – Cambodia, Laos, Myanmar, Thailand, and Vietnam.

Source: [Forum IAS](#)

15. Correct Answer is (A)

- There are 22 countries and one territory whose coasts are on the Mediterranean Sea.
- The European Countries- Spain, France, Italy, Malta, Monaco, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Albania, and Greece.
- The West Asian (Middle Eastern) countries- Turkey, Syria, Lebanon, Israel, the Palestine Gaza Strip and the divided island of Cyprus.
- Five North African countries- Morocco, Algeria, Tunisia, Libya and Egypt.

Source: [Forum IAS](#)

16. Correct Answer is (A)

- Statement 1 is correct. Krishna River is the third-longest river in India, after the Ganges and Godavari. It is the fourth-largest in India in terms of water inflows and river basin area after the Ganges, Indus, and Godavari. Its basin extends over Andhra Pradesh, Maharashtra and Karnataka.
- Statements 2 and 3 are incorrect. The Dudhaganga is a right bank tributary river of the Krishna River in western India. Tungabhadra is the largest tributary of the Krishna River. The Krishna River originates in the Western Ghats near Mahabaleshwar at an elevation of about 1,300 metres (4,300 ft), in the state of Maharashtra. From Mahabaleshwar it flows to the town of Wai and continues to travel east until it empties into the Bay of Bengal.

Source: [Forum IAS](#)

17. Correct Answer is (B)

- Gomti River is an alluvial river that originates from the Gomat Taal, or Fulhaar Jheel from Pilibhit in Uttar Pradesh. It joins river Ganga near Varanasi. The total drainage area of the river is 30,437 sq. km. Kathina, Bhainsi, Sarayan, Gon, Reth, Sai, Pili, and Kalyani are its

## 10 PM Compilation for the Month of February 2024

tributaries. There are various cities that are situated on the banks of the river Gomti, such as Sultanpur, Lucknow, Jaunpur, and Lakhimpur Kheri. It is a perennial river. It has a sluggish flow throughout the year, except during the monsoon season.

Source: [Forum IAS](#)

18. Correct Answer is (A)

- The Aral Sea, a once-large saltwater lake of Central Asia, shared the boundary between Kazakhstan to the north and Uzbekistan to the south. The sea was once the fourth-largest body of water in the world, but it has been reduced to a fraction of its original area. It encompasses drainage from Uzbekistan and parts of Kazakhstan, Tajikistan, Afghanistan, Turkmenistan, Iran, and Kyrgyzstan.

Source: [Forum IAS](#)

19. Correct Answer is (A)

- Statement 1 is correct. El Niño is a weather phenomenon characterized by a shift in ocean currents and temperatures in the Pacific Ocean. Specifically, it involves the warming of the ocean surface in the tropical Pacific, which leads to changes in atmospheric circulation and weather patterns across the globe.
- Statements 2 and 3 are incorrect. El Niño typically leads to warmer temperatures in India, particularly during the monsoon season, due to the changes in atmospheric circulation patterns. These warmer temperatures, coupled with below-normal rainfall, can result in drier conditions in some parts of the country. El Niño generally has a negative impact on crop yields in India. The warmer temperatures and lower rainfall associated with El Niño events can lead to water scarcity, reduced soil moisture, and increased stress on crops. This combination of factors usually results in lower agricultural productivity.

Source: [Forum IAS](#)

20. Correct Answer is (B)

- Kaji Nemu is a commercially cultivated lemon variety with a unique aroma. Kaji Nemu is a special type of lemon found in the Kazi Narang village of Assam's Biswanath district. It has a unique sweet aroma and flavor, differentiating it from other lemon varieties. Kaji Nemu lemons are known for their thin and smooth skin, as well as their high juice content. They are used in various culinary applications and have potential medicinal value due to their high vitamin C content. It is much juicier than other varieties of lemons. In 2019, Kaji Nemu was awarded a GI (Geographical Indication) tag. The Assam government recently declared the 'Kaji Nemu' (Citrus Limon) as the official State Fruit.

Source: [Forum IAS](#)

21. Correct Answer is (A)

- The correct sequence of seas from North to South is – Norwegian Sea, Baltic Sea, Adriatic Sea, Red Sea. Sea in the News – Baltic Sea: It is a semi-enclosed sea located in Northern Europe. It is a branch of the North Atlantic Ocean, stretching northward from southern Denmark towards the Arctic Circle. It divides the Scandinavian Peninsula from the rest of

## 10 PM Compilation for the Month of February 2024

mainland Europe. It has about 8,000 kilometers of coastline, shared by many countries such as Sweden, Poland, Lithuania, Latvia, Finland, Estonia, Germany, Denmark, and Russia. It connects to the White Sea through the White Sea Canal and to the German Bight of the North Sea via the Kiel Canal. It also connects to the Atlantic Ocean through the Danish Straits. The Baltic Sea has three main gulfs: the Gulf of Bothnia to the north, the Gulf of Finland to the east, and the Gulf of Riga slightly to the south of that. It is commonly referred to as the largest brackish inland water body in the world. The Baltic Sea's water is less salty compared to the world's oceans because of the inflow of freshwater from surrounding land and the sea's shallow depth.

Source: [Forum IAS](#)

22. Correct Answer is (B)

- La Niña typically results in cooler winters in India due to enhanced cloud cover and increased rainfall. This is because La Niña is characterized by cooler-than-average sea surface temperatures in the eastern and central Pacific Ocean, which affects global weather patterns, including India. During a La Niña event, the cooler waters in the Pacific lead to changes in atmospheric circulation that can enhance cloud cover and precipitation over India. This increased cloud cover and precipitation can lead to cooler winter temperatures in the country.

Source: [Forum IAS](#)

23. Correct Answer is (A)

- The Red Sea has some of the highest salinity levels among the world's oceans and seas due to its geographical location, climate, and limited connection to other bodies of water. The high evaporation rates in the region, coupled with the restricted exchange of water with the Indian Ocean through the narrow Bab-el-Mandeb strait, contribute to the elevated salinity levels in the Red Sea. These factors lead to a higher concentration of dissolved salts, making the Red Sea one of the saltiest bodies of water on Earth.

Source: [Forum IAS](#)

24. Correct Answer is (A)

- Statement 1 is correct. The riverine areas (island) of the river Brahmaputra are locally known as Char. Chars are island-like silt depositions in the lower parts of river basins. They are made of sand and silt. They are created naturally due to the accumulation of sediment transported in water from melting glaciers and eroding riverbanks. They are subjected to erosion on their upstream and deposition on the downstream.
- Statements 2 and 3 are incorrect. While the conditions on char areas can be harsh, they are not entirely devoid of plant and animal life. Certain specialized species of plants and animals can adapt to the dynamic and challenging environment of these areas. Char areas are not found in desert regions. They are formed by river systems and can occur in various environments, including floodplains, coastal areas, and river deltas.

Source: [Forum IAS](#)



## Polity

Q.1) What is the constitutional status of Panchayati Raj Institutions (PRIs) in India?

- a) Executive Body
- b) Statutory Body
- c) Constitutional Body
- d) Advisory Body

Q.2) With reference to the University Grants Commission (UGC), consider the following statements:

1. It aims to set uniform admission standards for all universities in India.
2. It is the implementing body for the higher education reforms as outlined in the National Education Policy (NEP) 2020.
3. All India Council for Technical Education (AICTE) fellowship programme is being implemented by the UGC.

Which of the statement(s) given above is/are correct?

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

Q.3) Which one of the following is the main legal challenge for implementing simultaneous elections in India?

- a) The Constitution does not explicitly provide for it.
- b) Election Commissions at different levels oppose it due to logistical challenges.
- c) Regional political parties fear losing their influence with national focus.
- d) The Election Commission lacks the manpower to manage nationwide polls simultaneously.

Q.4) Consider the following pairs:

Initiatives-----Specification

1. Digital Supreme Court Reports (Digi SCR) ----- Provides district court judges with electronic access to court records.
2. National Judicial Data Grid (NJDG) ----- A database of orders, judgments and case details of District & Subordinate Courts and High Courts.
3. Digital Courts 2.0 application-----Provides Supreme Court judgments to the citizens of the country free of cost and in electronic format.

Which of the above pair(s) is/are correctly matched?

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

## 10 PM Compilation for the Month of February 2024

Q.5) The Anuradha Bhasin judgment recognized the importance of which one of the following fundamental rights in the context of internet shutdowns?

- a) Right to Privacy
- b) Right to Freedom of Speech and Expression
- c) Right against Exploitation
- d) Right to Life and Personal Liberty

Q.6) With reference to Default Bail, consider the following statements:

- 1. It is also known as Anticipatory Bail.
- 2. It is given to an accused detained in custody, when the police fail to complete the investigation and file the charge sheet within the time frame mentioned under the law.
- 3. An accused cannot seek default bail on the grounds that the probe is pending against other co-accused.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.7) Consider the following statements:

- 1. India is among the nations facing the highest levels of water stress globally.
- 2. Water pricing in India is determined by the central government in collaboration with the relevant municipal authorities.

Select the correct answer using the codes given below:

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

Q.8) With reference to the Uniform Civil Code (UCC), consider the following statements:

- 1. The Uniform Civil Code, mentioned in the Indian Constitution, is part of Fundamental Duties.
- 2. It aims to have uniform laws for all religious communities in matters of personal law.

Select the correct answer using the codes given below:

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

## 10 PM Compilation for the Month of February 2024

Q.9) In which one of the following ways, is the concept of "We the People" given in the Preamble connected to the Fundamental Rights enshrined in the Constitution?

- It does not affect Fundamental Rights, which exist independently and separately.
- It empowers the government to grant or restrict Fundamental Rights based on need.
- It establishes the people as the holders and beneficiaries of Fundamental Rights.
- It implies that Fundamental Rights are only applicable to certain privileged groups within the society.

Q.10) With reference to the Uniform Civil Code (UCC), consider the following statements:

- The concept of a Uniform Civil Code (UCC) in India draws inspiration from Right to Equality.
- After the implementation of the UCC in India, issues related to freedom of religious expression and worship will easily be addressed.
- Implementing UCC would promote social equality by removing differences in the law based on religion.

How many of the statements given above are correct?

- Only one
- Only two
- All three
- None

Q.11) Which one of the following constitutional amendments granted financial autonomy to Panchayati Raj Institutions?

- 42nd Amendment
- 73rd Amendment
- 52nd Amendment
- 93rd Amendment

Q.12) Consider the following statements regarding the Spice Board of India:

- It is a statutory body constituted under Spices Board Act 1986.
- It is responsible for determining Minimum Support Prices (MSP) for spices.
- It comes under the Ministry of Commerce and Industry.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.13) Consider the following statements:

1. The financial transfers through Centrally Sponsored Schemes (CSS) and Central Sector Schemes (CSec) are statutory transfers to the states.
2. The Finance Commission has been granted the power by the Constitution to recommend the distribution of net tax revenues among the states.
3. The share of states in the gross tax revenue has decreased in recent years.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.14) Consider the following statements:

1. Panchayats earn only 1% of their income through taxes, with the rest being sourced from Central and State grants.
2. The Gram Panchayat is the elected body at the block level.

Which of the statement(s) given above is/are correct?

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

Q.15) Consider the following statements:

1. A municipal corporation is a type of local government in India which administers rural areas with a population of less than one million.
2. The 74<sup>th</sup> Amendment Act defined the formations of urban local governments and their activities.
3. The area administered by a municipal corporation is known as a municipal area.

Which of the statements given above are correct?

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

Q.16) Consider the following statements:

1. Delimitation exercise ensures fair and effective representation in a democracy by equitably distributing funds among all electoral constituencies.
2. The Delimitation Commission is responsible for redrawing the boundaries of State Legislative Councils and Rajya Sabha constituencies.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.17) With reference to the Election Commission of India, consider the following statements:

1. It is responsible for conducting elections for the President and Vice President.
2. The President of India has the discretionary power to remove the Chief Election Commissioner from office due to the misconduct or improper behavior.
3. The term of office for an Election Commissioner is five years from the date of joining the office.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.18) With reference to the Educational Consultants India Limited (EdCIL), consider the following statements:

1. It is the only Public Sector Undertaking (PSU) under the Ministry of Education.
2. It aims to conduct research and development in the field of education.
3. Educational infrastructure development is one of the services offered by EdCIL.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.19) With reference to the Quality Council of India (QCI), consider the following statements:

1. The Chairman of QCI is appointed by the Prime Minister on the recommendation of the industry to the government.
2. It audits and penalizes businesses for quality violations.

Which of the statement(s) given above is/are correct?

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

Q.20) Consider the following statements:

1. It is a government-owned property but usually not directly managed as state property.
2. It is often leased to entities for fixed periods.
3. It can be used for constructing public schools, hospitals, etc. by the government.

How many of the above-mentioned statements describe features of a 'Nazool land'?

- a) Only one
- b) Only two
- c) All three
- d) None

## 10 PM Compilation for the Month of February 2024

Q.21) With reference to the National Judicial Academy (NJA), consider the following statements:

1. It is fully funded by the Government of India.
2. The Prime Minister of India serves as the Chairman of the General Body of NJA.
3. It provides financial assistance to underprivileged individuals seeking legal aid.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.22) With reference to the National Credit Framework (NCrF), which of the following statements are correct?

1. Under the framework, students can earn credits for practical work experience, internships, or other forms of work-based learning.
2. Credits earned by students have a fixed monetary value for financial aid purposes.
3. Under the framework, every learning hour can be credited subject to its assessment.
4. It strictly enforces a rigid separation between different areas of learning, such as arts and sciences, vocational and academic streams, curricular and extra-curricular activities, for the purpose of assignment of credits and credit levels.

Select the correct answer using the codes given below:

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

Q.23) Which one of the following is the primary purpose of community radio stations in India?

- a) Play popular music and compete with commercial stations.
- b) Offer a platform for public service announcements and government messages.
- c) Cater to a specific local community and address their needs and interests.
- d) Promote national unity and cultural homogenization.

Q.24) Under Article 87 of the Indian Constitution, the President's special address at the commencement of the first session after a general election and the first session of each year indicates:

- a) The opportunity for the Opposition to present a vote of no-confidence.
- b) The formal start of the legislative process for that period.
- c) The introduction of the annual budget by the Finance Minister.
- d) The President's power to dissolve the Lok Sabha.

## 10 PM Compilation for the Month of February 2024

Q.25) With reference to the National Consumer Disputes Redressal Commission (NCDRC), consider the following statements:

1. The Commission is headed by a sitting or retired Judge of the Supreme Court of India or a sitting or retired Chief Justice of the High Court.
2. Only registered consumer organizations are eligible to file a complaint directly with the NCDRC.
3. It can hear appeals against the decisions of both State and District Consumer Dispute Redressal Forums.

Which of the statements given above are correct?

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

Q.26) Consider the following statements:

1. Article 39A of the Constitution provides for the state to secure equitable access to justice for all.
2. Article 130 provides that the Supreme Court shall sit in Delhi or in such other place or places as the Chief Justice of India may, with the approval of the President, from time to time, appoint.

Which of the statement(s) given above is/are correct?

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

Q.27) The Godavarman Thirumulpad v Union of India judgment, seen in the news recently, is associated with the:

- a) Protection of forests
- b) Pollution of water bodies and groundwater
- c) Issue of air pollution in the Delhi-NCR region
- d) Issue of pollution in the Ganges River

### Answer Key

1 - (c)	2 - (d)	3 - (a)	4 - (b)	5 - (b)	6 - (b)	7 - (a)	8 - (b)	9 - (c)
10 - (b)	11 - (b)	12 - (c)	13 - (b)	14 - (a)	15 - (b)	16 - (d)	17 - (a)	18 - (b)
19 - (a)	20 - (c)	21 - (a)	22 - (b)	23 - (c)	24 - (b)	25 - (c)	26 - (c)	27 - (a)

## Answers & Explanations

1. Correct Answer is (C)

- The 73rd Constitutional Amendment Act of 1992 gave the PRIs constitutional status. The act also established a three-tier PRI system, elections, and reserved seats for women, Scheduled Castes, and Scheduled Tribes.

Source: [Forum IAS](#)

2. Correct Answer is (D)

- Statements 1 and 3 are incorrect. The University Grants Commission of India (UGC India) is a statutory body set up by the Indian Union government in accordance with the UGC Act, 1956 under the Ministry of Human Resource Development. It is charged with coordination, determination and maintenance of standards of higher education. UGC also provides recognition to universities in India and disburses funds to such recognised universities and colleges. It is primarily responsible for regulating and maintaining the standards of higher education in India. It is not responsible for setting uniform admission standards for all universities in India. The University Grants Commission (UGC) and the All-India Council for Technical Education (AICTE) are separate regulatory bodies in India. The AICTE is responsible for the approval and regulation of technical institutions and courses, while the UGC is responsible for the regulation and maintenance of standards in higher education institutions. Hence, the All-India Council for Technical Education (AICTE) fellowship program is implemented by AICTE, not UGC.
- Statement 2 is correct. The UGC is responsible for implementing the higher education reforms proposed by the National Education Policy (NEP) 2020. It works towards the transformation of the higher education system to align with the goals and objectives of the NEP, such as improving access, quality, and equity in higher education.

Source: [Forum IAS](#)

3. Correct Answer is (A)

- The main legal hurdle to implementing simultaneous elections in India is that the current Constitution does not explicitly provide for it. Simultaneous elections would require multiple constitutional amendments to synchronize the terms of the Lok Sabha and state legislative assemblies, which is a complex and challenging process. The Law Commission of India has recommended various changes, including amending various articles like 83, 85, 172, and 174, to facilitate simultaneous elections.

Source: [Forum IAS](#)

4. Correct Answer is (B)

- Digital Supreme Court Reports (Digi SCR) – It will provide Supreme Court judgments to the citizens of the country free of cost and in electronic format. The key features of digital SCR include access to all 519 volumes of Supreme Court reports since 1950 in a user-friendly, open access digital format.



## 10 PM Compilation for the Month of February 2024

- National Judicial Data Grid (NJDG) – It is a database of orders, judgments and case details of 18,735 District & Subordinate Courts and High Courts. It was created as an online platform under the eCourts Project.
- Digital Courts 2.0 application – It is a recent initiative under the e-Courts project which aims to provide district court judges with electronic access to court records. It also uses artificial intelligence (AI) to transcribe speech into text instantly.

Source: [Forum IAS](#)

5. Correct Answer is (B)
- The Anuradha Bhasin judgment emphasized that government-imposed restrictions on internet access must be limited, lawful, necessary, and proportionate. It recognized the constitutional impact of internet shutdowns on the right to free speech and expression, as well as the freedom to practice any business or occupation over the medium of the internet, under Article 19 of the Indian Constitution.

Source: [Forum IAS](#)

6. Correct Answer is (B)
- Statement 1 is incorrect.
  - Default bail: Granted to an accused already in custody when the investigation and charge sheet filing exceed the legal timeframe. It is a right, not a discretionary grant.
  - Anticipatory bail: Sought before arrest, apprehending potential arrest in a non-bailable offense. It is discretionary and subject to conditions.
  - Statements 2 and 3 are correct. If the police fail to complete the investigation and file the charge sheet within the prescribed timeframe (60 or 90 days depending on the offense), the accused has the right to be released on default bail upon application to the court.
  - The Supreme Court in Wadhawani brother's multi-crore bank loan scam case, held that an accused cannot seek default bail on the grounds that the probe is pending against other co-accused. In cases where there are multiple accused, the default bail can only be sought by an individual if the investigation/probe is pending against that particular individual.

Source: [Forum IAS](#)

7. Correct Answer is (A)
- Statement 1 is correct. According to the World Bank, India is one of the world's most water-stressed country because it has 18% of the world's population but only 4% of its water resources.
  - Statement 2 is incorrect. In India, water pricing is determined by states in collaboration with their respective municipality frameworks. There is no central authority for the regulation of water pricing.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

8. Correct Answer is (B)

- Statement 1 is incorrect. The Uniform Civil Code is mentioned in the Directive Principles of State Policy (DPSP), not Fundamental Duties. DPSPs offer guidelines for the state but are not directly enforceable by courts.
- Statement 2 is correct. The central idea of the UCC is to replace varied personal laws (based on religion) governing marriage, divorce, inheritance, adoption, etc., with a uniform set of laws for all citizens.

Source: [Forum IAS](#)

9. Correct Answer is (C)

- The concept of "We the People" emphasizes the people's sovereignty and their role as the ultimate source of authority within the Indian Constitution. This directly connects to the Fundamental Rights enshrined in the Constitution. These rights are not bestowed upon the people by the government, but rather they are inherent and enjoyed by the people themselves. The Preamble, by stating "We the People," establishes this connection and makes it clear that these rights belong to the people as a whole.

Source: [Forum IAS](#)

10. Correct Answer is (B)

- Statements 1 and 3 are correct. The UCC aims to ensure equal treatment of all citizens, irrespective of their religion, in matters such as marriage, divorce, and inheritance, aligning with the Right to Equality. A major goal of the UCC is to ensure that all citizens are treated equally before the law, regardless of their religious background. This attempts to level the playing field where certain personal laws create different treatment of individuals depending on their faith.
- Statement 2 is incorrect. The UCC primarily deals with civil matters like marriage, divorce, inheritance, and adoption. It's not specifically designed to regulate religious practices and expressions of faith. Further, issues related to religious expression and worship are protected under the fundamental right to freedom of religion guaranteed by the Indian Constitution (Article 25), and they may require separate considerations and legal frameworks beyond the scope of the UCC. This fundamental right would continue to exist even after a UCC is implemented.

Source: [Forum IAS](#)

11. Correct Answer is (B)

- The 73rd Amendment to the Indian Constitution granted financial autonomy to Panchayati Raj Institutions (PRIs) by providing them with the power to levy and collect taxes, fees, and other revenue.

Source: [Forum IAS](#)

12. Correct Answer is (C)

- Statements 1 and 3 are correct. The Spice Board of India is a statutory body constituted under the Spices Board Act, 1986, and comes under the Ministry of Commerce and Industry,

## 10 PM Compilation for the Month of February 2024

Government of India. The board is headquartered in Kochi. There are also regional laboratories at Mumbai, Chennai, Delhi, Tuticorin, Kandla and Guntur.

- Statement 2 is incorrect. The Spice Board is not responsible for determining Minimum Support Prices (MSP) for spices. This function falls under the purview of the Commission for Agricultural Costs and Prices (CACP). The Spice Board has the responsibility of production/development of cardamom and export promotion of 52 spices shown in the schedule of the Act.

Source: [Forum IAS](#)

13. Correct Answer is (B)

- Statement 1 is incorrect. Net Tax Revenues and Grant-In Aids form the two statutory transfers to the states by the Central Government. The financial transfers through Centrally Sponsored Schemes (CSS) and Central Sector Schemes (CSec) are non-statutory transfers to the states. Statutory transfers refer to payments mandated by law or statute while non-statutory transfers refer to payments that are not mandated by law.
- Statements 2 and 3 are correct. The Finance Commission is a constitutional body established by the President under Article 280 of the Constitution. The Commission's primary responsibility is to evaluate the state of finances of the Union and State Governments. The functions of the Finance Commission as mandated by the Constitution are to make recommendations on a) the distribution between the Union and the States of the net proceeds of union taxes, b) the distribution between the States of their respective shares and c) the principles which should govern grants-in-aid to the States. The share of states in the gross tax revenue (total tax revenue collected, which includes cess and surcharges) has decreased from 35% in 2015-16 to 30% in 2023-24.

Source: [Forum IAS](#)

14. Correct Answer is (A)

- Statement 1 is correct. A recent RBI study noted that panchayats earn only 1% of their income through taxes, with the rest being sourced from Central and State grants.
- Statement 2 is incorrect. In India, the Panchayat Raj system has three tiers: 1) Zila Parishad: At the district level, 2) Panchayat Samiti: At the block level, 3) Gram Panchayat: At the village level.

Source: [Forum IAS](#)

15. Correct Answer is (B)

- Statement 1 is incorrect. Municipal corporations in India govern urban areas with a population of more than one million. Smaller urban areas are managed by municipalities or Nagar Palikas.
- Statements 2 and 3 are correct. The 74th Amendment Act of the Constitution of India, enacted in 1992, established a framework for urban local governments (ULGs) and outlined their powers and responsibilities. The area administered by a municipal corporation is known as a municipal area. Each municipal area is divided into territorial constituencies known as wards. A municipal corporation is made up of a wards committee. Each ward has

## 10 PM Compilation for the Month of February 2024

one seat in the wards committee. Members are elected to the wards committee on the basis of adult franchise for a term of five years. These members are known as councillors or corporators. The number of wards in a municipal area is determined by the population of the city.

Source: [Forum IAS](#)

16. Correct Answer is (D)

- Statements 1 and 2 are incorrect. The delimitation exercise does not focus on equitably distributing funds among electoral constituencies. Instead, its primary objective is to ensure fair and effective representation in a democracy by redistributing constituencies based on demographic changes. The Delimitation Commission in India is primarily responsible for redrawing the boundaries of Lok Sabha (the lower house of Parliament) and State Legislative Assembly constituencies.

Source: [Forum IAS](#)

17. Correct Answer is (A)

- Statement 1 is correct. The Election Commission of India is responsible for conducting elections for the offices of the President and Vice President of India, as well as elections to Parliament, state legislatures. The Commission ensures that elections are conducted in a free, fair, and impartial manner, following the rules and regulations outlined in the Indian Constitution and various election-related laws.
- Statements 2 and 3 are incorrect. The President of India does not have discretionary power to remove the Chief Election Commissioner (CEC) from office due to misconduct or improper behavior. The removal process for the CEC is defined in Article 324 of the Indian Constitution, which states that the CEC can only be removed in the same manner as a judge of the Supreme Court. The President does not have the unilateral power to remove the CEC based on misconduct or improper behavior. The term of office for an Election Commissioner, including the Chief Election Commissioner, is six years or until they reach the age of 65, whichever comes earlier.

Source: [Forum IAS](#)

18. Correct Answer is (B)

- Statements 1 and 3 are correct. Educational Consultants India Limited (EdCIL) is a Mini Ratna Category-I Central Public Sector Enterprise (CPSE), and it is the only PSU under the administrative control of the Ministry of Education, Government of India. EdCIL provides a range of services in the field of education, and one of its key service areas is educational infrastructure development.
- Statement 2 is incorrect. The objective of EdCIL is to provide consultancy and technical services in the field of education and human resource development. It does not conduct research and development in the field of education.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

19. Correct Answer is (A)

- Statement 1 is correct. QCI was established in 1997 jointly by the Department for Promotion of Industry & Internal Trade (DPIIT), the Ministry of Commerce & Industry, and the Indian industry. It is registered as a non-profit organization under the Societies Registration Act XXI of 1860. It is governed by a Council of 38 members with equal representations of government, industry and consumers. The Chairman of QCI is appointed by the Prime Minister on the recommendation of the industry to the government.
- Statement 2 is incorrect. The QCI does not audit and penalize businesses for quality violations. Instead, it focuses on quality facilitation and certification. It works with accreditation bodies like NABET, which can assess organizations against specific quality standards, but penalties like fines are not directly imposed by QCI.

Source: [Forum IAS](#)

20. Correct Answer is (C)

- Nazool land is government-owned property. However, usually it is not directly managed as state property. It is often leased to entities for fixed periods, ranging from 15 to 99 years. In case of lease expiry, one can approach the authority to renew the lease by submitting a written application to the revenue department of the local development authority. The government can either renew or cancel leases. The Nazool Lands (Transfer) Rules, 1956, is the law mostly used for adjudicating Nazool land. The government typically uses Nazool land for public purposes such as constructing schools, hospitals, Gram Panchayat buildings, etc.

Source: [Forum IAS](#)

21. Correct Answer is (A)

- Statement 1 is correct. The National Judicial Academy is fully funded by the Government of India. Established in 1993 under the Societies Registration Act, 1860, the NJA is an independent society that receives its funding from the government to carry out its mission of providing judicial education and training.
- Statements 2 and 3 are incorrect. The Chief Justice of India (CJI) serves as the Chairman of the General Body, Governing Council, Executive Committee, and Academic Council of NJA. The primary focus of the NJA is on providing training programs for judges, court personnel, law enforcement officials, and other stakeholders in the justice system. It does not provide financial assistance to underprivileged individuals seeking legal aid.

Source: [Forum IAS](#)

22. Correct Answer is (B)

- Statements 1 and 3 are correct. The NCrf allows students to earn credits for various learning experiences, including practical work, internships, and work-based learning, promoting a holistic and flexible approach to education. The NCrf enables the creditization of every learning hour, provided it is subject to appropriate assessment. This approach emphasizes the recognition of diverse learning experiences and encourages lifelong learning.

## 10 PM Compilation for the Month of February 2024

- Statements 2 and 4 are incorrect. Credits earned under the NCrf do not have a fixed monetary value for financial aid purposes. Instead, they represent the academic value or weightage of a course or learning experience. The NCrf does not enforce a rigid separation between different areas of learning. Instead, it promotes interdisciplinary learning and encourages the integration of various learning experiences, such as arts, sciences, vocational, academic, curricular, and extra-curricular activities, for credit assignment and credit levels.

Source: [Forum IAS](#)

23. Correct Answer is (C)

- The primary purpose of community radio stations in India is to cater to a specific local community and address their needs and interests. These stations serve a small area, providing utility services reaching to the community which uses the microphone to reflect and enrich its life and artistic expression. Community radio stations are expected to produce at least 50% of their programmes locally, as far as possible in local languages or dialect. India's first community radio station (CRS) opened at Anna University's campus in 2004.

Source: [Forum IAS](#)

24. Correct Answer is (B)

- Under Article 87 of the Indian Constitution, the President's special address at the commencement of the first session after a general election and the first session of each year signifies the formal start of the legislative process for that period. The President's address outlines the government's policy priorities and plans for the upcoming legislative session, setting the stage for discussions, debates, and the introduction of new legislation.

Source: [Forum IAS](#)

25. Correct Answer is (C)

- Statements 1 and 3 are correct. NCDRC is a quasi-judicial commission in India which was set up in 1988 under the Consumer Protection Act of 1986. The Commission is headed by a sitting or retired Judge of the Supreme Court of India or a sitting or retired Chief Justice of the High Court. It has the power to hear appeals against the decisions of both State and District Consumer Dispute Redressal Forums. If a consumer is not satisfied with the decision of the lower forums, they can file an appeal with the NCDRC within a specified period. The Commission's decisions are considered final and can only be challenged in the Supreme Court of India.
- Statement 2 is incorrect. While registered consumer organizations can file complaints with the NCDRC, individual consumers can also directly approach the commission to file complaints against unfair trade practices and other consumer grievances.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

26. Correct Answer is (C)

- Statements 1 and 2 are correct. Article 39A falls within the Directive Principles of State Policy. It mandates the state to ensure that the legal system operates to promote justice on an equal basis. This includes providing free legal aid to those who cannot afford it. Article 130 provides that the Supreme Court shall sit in Delhi or in such other place or places as the Chief Justice of India may, with the approval of the President, from time to time, appoint.

Source: [Forum IAS](#)

27. Correct Answer is (A)

- The Godavarman Thirumulpad v Union of India (1996) judgment is a landmark legal case in India concerning environmental conservation and the protection of forests. The case was heard by the Supreme Court of India. The Supreme Court, in its judgment, recognized the importance of preserving forests and protecting the environment for the well-being of present and future generations. The court issued several directives aimed at preventing illegal logging, encroachments, and other activities detrimental to forests.

Source: [Forum IAS](#)

### Acts & Policies

Q.1) Which one of the following is the primary objective of the 'VAIBHAV Fellowship Programme'?

- To attract foreign investment in Indian Science and Technology (S&T) sector.
- To provide financial assistance to Indian students studying abroad.
- To connect the Indian diaspora in science, technology, engineering, mathematics and medicine (STEMM) fields with Indian research institutions.
- To promote tourism and cultural exchange between India and other countries.

Q.2) With reference to Jal Jeevan Mission (JJM), consider the following statements:

1. Its primary goal is to provide safe and adequate drinking water through individual household tap connections (FHTCs) to every rural household in India.
2. It also aims to establish centralized water treatment plants for all rural communities.
3. Community involvement in water management is a key feature of the Mission.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.3) With reference to PM Young Achievers Scholarship Award Scheme for Vibrant India (YASASVI), consider the following statements:

1. It is a scholarship scheme for Other Backward Class (OBCs), Economically Backward Class (EBC) and Denotified Nomadic Tribes (DNT) students.
2. Only students studying in class 9 or class 11 will be considered eligible to get this scholarship.
3. The scheme has been launched by the Ministry of Education.

Which of the statements given above are correct?

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

Q.4) In the context of “sapinda marriage”, which one of the following does the Hindu Marriage Act, 1955, aim to regulate?

- a) Inter-caste marriages
- b) Arranged marriages only
- c) Marriages based on love
- d) Marriages within prohibited degrees of relationship

Q.5) With reference to Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), consider the following statements:

1. The primary objective of MGNREGS is rural infrastructure development.
2. Ministry of Rural Development is responsible for the policy formulation, overall planning, and monitoring of MGNREGS in India.
3. It empowers rural communities through participation.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.6) Which one of the following statements is correct in respect of Market Access Initiative (MAI) Scheme?

- a) It aims to provide financial assistance to consumers to purchase Indian goods and services.
- b) The scheme aims to increase India's exports to new markets and enhance its share in existing markets.
- c) It offers subsidies to Indian exporters for domestic production.
- d) It facilitates foreign investments in India's manufacturing sector.



## 10 PM Compilation for the Month of February 2024

Q.7) With reference to the Gallantry awards, consider the following statements:

1. These awards are given by the Government of India to individuals who have made significant contributions in various fields such as art, literature, science, public service, and social work.
2. These awards are announced twice a year.
3. The highest gallantry award is the Param Vir Chakra, followed by the Ashoka Chakra in terms of precedence.

Which of the statements given above are correct?

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

Q.8) With reference to National Mission for Mentoring (NMM), consider the following statements:

1. The mission aims to provide large-scale financial support for educational institutions.
2. It is a programme in line with the National Education Policy (NEP) 2020.
3. It also emphasizes the importance on competitive testing to measure student success.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.9) Which one of the following statements is correct about 'Digital Detox Initiative', recently seen in the news?

- a) It is a program where participants temporarily disconnect from digital technology and involve themselves in offline activities.
- b) It aims to encourage mindfulness, lessen screen time, address digital addiction, and foster healthier habits with technology.
- c) It aims to minimize the presence of electronic screens in certain spaces, such as family gatherings, to ensure sufficient time for family members.
- d) Its objective is to encourage individuals to take at least a day away from digital devices and online engagements.

Q.10) With reference to the Pradhan Mantri Suryodaya Yojana, which of the following statement(s) is/are correct?

1. It aims to install rooftop solar panels on one crore households.
2. Under the initiative, beneficiaries will be entitled to free installation of solar rooftop systems.

Select the correct answer using the code given below:

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

## 10 PM Compilation for the Month of February 2024

Q.11) Which one of the following ministries has launched 'Track Child Portal'?

- a) Ministry of Women and Child Development
- b) Ministry of Home Affairs
- c) Ministry of Health and Family Welfare
- d) Ministry of Information and Broadcasting

Q.12) Consider the following statements:

1. Micro-credentials offer a flexible and efficient way to gain in-demand skills through short, focused learning experiences, leading to recognized certifications in specific areas.
2. Micro-credentials have a universal standardized curriculum and assessment process across different issuing institutions or platforms.
3. Micro-credentials are incorporated within the National Credit Framework (NCrF).

Which of the statements given above are correct?

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

Q.13) With reference to the Inclusive Education for Disabled at Secondary Stage (IEDSS) scheme, consider the following statements:

1. It enables students with disabilities to pursue four years of secondary schooling after completing eight years of elementary schooling.
2. The scheme covers all children studying at the secondary stage in Government, local body and Government-aided schools, with one or more disabilities as defined under the Persons with Disabilities Act (1995) and the National Trust Act (1999).
3. The scheme offers specialized education programs exclusively for students with disabilities.

Which of the statements given above are correct?

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

Q.14) Consider the following statements:

Statement-I: Sanitation coverage in India saw a significant improvement, increasing from 39% in 2014 to a 100% by 2019.

Statement-II: Swachh Bharat Mission (SBM) aimed for universal sanitation coverage by 2019.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

## 10 PM Compilation for the Month of February 2024

Q.15) With reference to the Public Examinations (Prevention of Unfair Means) Bill 2024, consider the following statements:

1. The Bill makes offenses bailable and non-cognizable.
2. The Bill is applicable to central recruitment and entrance exams conducted by the Union Public Service Commission (UPSC).
3. Impersonating a candidate on an exam is considered an "unfair means" under the Bill.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.16) Which one of the following is the primary objective of the Prime Minister's Development Initiative for the North East Region (PMDevINE) scheme?

- a) To promote tourism in the North Eastern Region (NER) of India.
- b) To address development gaps and improve infrastructure in the NER.
- c) To provide financial assistance to small and medium businesses in the NER.
- d) To facilitate cultural exchange programs between the NER and other regions.

Q.17) Which one of the following statements provides the most accurate description of the functioning of the Production Linked Incentive (PLI) Scheme?

- a) Companies are reimbursed for their production costs by the government.
- b) Companies are provided with tax breaks for exporting goods.
- c) Companies receive financial incentives based on their incremental sales over a predefined base year.
- d) Companies are granted exclusive rights to sell their products in designated markets.

Q.18) Which one of the following is the objective of Enhancement of Competitiveness in the Indian Capital Goods Sector scheme?

- a) Providing financial assistance to large public sector undertakings
- b) Increasing foreign direct investment in the capital goods sector
- c) Addressing technological obsolescence and improving quality standards
- d) Promoting exports of agricultural machinery and equipment

## 10 PM Compilation for the Month of February 2024

Q.19) Consider the following components:

1. Formalizing the sector through digital registration
2. Increasing import tariffs on seafood products
3. Facilitating adoption of aquaculture insurance
4. Providing free fishing boats to all fishers

How many of the above are the components of Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY)?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.20) Which one of the following is the objective of 'Kilkari Programme'?

- a) Provide financial assistance to pregnant women.
- b) Improve maternal health and newborn care through community mobilization.
- c) Promote institutional deliveries in government hospitals.
- d) Offer nutritional supplements to pregnant and lactating mothers.

Q.21) Which one of the following is the objective of 'Swadesh Darshan Scheme'?

- a) Promote international tourism destinations in India.
- b) Develop theme-based tourist circuits within India.
- c) Provide financial assistance to budget travelers.
- d) Encourage foreign direct investment in the tourism sector.

Q.22) Which one of the following best describes the function of the Sandbox for Agricultural and Rural Security, Technology and Insurance (SARTHI) portal?

- a) Providing low interest rates loans to farmers in India
- b) Facilitating the delivery of insurance products and services to farmers
- c) Monitoring crop health and predicting yield in real-time using satellite data
- d) Serving as a centralized marketplace for farmers to sell agricultural produce

Q.23) With reference to the Middle-Class Housing Scheme, consider the following statements:

1. The scheme is an extension of the Pradhan Mantri Awas Yojana (PMAY).
2. It aims to enable access to affordable housing for middle-income families.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.24) Which one of the following statements is correct regarding “Science for Women: A Technology & Innovation” (SWATI) portal?

- It is a database highlighting accomplishment of Indian women in STEMM fields.
- It is a platform for Indian women to learn about science and technology.
- It is a government initiative to promote gender parity in the workplace.
- It is a social media platform for women in science.

Q.25) With reference to the Production Linked Incentive (PLI) scheme, consider the following statements:

- Under the scheme, the participating company gets guaranteed profits irrespective of performance.
- The scheme promotes import substitution and self-reliance.
- The scheme is open to both domestic and foreign companies.

How many of the statements given above are correct?

- Only one
- Only two
- All three
- None

Q.26) Consider the following statements with respect to the Places of Worship Act, 1991:

- The Act aims to maintain the religious character of places of worship as they existed on August 15, 1947.
- It applies to all places of worship in India.
- Selling or purchasing of places of worship is prohibited under the Act.
- As per the Act, no changes can be made to the existing religious character of places of worship.

How many of the statements given above are correct?

- Only one
- Only two
- Only three
- All four

Q.27) With reference to the Electoral Bonds scheme, consider the following statements:

- It is a bond issued like a promissory note which shall be a bearer banking instrument and shall not carry the name of the buyer or payee.
- Electoral bonds could only be purchased by individuals.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.28) Which one of the following is correct regarding of “Sagar Aankalan Guidelines”?

- These guidelines aim to promote deep-sea exploration and resource extraction.
- These guidelines focus on developing sustainable fishing practices and conserve marine resources.
- These guidelines aim for information sharing and cooperation between maritime agencies.
- These guidelines aim for mapping and benchmarking the logistics performance of Indian ports.

### Answer Key

1 - (c)	2 - (c)	3 - (a)	4 - (b)	5 - (b)	6 - (d)	7 - (b)	8 - (a)	9 - (b)	10 - (c)
11 - (a)	12 - (c)	13 - (a)	14 - (a)	15 - (b)	16 - (b)	17 - (c)	18 - (c)	19 - (b)	20 - (b)
21 - (b)	22 - (b)	23 - (b)	24 - (a)	25 - (b)	26 - (c)	27 - (a)	28 - (d)		

### Answers & Explanations

1. Correct Answer is (C)

- The Vaishvik Bhartiya Vaigyanik (VAIBHAV) fellowship programme aims to connect the Indian diaspora in science, technology, engineering, mathematics and medicine (STEMM) fields with Indian research institutions. The VAIBHAV program was launched in 2023 by the Department of Science and Technology (DST) of India. It is open to Non-Resident Indians (NRIs), Persons of Indian Origin (PIOs), and Overseas Citizens of India (OCIs) working in STEMM fields abroad. Selected scientists can spend up to two months a year for a maximum of three years collaborating with Indian research institutions. The program aims to facilitate knowledge sharing, joint research projects, and capacity building in key areas of science and technology.

Source: [Forum IAS](#)

2. Correct Answer is (C)

- Statements 1 and 3 are correct. The main objective of JJM is to provide safe and adequate drinking water to all rural households in India through individual household tap connections (FHTCs). The mission aims to ensure access to clean and safe drinking water for every rural household by 2024 through individual tap connections. Community involvement in water management is a key feature of the Jal Jeevan Mission. It encourages the active participation of local communities in the planning, implementation, and management of water supply systems, ensuring sustainability and ownership.

## 10 PM Compilation for the Month of February 2024

- Statement 2 is incorrect. JJM emphasizes decentralized water supply systems, including individual tap water connections at the household level. It does not focus on establishing centralized water treatment plants for all rural communities.

Source: [Forum IAS](#)

3. Correct Answer is (A)

- Statements 1 and 2 are correct. The YASASVI scheme is a Scholarship scheme for Other Backward Class (OBCs), Economically Backward Class (EBC) and Denotified Nomadic Tribes (DNT) Students. Only students studying in class 9 or class 11 will be considered eligible to get this scholarship. The family annual income of the applicant students should be maximum 2.5 lakh rupees to get this scholarship. Students of all genders will be eligible to get the benefits under PM Yashasvi Scheme 2023. Financial assistance of Rs 75,000 per year is provided to the eligible students of class IX in the form of scholarship.
- Statement 3 is incorrect. The scheme has been launched by the Ministry of Social Justice and Empowerment.

Source: [Forum IAS](#)

4. Correct Answer is (B)

- Statement 1 is incorrect. The primary objective of MGNREGS is to provide at least 100 days of guaranteed wage employment in a financial year to every registered household whose adult members volunteer for unskilled manual work.
- Statements 2 and 3 are correct. The Ministry of Rural Development (MoRD) is responsible for the policy formulation, overall planning, and monitoring of MGNREGS in India. However, the implementation happens at the state and district levels through Gram Panchayats and other local bodies. MGNREGS empowers rural communities through: providing 100 days of guaranteed wage employment per financial year to rural households, increasing economic security, providing social protection for vulnerable people, enhancing the livelihood security of the rural poor, etc.

Source: [Forum IAS](#)

5. Correct Answer is (B)

- Market Access Initiative (MAI) Scheme is an Export Promotion Scheme meant to act as a catalyst to promote India's exports on a sustained basis. The scheme is formulated on focus product-focus country approach to evolve specific market and specific product through market studies/survey. The following activities will be eligible for financial assistance under the Scheme: Marketing Projects Abroad, Capacity Building, Support for Statutory Compliances, Studies, Project Development, Developing Foreign Trade Facilitation web Portal, to support Cottage and handicrafts units. It is administered by the Ministry of Commerce and Industry, Government of India, through the Directorate General of Foreign Trade (DGFT).

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

6. Correct Answer is (D)

- A sapinda marriage is one between individuals who are closely related to each other. As per section 3 of Hindu Marriage Act, “Two persons are said to be sapindas of each other if one is a lineal ascendant (it means son, grandson) of the other, or if they have a common lineal ascendant who is within the limits of sapinda relationship.” Section 5(v) of the Hindu Marriage Act prohibits sapinda marriages unless there is an established custom that permits the marriage. This means that if there is no established custom, marriage is considered invalid.

Source: [Forum IAS](#)

7. Correct Answer is (B)

- Statement 1 is incorrect. Gallantry awards are specifically instituted to recognize acts of valor and courage displayed by members of the armed forces and, in some cases, civilians in the face of the enemy. They are not given for contributions in fields such as art, literature, science, public service, or social work. These awards are distinct from civilian awards like the Padma Awards, which recognize achievements in various domains. The first three gallantry awards namely Param Vir Chakra, Maha Vir Chakra, and Vir Chakra were instituted by the government of India on 26th January 1950. These awards are given during war time. Three other gallantry awards – the Ashoka Chakra Class-I, the Ashoka Chakra Class-II, and the Ashoka Chakra Class-III – were instituted in 1952. These awards were renamed Ashoka Chakra, Kirti Chakra, and Shaurya Chakra in January 1967. These awards are given during peace time.
- Statements 2 and 3 are correct. Gallantry awards are announced twice a year, on the occasion of Republic Day (January 26th) and Independence Day (August 15th). Order of precedence: Param Vir Chakra > the Ashoka Chakra > the Mahavir Chakra > the Kirti Chakra > the Vir Chakra > the Shaurya chakra. All the gallantry awards may be awarded posthumously.

Source: [Forum IAS](#)

8. Correct Answer is (A)

- Statements 1 and 3 are incorrect. National Mission for Mentoring (NMM) provides mentors with opportunities to share expertise with mentees, assisting them in becoming effective teachers. It aims to establish a strong mentorship system that empowers teachers to improve teaching practices and effectiveness. It keeps teachers updated and relevant in today's dynamic educational landscape. The NMM does not emphasize competitive testing as a measure of student success. Instead, it focuses on holistic development and creating a nurturing learning environment.
- Statement 2 is correct. The NMM was launched in line with the National Education Policy (NEP) 2020 which emphasizes the need for a strong mentoring system for teachers. The program aims to create a large pool of mentors who can support teachers' professional development and help them implement the NEP's vision.

Source: [Forum IAS](#)



## 10 PM Compilation for the Month of February 2024

9. Correct Answer is (B)

- The Digital Detox initiative, launched by the Karnataka government, aims to encourage mindfulness, lessen screen time, address digital addiction, and foster healthier habits with technology. It involves setting up both online and offline Digital Detox Centers across the state, offering personalized guidance, counseling, and practical tools to manage screen time and use technology more responsibly. It often involves activities such as unplugging from devices, engaging in offline hobbies and activities, spending time in nature, and fostering face-to-face social interactions.

Source: [Forum IAS](#)

10. Correct Answer is (C)

- Statements 1 and 2 are correct. Pradhan Mantri Suryodaya Yojana aims to promote adoption of rooftop solar power generation in Indian homes, contributing to energy security and reducing dependence on traditional grids. Under this initiative, one crore households will receive up to 300 units of free electricity monthly. The scheme will help households to save between Rs 15,000 and Rs 18,000 annually. It will also enable them to sell any surplus electricity to distribution companies (DISCOMs) as part of the net metering policy. Rural Electrification Corporation (REC) is the nodal agency responsible for implementing the scheme. Under the Pradhan Mantri Suryodaya Yojana, beneficiaries will be entitled to free installation of solar rooftop systems.

Source: [Forum IAS](#)

11. Correct Answer is (A)

- The Ministry of Women and Child Development developed the “Track Child Portal”, which enables tracking of the missing and found children in all States/UTs. The Track Child portal is integrated with the CCTNS or Crime and Criminal Tracking & Network Systems of the Ministry of Home Affairs. “Khoya-Paya” is one of the components of Track Child Portal. In this, any citizen can report for any missing or sighted children.

Source: [Forum IAS](#)

12. Correct Answer is (C)

- Statements 1 and 3 are correct. Micro-credentials offer a flexible and efficient way to gain in-demand skills through short, focused learning experiences, leading to recognized certifications in specific areas. Micro-credentials are incorporated within the National Credit Framework (NCrF) in India, which outlines learning outcomes and credits for progression.
- Statement 2 is incorrect. Micro-credentials refer to courses that are usually offered by platforms like Coursera, Udemy, Microsoft, etc. These are specialized short term courses that adds value to a person’s skill and knowledge. However, these platforms differ and there is no standardized curriculum and assessment process for micro-credentials. Each has its own standard and assessment process. A universal standard across all institutions and platforms doesn’t exist.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

13. Correct Answer is (A)

- Statements 1 and 2 are correct. IEDSS enables students with disabilities to pursue four years of secondary schooling after completing eight years of elementary schooling in an inclusive environment. The scheme covers all children studying at the secondary stage in Government, local body and Government-aided schools, with one or more disabilities as defined under the Persons with Disabilities Act (1995) and the National Trust Act (1999). This scheme is now subsumed under Rashtriya Madhyamik Shiksha Abhiyan. Funds are released per student for student-oriented components, such as medical and educational assessment, books and stationery, uniforms, transport allowance, reader allowance, stipend for girls, support services, assistive device etc.
- Statement 3 is incorrect. The IEDSS scheme aims to provide inclusive education for disabled children at the secondary stage, rather than offering specialized education programs exclusively for students with disabilities. The central focus of the IEDSS scheme is on inclusive education. This means students with disabilities learn alongside their peers in a regular classroom setting, with adaptations and support as needed.

Source: [Forum IAS](#)

14. Correct Answer is (A)

- Statement – I: As per the government, Sanitation coverage in India significantly improved from 39% in 2014 to 100% in 2019.
- Statement-II: The Swachh Bharat Mission (SBM), launched by the Indian government in 2014, had the primary objective of achieving universal sanitation coverage in India by 2nd October 2019, the 150th birth anniversary of Mahatma Gandhi. The mission focused on the construction of individual household toilets, community and public toilets, and promoting behavioral changes to improve hygiene and sanitation practices.
- Hence, Statement II explains the reason behind the Statement I.

Source: [Forum IAS](#)

15. Correct Answer is (B)

- Statement 1 is incorrect Section 9 of the Bill states that all offences shall be cognizable, non-bailable, and non-compoundable – which means that an arrest can be made without a warrant and bail will not be a matter of right.
- Statements 2 and 3 are correct. The bill is applicable to central recruitment and entrance exams conducted by Union Public Service Commission (UPSC), Staff Selection Commission (SSC), Railway Recruitment Boards (RRBs), National Testing Agency (NTA) and Institute of Banking Personnel Selection (IBPS). Impersonation during an exam, along with other activities like sharing question papers, using unauthorized communication devices, and organizing cheating gangs, are all considered "unfair means" and punishable under the Bill.

Source: [Forum IAS](#)

16. Correct Answer is (B)

## 10 PM Compilation for the Month of February 2024

- The primary objective of the PMDevINE scheme is to address development gaps and improve infrastructure in the North Eastern Region (NER) of India. PMDevINE was specifically launched to tackle development deficits in the North Eastern Region of India. The scheme aims to fund large-scale infrastructure projects and social development initiatives in critical areas like connectivity, healthcare, education, and livelihood generation.

Source: [Forum IAS](#)

17. Correct Answer is (C)

- The PLI Scheme is an initiative by the Government of India to incentivize domestic manufacturing and boost the country's industrial growth. Under this scheme, eligible companies receive financial incentives in the form of cash subsidies based on their incremental sales of manufactured goods over a specified base year. The scheme aims to encourage companies to increase their production capacity, enhance competitiveness, and attract investment in various sectors, including electronics, pharmaceuticals, automobiles, and textiles.

Source: [Forum IAS](#)

18. Correct Answer is (C)

- The objective of the Enhancement of Competitiveness in the Indian Capital Goods Sector scheme is addressing technological obsolescence and improving quality standards. The Smart Advanced Manufacturing and Rapid Transformation Hub (SAMARTH) centres will be set up under the Scheme for “Enhancement of Competitiveness in the Indian Capital Goods Sector”. These centers will provide assistance to the MSMEs to train the workforce and make them aware about Industry 4.0 technologies.

Source: [Forum IAS](#)

19. Correct Answer is (B)

- The PM-MKSSY is a central sector sub-scheme under the Pradhan Mantri Matsya Sampada for formalisation of the fisheries sector. The scheme focuses on formalizing the sector through digital registration, promoting the adoption of improved aquaculture practices, and enhancing the socio-economic conditions of fishers and fish farmers. Its major components are: formalisation of fisheries sector through digital registration, facilitating adoption of aquaculture insurance, adoption and expansion of fish and fishery product safety and quality assurance systems, project management, monitoring and reporting.

Source: [Forum IAS](#)

20. Correct Answer is (B)

- The Kilkari Programme is a mobile health initiative that aims to improve maternal health and newborn care through community mobilization. The program uses prerecorded, weekly, stage-based calls to provide information about reproductive, maternal, neonatal, and child health to families' mobile phones. It aims to empower families and communities to make informed decisions about maternal and newborn care, ultimately improving health

## 10 PM Compilation for the Month of February 2024

outcomes. The scheme is centrally hosted by the Ministry of Health and Family Welfare (MoHFW). The programme is integrated with the centralized Reproductive Child Health (RCH) portal of MoHFW.

Source: [Forum IAS](#)

21. Correct Answer is (B)

- The Swadesh Darshan Scheme was launched by the Ministry of Tourism in India with the primary objective of developing theme-based tourist circuits within the country. The scheme aims to promote domestic tourism by creating tourist circuits around specific themes such as culture, heritage, religion, wildlife, and nature. It is 100% centrally funded scheme. The Ministry of Tourism provides financial assistance to State governments, Union Territory Administrations, or Central Agencies for development of tourism infrastructure in the country.

Source: [Forum IAS](#)

22. Correct Answer is (B)

- The function of the Sandbox for Agricultural and Rural Security, Technology and Insurance (SARTHI) portal is to facilitate the delivery of insurance products and services to farmers and the rural population in India. It aims to simplify the insurance process for farmers by providing a digitized insurance platform, offering a single-window platform for viewing, purchasing, and availing insurance products, with digital payment options and streamlined premium collection. The portal will introduce a range of insurance products gradually, starting with personal accident and hospital cash policies, followed by health, shop, home, tractor, two-wheeler, livestock, and non-PMFBY insurance products. The Krishi Rakshak Portal and Helpline will act as a facilitator between insured farmers, insurance companies, bankers, Common Service Centres (CSCs), and state governments, enabling farmers to register complaints for redressal.

Source: [Forum IAS](#)

23. Correct Answer is (B)

- Statement 1 is incorrect. The government will start a program called Middle-Class Housing Scheme, to assist middle-class individuals living in rented houses, slums, chawls, and unauthorized colonies to purchase or construct their own homes. While it is part of the 'housing for all' policy, it's not an extension of Pradhan Mantri Awas Yojana (PMAY). It's a new scheme where the government will define income levels, location, and accommodation types to identify beneficiaries.
- Statement 2 is correct. The primary goal of the Middle-Class Housing Scheme is to provide affordable housing solutions to middle-income families.

Source: [Forum IAS](#)

24. Correct Answer is (A)

- The SWATI (Science for Women: A Technology & Innovation) portal is an initiative aimed at recognizing and celebrating the contributions of Indian women in the fields of Science,

## 10 PM Compilation for the Month of February 2024

Technology, Engineering, Mathematics, and Medicine (STEMM). By providing a platform to showcase their accomplishments, the SWATI portal promotes gender equality and encourages more women to pursue careers in these male-dominated fields.

Source: [Forum IAS](#)

25. Correct Answer is (B)

- Statement 1 is incorrect. The PLI scheme doesn't guarantee profits for participating companies. Instead, it provides financial incentives based on the company's performance, such as achieving predetermined production and investment targets. The scheme provides incentives to eligible companies based on incremental sales (over base year) of goods manufactured in India and covered under target segments, for a period of five to six years.
- Statements 2 and 3 are correct. The PLI scheme aims to encourage local manufacturing and reduce reliance on imports, thus promoting import substitution and self-reliance. The PLI scheme is open to both domestic and foreign companies that meet the eligibility criteria. This is intended to attract foreign investment and expertise to India's manufacturing sector. It incentivizes both foreign and domestic companies to establish or expand their manufacturing operations in India.

Source: [Forum IAS](#)

26. Correct Answer is (C)

- Statements 1, 2 and 4 are correct. The Places of Worship Act, 1991 prohibits the conversion of any place of worship and aims to maintain the religious character of any place of worship as it existed on August 15, 1947. The Act applies to all places of worship, including temples, mosques, gurudwaras, churches, and monasteries. However, the Act does not apply to any place of worship which is an ancient and historical monument or an archaeological site or remains covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958. As per the Act, the religious character of a place of worship existing on the 15th day of August, 1947 shall continue to be the same as it existed on that day, and no changes can be made to the existing religious character of places of worship.
- Statement 3 is incorrect. Selling or purchasing of places of worship is not prohibited under the Act. However, no person shall convert any place of worship of any religious denomination or any section into a place of worship of a different section of the same religious denomination or of a different religious denomination.

Source: [Forum IAS](#)

27. Correct Answer is (A)

- Statement 1 is correct. Under the Electoral Bonds scheme, the bond was issued like a promissory note, serving as a bearer banking instrument. The key feature of these bonds was that they did not carry the name of the buyer or payee, thus ensuring the anonymity of the donor.
- Statement 2 is incorrect. Electoral bonds could be purchased not only by individuals but also by other entities incorporated or established in India, such as companies, firms, or associations. This meant that a wide range of entities could purchase electoral bonds and

## 10 PM Compilation for the Month of February 2024

contribute to political parties without revealing their identity. However, the Supreme Court of India struck down the Electoral Bonds scheme due to concerns over transparency, accountability, and the potential for anonymous corporate funding in politics.

Source: [Forum IAS](#)

28. Correct Answer is (D)

- The Sagar Aankalan Guidelines were launched by the Indian government to establish a comprehensive framework for assessing and improving the performance of Indian ports. It focuses on the National Benchmarking of Indian Ports' Performance to enhance the efficiency and effectiveness of seaports across India. It would be applicable to all Indian seaports. It will transform the performance assessment of Indian ports. It will help in fulfilling "Maritime Amrit Kaal Vision 2047". It will help in port development, modernization, green hydrogen and ammonia, port-led development, cruise sector, business and commerce, shipbuilding, and knowledge sharing.

Source: [Forum IAS](#)

### Index & Reports

Q.1) Consider the following statements:

Statement-I: As per the fifth National Family Health Survey 2019-21, prevalence of anemia increased from 54.1% to 59.1% among women aged 15-19 years.

Statement-II: There has been an increase in the consumption of iron-rich fortified foods for women aged 15-19 years.

Which one of the following is correct in respect of the above statements?

- Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- Statement-I is correct but Statement-II is incorrect
- Statement-I is incorrect but Statement-II is correct

Q.2) "Global Gender Gap Report" is published by:

- World Economic Forum (WEF)
- World Health Organization (WHO)
- International Labour Organization (ILO)
- UN Population Fund (UNFPA)

## 10 PM Compilation for the Month of February 2024

Q.3) Consider the following statements with respect to the Corruption Perceptions Index (CPI):

1. The index measures the amount of money lost due to corruption.
2. The index is published by the International Monetary Fund (IMF).
3. India's rank dropped in the CPI, 2023.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.4) What one of the following is the primary focus of the "Prabhaav" report?

- a) Evaluating the overall performance of Indian startups.
- b) Assessing the impact of government initiatives on social welfare.
- c) Analyzing the effectiveness of the Fund of Funds for Startups (FFS).
- d) Comparing different investment strategies for small businesses.

### Answer Key

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

### Answers & Explanations

1. Correct Answer is (C)

- Statement-I is correct. According to the fifth National Family Health Survey 2019-21, there was an increase in the prevalence of anemia among women aged 15-19 years, rising from 54.1% to 59.1%.
- Statement-II is incorrect. The consumption of iron-rich fortified foods is typically associated with a decrease in anemia rates, not an increase. Hence, Statement-II stands incorrect.

Source: [Forum IAS](#)

2. Correct Answer is (A)

- The "Global Gender Gap Report" is published by the World Economic Forum (WEF). It is an annual report that benchmarks the progress towards gender parity and compares gender gaps across various dimensions. The report is based on a methodology that integrates the latest statistics from international organizations and a survey of executives. It is a widely

## 10 PM Compilation for the Month of February 2024

recognized publication that serves as a tool for leaders to identify areas for individual and collective action to address gender disparities.

Source: [Forum IAS](#)

3. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The CPI does not measure the amount of money lost due to corruption. It assesses the perceived level of public sector corruption in different countries, based on expert opinions and surveys. The CPI is published by Transparency International, an independent non-profit organization focused on reducing corruption.
- Statement 3 is correct. India's rank in the CPI dropped in 2023 compared to 2022. In 2023, India ranked 93rd with a score of 39, while in 2022 it ranked 85<sup>th</sup> with a score of 40.

Source: [Forum IAS](#)

4. Correct Answer is (C)

- The "Prabhaav" report, released by the Small Industries Development Bank of India (SIDBI), focuses on assessing the impact and effectiveness of the Fund of Funds for Startups (FFS). The FFS was established under the Startup India Action Plan to provide capital to venture capital and alternative investment funds, which in turn invest in early-stage startups. The report evaluates the performance of the FFS, its contribution to the startup ecosystem, and its role in promoting innovation and entrepreneurship in India.

Source: [Forum IAS](#)

## International Relations/Organizations

Q.1) Which one of the following is the primary benefit of resolving disputes through the International Court of Justice (ICJ) compared to other methods like negotiations or arbitration?

- a) Faster resolution of the dispute.
- b) Lower financial cost for the involved parties.
- c) Enforceable and legally binding outcome.
- d) More flexibility in reaching a compromise.

Q.2) Consider the following statements:

1. Bureau of Indian Standards (BIS) aims to ensure harmonious development of the activities of standardization, marking and quality certification of goods.
2. The International Organization for Standardization (ISO) is a regulatory body that imposes mandatory standards on all countries, industries, and businesses.

Which of the statement(s) given above is/are correct?

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



## 10 PM Compilation for the Month of February 2024

Q.3) In the context of the United Nations' Genocide Convention, which one of the following constitutes the crime of genocide?

- a) Armed conflict between nations
- b) Deliberate and systematic destruction of a racial, ethnic, or religious group
- c) The systematic killing of any group of people.
- d) Violating human rights on a large scale.

Q.4) 'The Horizon 2047 Framework' was recently seen in the news. India has entered into an agreement for this framework with which one of the following countries?

- a) Israel
- b) Canada
- c) France
- d) Russia

Q.5) With reference to the Association of Southeast Asian Nations (ASEAN), consider the following statements:

1. It is a regional grouping that aims to promote economic and security cooperation among its members.
2. Bangladesh is one of the member countries of ASEAN.
3. Its headquarters are in Jakarta, Indonesia.

Which of the statements given above are correct?

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

Q.6) Consider the following statements:

1. The pandemic treaty aims to boost international cooperation in sharing data, research, and the production and distribution of medical countermeasures like vaccines, medicines, diagnostics, and protective equipment.
2. Disease X is a hypothetical pathogen or threat that may cause a major pandemic in the future.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.7) Consider the following statements with respect to United Nations Relief and Works Agency (UNRWA):

1. It operates only in the Gaza Strip and West Bank.
2. Its mandate is to facilitate peace negotiations between Israel and Palestine.

Which of the statement(s) given above is/are correct?

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

Q.8) With reference to India and France relations, consider the following statements:

1. Scorpene submarines have been built by Mazagon Dock Shipbuilders Limited with transfer of technology from France.
2. The Jal Shakti Abhiyan initiative launched collectively by India and France focuses on renewable energy development and climate change mitigation.
3. India and France played important role in the establishment of International Solar Alliance.

Which of the above statements are correct?

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

Q.9) With reference to the Dispute Settlement System of the WTO (World Trade Organization), consider the following statements:

1. It provides a forum for negotiations on trade agreements.
2. The Dispute Settlement Body (DSB) of the WTO is comprised of representatives of all WTO member countries.

Which of the statement(s) given above is/are correct?

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

Q.10) Which of the following international organizations jointly established the Codex Alimentarius Commission?

- a) World Health Organization (WHO) and Food and Agriculture Organization (FAO)
- b) International Monetary Fund (IMF) and World Bank
- c) United Nations Educational, Scientific, and Cultural Organization (UNESCO) and International Labour Organization (ILO)
- d) United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP)

## 10 PM Compilation for the Month of February 2024

Q.11) With reference to India-Myanmar relations, consider the following statements:

1. Myanmar is India's gateway to South-East Asia and development of North-Eastern India.
2. Both India and Myanmar were part of British India during colonial rule.
3. India, Myanmar, and Thailand are building the Asian Trilateral Highway, which will connect India to ASEAN.

Which of the statements given above are correct?

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

Q.12) With reference to the Kaladan Multimodal Project, consider the following statements:

1. It aims to create a dedicated freight corridor for transporting goods between India and Bangladesh.
2. It will reduce the need to transport goods through the narrow Siliguri corridor.
3. It will strengthen India's Act East Policy.

Which of the statements given above are correct?

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

Q.13) Consider the following statements with respect to the International Energy Agency (IEA):

1. World Energy Outlook report is published by the International Energy Agency (IEA).
2. It is responsible for advising governments on energy policy.
3. It is a subsidiary of the United Nations (UN).

Which of the statements given above are correct?

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

Q.14) With reference to India-Africa relations, consider the following statements:

1. India has increased its investments in Africa to boost Africa's economic growth and reduce the poverty levels in the Global South.
2. Military intervention in internal conflicts is a key pillar of India's engagement with Africa.
3. India-Africa share security cooperation synergies on issues like curbing piracy, humanitarian and Disaster Relief (HADR) and maritime security.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.15) With reference to the India-U.A.E. relations, how many of the following statements are correct?

1. The UAE is a part of the India-Middle East-Europe Economic Corridor (IMEEC) infrastructure project that was signed during the G-20 summit in Delhi.
2. The UAE is the only Gulf nation with strategic oil reserves stored in India.
3. Tourism and travel are the largest contributors to the economic relationship between India and the U.A.E.
4. The RuPay card, a key component of India's Digital Public Infrastructure (DPI), is accepted in the UAE.

Select the correct answer using the codes given below:

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.16) With reference to Cairns Group, consider the following statements:

1. It is a coalition of agricultural exporting countries that advocate for agricultural trade liberalization.
2. It advocates for reduced trade barriers and subsidies in agriculture.

Which of the statement(s) given above is/are correct?

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

Q.17) Which one of the following is the objective of 'UN World Restoration Flagships'?

- a) Advocate for the protection of endangered species.
- b) Promote sustainable practices in land management.
- c) Accelerate large-scale landscape restoration efforts globally.
- d) Provide financial assistance to developing countries for restoration projects.

Q.18) Consider the following:

1. Economic collaboration
2. Security and defense cooperation
3. Climate change

How many of the above are the areas of cooperation under the 'Weimar Triangle'?

- a) Only one
- b) Only two
- c) All three
- d) None

## 10 PM Compilation for the Month of February 2024

Q.19) With reference to the European Free Trade Association (EFTA), consider the following statements:

1. It aims to facilitate political integration and harmonization of laws and regulations among its member states.
2. EFTA has a centralized legislative body, while the European Union (EU) relies on cooperation among national governments.
3. Germany is one of the member countries of EFTA.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.20) With reference to the Munich Security Conference, consider the following statements:

1. It is often referred to as the 'Davos of Defence'.
2. It aims to facilitate humanitarian aid efforts in conflict zones worldwide.
3. The conference is only attended by leaders from European Union member states.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.21) Which article of the North Atlantic Treaty Organization (NATO) treaty is known as the "collective defense" clause, stating that an attack against one member is considered an attack against all members?

- a) Article 1
- b) Article 2
- c) Article 5
- d) Article 10

Q.22) Consider the following pairs:

Interpol Notice-----Objective

1. Green Notice----- To warn about a person's criminal activities
2. Blue Notice-----To provide information on modus operandi, procedures, objects, devices, or hiding places used by criminals
3. Yellow Notice-----To seek information on unidentified bodies
4. Orange Notice-----To seek the location or arrest of a person wanted by a judicial jurisdiction or an international tribunal

How many of the above pairs are correctly matched?

- a) Only one pair
- b) Only two pairs
- c) Only three pairs
- d) All four pairs

## Answer Key

1 - (c)	2 - (a)	3 - (b)	4 - (c)	5 - (c)	6 - (c)	7 - (d)	8 - (c)	9 - (b)	10 - (a)	11 - (d)
12 - (b)	13 - (a)	14 - (c)	15 - (c)	16 - (c)	17 - (c)	18 - (c)	19 - (d)	20 - (a)	21 - (c)	22 - (a)

## Answers & Explanations

1. Correct Answer is (C)

- One of the primary benefits of resolving disputes through the International Court of Justice (ICJ) compared to other methods like negotiations or arbitration is that the decision reached by the ICJ is enforceable and legally binding. The ICJ is the principal judicial organ of the United Nations and has the authority to make decisions that countries are obligated to follow under international law. The judgment is final, binding on the parties to a case and without appeal. Under Article 94 of the UN Charter, the Security Council has the authority to enforce ICJ decisions, and it can take a range of measures to ensure compliance, including economic sanctions, travel restrictions, and the use of military force. The ICJ does not itself has enforcing powers.

Source: [Forum IAS](#)

2. Correct Answer is (A)

- Statement 1 is correct. The Bureau of Indian Standards (BIS) aims to ensure the harmonious development of the activities of standardization, marking, and quality certification of goods. BIS is the National Standard Body of India established under the BIS Act 2016.
- Statement 2 is incorrect. The ISO is not a regulatory body and does not impose mandatory standards. It is a non-governmental international organization that develops and publishes voluntary international standards. Organizations and industries choose to adopt ISO standards based on their relevance and benefits.

Source: [Forum IAS](#)

3. Correct Answer is (B)

- The crime of genocide, as defined by the United Nations' Genocide Convention, is the deliberate and systematic destruction of a racial, ethnic, or religious group, in whole or in part, with the intent to destroy the group as such. The convention was the first human rights treaty adopted by the General Assembly of the United Nations on 9 December 1948. The Convention was established in response to the atrocities committed during World War

## 10 PM Compilation for the Month of February 2024

II, particularly the Holocaust, and it aimed to prevent and punish acts of genocide. According to the Genocide Convention, genocide is a crime that can take place both in time of war and in time of peace.

Source: [Forum IAS](#)

4. Correct Answer is (C)

- India has entered into an agreement for the Horizon 2047 framework with France. The Horizon 2047 framework reflects a vision for the India-France strategic partnership, outlining the bilateral relationship in various areas until 2047, which will mark 100 years of India's independence. It is a strategic roadmap outlining the future of India-France relations established in 2022. It aims to deepen their cooperation in various sectors including defence, space, and nuclear energy.

Source: [Forum IAS](#)

5. Correct Answer is (C)

- Statements 1 and 3 are correct. ASEAN is a regional grouping aiming to promote economic and security cooperation among its ten member countries. It facilitates economic integration, trade liberalization, and joint efforts on security issues like maritime security and counter-terrorism. The headquarters of ASEAN is located in Jakarta, Indonesia. It has been there since its establishment in 1967.
- Statement 2 is incorrect. Bangladesh is not a member country of ASEAN. Currently, ASEAN has 10 member states: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

Source: [Forum IAS](#)

6. Correct Answer is (C)

- Statements 1 and 2 are correct. The pandemic treaty aims to foster an all government and all society approach, strengthening national, regional and global capacities and resilience to future pandemics. It also aims to boost international cooperation in sharing data, research, and the production and distribution of medical countermeasures like vaccines, medicines, diagnostics, and protective equipment. Disease X is a hypothetical pathogen or threat that may cause a major pandemic in future. It could be a new agent, a virus, a bacterium, or a fungus without any known treatment. Disease X was included in the WHO's updated Blueprint list of diseases back in 2018. Disease X could be 20 times more deadly than SARS-Covid virus that caused pandemic recently.

Source: [Forum IAS](#)

7. Correct Answer is (D)

- Statements 1 and 2 are incorrect. UNRWA operates in five areas: Jordan, Lebanon, Syria, the Gaza Strip, and the West Bank, including East Jerusalem. The organization's primary mandate is to provide essential services to Palestine refugees, including education, healthcare, relief and social services, infrastructure and camp improvement, and emergency assistance. UNRWA's operations are primarily humanitarian in nature, and the

## 10 PM Compilation for the Month of February 2024

organization does not aim to facilitate peace negotiations between Israel and Palestine. It is a specialized agency established by the United Nations General Assembly in 1949. UNRWA receives generous support from UN Member States such as US, regional governments, and the European Union. It also gets a limited subsidy from the UN, which is used only for administrative costs. Top donors of 2022- USA, Germany, EU, Sweden, Norway, Japan, France, Saudi Arabia, Switzerland and Turkey.

Source: [Forum IAS](#)

8. Correct Answer is (C)

- Statements 1 and 3 are correct. The Scorpene-class submarines are diesel-electric attack submarines jointly developed by the French shipbuilder Naval Group (formerly known as DCNS) and the Spanish company Navantia. In India, these submarines are being built by Mazagon Dock Shipbuilders Limited (MDL) located in Mumbai, under a technology transfer agreement with France. This is part of India's Project 75, which aims to modernize the country's submarine fleet. The International Solar Alliance (ISA) was jointly launched by the Prime Minister of India and the President of France during COP21 in Paris. The alliance is a treaty-based international organization that aims to promote solar energy among its member countries. The primary objective of the ISA is to collectively work for efficient exploitation of solar energy to reduce dependence on fossil fuels.
- Statement 2 is incorrect. The Jal Shakti Abhiyan is an initiative by the Government of India aimed at water conservation and water resource management by focusing on the efficient use of water and expanding water harvesting through various means.

Source: [Forum IAS](#)

9. Correct Answer is (B)

- Statement 1 is incorrect. The Dispute Settlement System of the WTO aims to resolve disputes between member countries regarding violations of WTO agreements, not to provide a forum for negotiations on trade agreements.
- Statement 2 is correct. The Dispute Settlement Body (DSB) of the World Trade Organization (WTO) is made up of representatives of all WTO member countries. The DSB is responsible for administering the Dispute Settlement Understanding (DSU) and overseeing the entire dispute settlement process. The DSB is made up of all member governments, usually represented by ambassadors or equivalent.

Source: [Forum IAS](#)

10. Correct Answer is (A)

- The Codex Alimentarius Commission was established in 1963 by the WHO and FAO. Its primary goal is to develop international food standards, guidelines, and codes of practice aimed at protecting consumer health and ensuring fair practices in the food trade. It consists of 189 member countries. It is an international, intergovernmental body which is based in Rome. The programme of work of the Commission is funded through the regular budgets of WHO and FAO. The standards developed by the Committees under the CAC,



## 10 PM Compilation for the Month of February 2024

including the CCSCH, are voluntary in nature. Its standards are recognized by the WTO to resolve trade disputes concerning food safety and consumer protection.

Source: [Forum IAS](#)

11. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. Myanmar is India's gateway to South-East Asia and development of North-Eastern India. Myanmar can be seen as a gateway to Southeast Asia for India, providing land and sea access to the region and facilitating trade and cultural exchanges. Both India and Myanmar were part of British India during colonial rule, gaining independence in 1947 and 1948, respectively. India, Myanmar, and Thailand are indeed collaborating on the Asian Trilateral Highway (ATH) project, which aims to connect India to Southeast Asia through Myanmar.

Source: [Forum IAS](#)

12. Correct Answer is (B)

- Statement 1 is incorrect. The Kaladan Multi-Modal Transit Transport Project was jointly identified by India and Myanmar to create a multi-modal mode of transport for the shipment of cargo from the eastern ports of India to Myanmar. It connects the eastern Indian seaport of Kolkata with Sittwe seaport in Rakhine State, Myanmar by sea. It will reduce the distance from Kolkata to Sittwe by approximately 1,328 km.
- Statements 2 and 3 are correct. The project will reduce the distance from Kolkata to Sittwe by approximately 1,328 km. It will reduce the need to transport goods through the narrow Siliguri corridor. This project will connect Sittwe Port in Myanmar to the India-Myanmar border. It will contribute to the economic development of the North-Eastern States of India, by opening up the sea route for the products. It provides an alternative to the Chicken's Neck. This will lead to enhanced India's control over its northeastern frontier and reduced logistical vulnerabilities. It will strengthen India's Act East Policy.

Source: [Forum IAS](#)

13. Correct Answer is (A)

- Statements 1 and 2 are correct. The International Energy Agency (IEA) publishes the annual World Energy Outlook report, containing analysis and projections on global energy trends. It acts as a key policy advisor to member countries, providing data-driven recommendations for secure, sustainable, and affordable energy systems.
- Statement 3 is incorrect. The International Energy Agency (IEA) is not a subsidiary of the United Nations (UN). The IEA was established in 1974 to ensure the security of oil supplies and is hosted at the OECD in Paris. It operates autonomously, with its own budget and governance structure.

Source: [Forum IAS](#)

14. Correct Answer is (C)

- Statements 1 and 3 are correct. India has increased its investments in Africa to boost Africa's economic growth and reduce the poverty levels in the global south. For ex- EXIM

## 10 PM Compilation for the Month of February 2024

Bank's Focus Africa Programme, India-Africa Partnership project, etc. India and African nations have a growing partnership in security, particularly in issues impacting the Indian Ocean region. This includes collaborations on maritime security, anti-piracy initiatives, and capacity building for Humanitarian Assistance and Disaster Relief (HADR).

- Statement 2 is incorrect. India's approach to Africa emphasizes non-interference in internal affairs and peaceful conflict resolution through dialogue and diplomacy. Military intervention is not a central component of India's strategy.

Source: [Forum IAS](#)

15. Correct Answer is (C)

- Statements 1, 2 and 4 are correct. The UAE is part of the India-Middle East-Europe Economic Corridor (IMEEC) infrastructure project, which was signed during the G-20 summit in Delhi, aiming to enhance trade and connectivity between the regions. This is aimed to counter China's Belt and road initiative in the region. The UAE is only nation from the gulf region which has strategic oil reserves stored in India. An agreement was signed by Indian Strategic Petroleum Reserves Ltd (ISPRL) and the Abu Dhabi National Oil Company to invest in the strategic crude oil storage facility in Mangaluru. The UAE is India's third-largest trading partner and India's second-largest export destination. The UAE is also the fourth-largest overall investor in India. The RuPay card, a key component of India's Digital Public Infrastructure (DPI), is accepted in the UAE. From July 2023, the rupee was also accepted for transactions at Dubai's airports.
- Statement 3 is incorrect. Trade in oil and gas from the U.A.E. to India is the largest contributor to the economic relationship between India and the U.A.E. While tourism is a significant aspect of the relationship, the largest contributors are trade and investment.

Source: [Forum IAS](#)

16. Correct Answer is (C)

- Statements 1 and 2 are correct. Cairns Group is an international coalition of 19 agricultural exporting countries, including Australia, Brazil, Canada, and New Zealand, among others. It was established in 1986 and has since been an influential voice in international trade negotiations, particularly in the area of agriculture. The Cairns Group advocates for agricultural trade liberalization, seeking to reduce trade barriers and promote a more open and fair global market for agricultural products. The group advocates for reduced trade barriers and subsidies in agriculture, and has had some success in reducing tariff barriers and eliminating subsidies.

Source: [Forum IAS](#)

17. Correct Answer is (C)

- The objective of the UN World Restoration Flagships is to accelerate large-scale landscape restoration efforts globally. These flagships are initiatives recognized by the United Nations Environment Programme (UNEP) and the Food and Agriculture Organization (FAO) of the United Nations for their potential to restore ecosystems, promote biodiversity, and improve livelihoods. Its goal is to stop, prevent, and reverse the decline of ecosystems across all

## 10 PM Compilation for the Month of February 2024

continents and oceans. Seven initiatives under the UN World Restoration Flagships: The Restoring Mediterranean Forests Initiative, The Living Indus initiative, The Acción Andina social movement, the Sri Lanka Mangrove Regeneration initiative, the Terai Arc Landscape initiative, Regreening agriculture in Africa, the Growing Forests in Africa's Drylands initiative.

Source: [Forum IAS](#)

18. Correct Answer is (C)

- The Weimar Triangle was created in 1991. It is a regional alliance to promote cooperation among France, Germany, and Poland. It aims to strengthen bonds and encourage cooperation among the three countries, especially in politics, economy, and culture. Also, to tackle the common challenges faced by them. The forum offers a platform to discuss regional and global issues and has had a big impact on European relations and policies. Areas of cooperation include: Political dialogue, Economic collaboration, Cultural exchanges, Security and defense cooperation, Contemporary issues like energy security, climate change, and technological innovation.

Source: [Forum IAS](#)

19. Correct Answer is (D)

- Statements 1, 2 and 3 are incorrect. EFTA primarily aims to promote free trade and economic integration among its member states, rather than political integration or harmonization of laws and regulations. It is an intergovernmental organization established in 1960 through the Stockholm Convention. EFTA focuses on reducing trade barriers and fostering cooperation in various economic fields, such as industry, research, and technology. EFTA does not have a centralized legislative body. Instead, it operates based on intergovernmental cooperation among its member states, similar to the European Union (EU). EFTA member states retain their national sovereignty and make decisions through consensus in the EFTA Council, which is the organization's highest governing body. The organization works alongside the European Union (EU). The current member states of EFTA are Iceland, Liechtenstein, Norway, and Switzerland. These countries are not part of the European Union but maintain close economic ties with the EU through the European Economic Area (EEA) Agreement, which allows for the free movement of goods, services, capital, and people between EFTA and EU member states.

Source: [Forum IAS](#)

20. Correct Answer is (A)

- Statement 1 is correct. The Munich Security Conference (MSC) is often referred to as the 'Davos of Defence' due to its high-profile focus on international security and defense.
- Statements 2 and 3 are incorrect. Its objective is to build trust and contribute to the peaceful resolution of conflicts, by sustaining a continuous and informal dialogue within the international security community. The conference is held annually in February. It is a venue for diplomatic initiatives to address the world's most pressing security concerns. It publishes the Munich Security Report. This is an annual

## 10 PM Compilation for the Month of February 2024

report about figures, maps and research on crucial security challenges. It is not limited to leaders from European Union member states. Instead, it attracts participants from various countries worldwide, including heads of state, defense ministers, foreign ministers, military officials, and security experts.

Source: [Forum IAS](#)

21. Correct Answer is (C)

- Article 5 is the cornerstone of NATO's collective defense principle. It states that an armed attack against one or more members is considered an attack against all and members must assist, including the use of armed force if necessary. NATO is a transatlantic security alliance of 31 like-minded North American and European countries. It was established by the North Atlantic Treaty (also called the Washington Treaty) on April 4, 1949. Its objective is to protect peace and to guarantee the territorial integrity, political independence, and security of the member states.

Source: [Forum IAS](#)

22. Correct Answer is (A)

- Only 1 is correctly matched.
- Blue Notice: To locate, identify or obtain information on a person of interest in a criminal investigation.
- Yellow Notice: To locate a missing person or to identify a person unable to identify himself/herself.
- Orange Notice: To warn of an event, a person, an object or a process representing an imminent threat and danger to persons or property.

Source: [Forum IAS](#)

### Economy

Q.1) In the context of the Goods and Services Tax (GST), which one of the following accurately describes the levying of taxes on the exports and imports of goods and services?

- Exports are taxed, and imports are exempted
- Both exports and imports are exempted
- Exports are exempted, and imports are taxed
- Both exports and imports are taxed

## 10 PM Compilation for the Month of February 2024

Q.2) Consider the following statements:

1. Foreign Portfolio Investments (FPIs) are investments in real assets and businesses of a foreign country, such as factories, land, and infrastructure projects whereas Foreign Direct Investments (FDIs) are investments in financial assets of a foreign country, such as stocks, bonds, and mutual funds.
2. FPI is considered a passive form of investment whereas FDI is considered an active and long-term form of investment.
3. FPIs involve higher volatility and risks compared to FDIs.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.3) With reference to the Economic Survey, consider the following statements:

1. It is prepared under the guidance of the Chief Economic Adviser of India.
2. The document is binding in nature and was first presented in 1964.
3. It gives an outlook on India's GDP growth, inflation rate and projection, forex reserves, and trade deficits.

Which of the statements given above are correct?

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

Q.4) If a central bank decides to lower the Cash Reserve Ratio (CRR), which one of the following is the likely impact on the money supply in the economy?

- a) Money supply decreases
- b) Money supply increases
- c) Money supply decreases for a while and then increases
- d) Money supply remains unchanged

Q.5) Consider the following statements with reference to the 'Forex Reserves':

1. Trade surpluses, current account balances, and exchange rates are the main components of forex reserves.
2. Foreign exchange reserves help a country manage its exchange rate by influencing the supply and demand for its currency.
3. A higher amount of foreign exchange reserves leads to a lower credit rating.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.6) Consider the following statements:

Statement-I: Urea is the only fertilizer in India with statutorily controlled price & movement.

Statement-II: Urea is the most widely used nitrogen-based fertilizer in India, crucial for crop growth and food production.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

Q.7) Which one of the following is responsible for collecting income tax in India?

- a) Reserve Bank of India
- b) Securities and Exchange Board of India
- c) Income Tax Department
- d) Goods and Services Tax Council

Q.8) Consider the following:

1. Slower Deposit Growth
2. Fintech Competition
3. Large and Growing Market

How many of the above are the challenges faced by the Indian Banks?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.9) With reference to the Disinvestment in India, consider the following statements:

1. Disinvestment helps in raising funds for the government, aiding in managing fiscal deficits.
2. The Department of Disinvestment (DOD) is responsible for overseeing the disinvestment process in India.
3. Disinvestment helps in overall economic growth and development of India by increasing government control over strategic sectors.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

## 10 PM Compilation for the Month of February 2024

Q.10) With reference to the Foreign Direct Investment (FDI) in India, consider the following statements:

1. The two primary routes for FDI in India are direct route and portfolio route.
2. Since the economic reforms in 1990s, FDI inflows have shown an upward trend.
3. FDI differs from Foreign Portfolio Investment (FPI) primarily in terms of level of control the investor exerts in the enterprise.

Which of the statements given above are correct?

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

Q.11) Consider the following statements:

1. The primary deficit is the difference between government revenues and spending, excluding interest payments.
2. Reducing government expenditure and/or increasing tax revenue can help reduce a primary deficit.
3. A progressive tax system means indirect taxes form the largest part of the tax revenue.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.12) A country with a high Tax-to-GDP ratio indicates:

- a) Lower tax compliance among citizens
- b) Higher economic development and stability
- c) A larger informal economy
- d) Reduced government expenditure on public services

Q.13) The Indian government announces significant investment in the modernization of its railway network. This expenditure would primarily be classified as:

- a) Operating Expenditure (Opex)
- b) Capital Expenditure (Capex)
- c) Revenue Expenditure
- d) Non-Plan Expenditure

## 10 PM Compilation for the Month of February 2024

Q.14) Consider the following statements:

1. It can offer loans.
2. It can issue debit cards but not credit cards.
3. It generates revenue through fees charged on transactions and services.
4. ₹5 lakhs are the maximum balance limit allowed in the account.
5. It can set up subsidiaries to undertake non-banking financial activities.

How many of the statements given above are correct regarding the “Payment Banks” in India?

- a) Only two
- b) Only three
- c) Only four
- d) All five

Q.15) With reference to the Competition Commission of India (CCI), which of the following statement(s) is/are correct?

1. The Commission is a quasi-judicial body.
2. It is responsible for promoting competition in the Indian market and preventing anti-competitive practices.
3. Offering discounts and promotional offers to attract customers is an anti-competitive practice prohibited by the CCI.

Select the correct statements using the codes given below:

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

Q.16) With reference to the Coal Mines Provident Fund Organization, consider the following statements:

1. It is an autonomous organization under the aegis of Ministry of Coal.
2. It aims to ensure safety regulations are being followed in coal mines.

Which of the statement(s) given above is/are correct?

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



## 10 PM Compilation for the Month of February 2024

Q.17) Consider the following statements:

1. Foreign investors must use local legal remedies for at least five years before seeking international arbitration.
2. Taxation measures imposed by India are included.
3. The Most Favored Nation (MFN) clause is present, ensuring equal treatment among investors.

How many of the above characteristics are correct regarding the India's model of Bilateral Investment Treaties (BITs)?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.18) With reference to Nanostructured diammonium phosphate (Nano-DAP), which of the following statement(s) is/are correct?

1. Nano-DAP is a genetically modified fertilizer designed to enhance crop yields by directly injecting it into plant cells.
2. It can assist the government lower its fertilizer subsidy burden.
3. It can also be combined with other nano-fertilizers like nano-urea to increase agricultural benefits.

Select the correct statements using the codes given below:

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

Q.19) In the context of the Blue Economy, the term "blue carbon" refers to:

- a) Carbon dioxide emitted by marine industries
- b) Carbon stored in coastal and marine ecosystems
- c) Carbon tax imposed on shipping vessels
- d) Carbon trading in ocean-based markets

Q.20) Consider the following statements:

1. An Annual Budget requires assent from the President, while an Interim Budget does not require such assent.
2. An Interim Budget requires approval from both houses of Parliament, while an Annual Budget only requires approval from the Lok Sabha.
3. Interim Budget outlines long-term economic policies and reforms.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

## 10 PM Compilation for the Month of February 2024

Q.21) With reference to the Net Borrowing Ceiling (NBC), consider the following statements:

1. It refers to limit on borrowing imposed by the central bank for commercial banks.
2. If a government consistently exceeds its Net Borrowing Ceiling (NBC), it may downgrade its credit rating.
3. Net Borrowing Ceiling helps in maintaining fiscal discipline.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.22) Which one of the following bodies is responsible for recommending the devolution of taxes from the central government to states?

- a) The National Development Council
- b) The Reserve Bank of India
- c) The Finance Commission
- d) The Supreme Court of India

Q.23) With reference to the Annual Survey of Industries (ASI), consider the following statements:

1. It is the primary source of industrial statistics in the country.
2. The survey is conducted by the Department for Promotion of Industry and Internal Trade (DPIIT).
3. The ASI extends to the entire country.
4. It does not cover unorganised or unregistered or informal sector enterprises.

Which of the statements given above are correct?

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

Q.24) Consider the following statements:

1. The meetings of the Monetary Policy Committee (MPC) are held at least four times a year.
2. An expansionary monetary policy implemented by the MPC would include raising the marginal standing facility (MSF) rate.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.25) Consider the following statements:

Statement-I: Manufacturing sector employment in India is low at 11.7% of total employment.

Statement-II: India faces a shortage of unskilled labor necessary for manufacturing industries.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

Q.26) Consider the following statements:

Statement-I: Retail rice prices in India have increased over the past year.

Statement-II: In recent years, there has been an increase in the costs associated with the transportation and storage of rice.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

Q.27) In which of the following ways do payment aggregators differ from payment gateways?

- a) Payment aggregators focus on physical point-of-sale transactions, while payment gateways handle online payments.
- b) Payment gateways facilitate transactions between customers and merchants, while payment aggregators consolidate transactions for multiple merchants.
- c) Payment aggregators offer a wide range of payment methods, while payment gateways specialize in specific payment options.
- d) Payment gateways provide credit services, while payment aggregators offer debit solutions.

Q.28) "DigiReady Certification Portal" was seen in the news recently, is associated with:

- a) Certifying government schools for their integration of digital technology.
- b) Giving training to the government and private sector employees on advanced technologies.
- c) Assessing and certifying digital readiness of Micro, Small, and Medium Enterprises (MSME) entities.
- d) Promoting digital readiness and inclusion in communities by Non-profit organizations.

## 10 PM Compilation for the Month of February 2024

Q.29) With reference to fiscal federalism, consider the following statements:

1. It is based on the principle that all levels of government have equal fiscal powers.
2. It emphasizes the importance of fiscal discipline and accountability at all levels of government.
3. Intergovernmental transfers play a crucial role in fiscal federalism.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.30) Consider the following statements:

1. Fintech refers to businesses that use technology to enhance or automate financial services and processes.
2. India has the third largest Fintech ecosystem in the world.
3. Fintech completely eliminates the need for human interaction in finance.

Which of the statements given above are correct?

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

Q.31) Consider the following statements:

1. Retail inflation is also known as Consumer Price Index (CPI) inflation.
2. Retail inflation measures the rise in prices of raw materials for industries.
3. A high retail inflation would lead to decreased cost of living for the consumers.
4. A rising retail inflation would decrease the value of money over time.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.32) Which one of the following provides the most accurate description of 'Asset Tokenization'?

- a) Converting physical assets into shares of a company
- b) Representing ownership of real or financial assets using digital tokens on a blockchain
- c) Issuing new cryptocurrencies backed by traditional assets
- d) Creating a central database of all asset ownership records

## 10 PM Compilation for the Month of February 2024

Q.33) A developed country provides subsidies to its corn farmers, resulting in artificially low prices for corn products in the international market. How would these subsidies likely be classified under WTO rules?

- a) Blue Box subsidies
- b) Green Box subsidies
- c) Amber Box subsidies
- d) Red Box subsidies

Q.34) Consider the following statements:

- 1. India holds the title of the world's largest producer, consumer, and importer of pulses.
- 2. Kharif pulses contribute over 60% to the total production.
- 3. The government aims to attain self-sufficiency in pulses by the end of 2027.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.35) Consider the following statements:

- 1. Real Time Gross Settlement (RTGS) system does not operate on weekends.
- 2. National Electronic Funds Transfer (NEFT) is suitable for both small and large value transactions.
- 3. Under Immediate Payment Service (IMPS), a minimum transaction amount is ₹2 lakhs.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.36) Consider the following:

- 1. Cost of production
- 2. Demand and supply conditions
- 3. Prices in domestic and international markets
- 4. Land fertility levels

Which of the above factors is considered by the Commission for Agricultural Costs and Prices (CACP) when recommending a Minimum Support Price (MSP)?

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

## 10 PM Compilation for the Month of February 2024

Q.37) The "C2" cost of production in the context of Minimum Support Price (MSP) refers to:

- All paid-out costs directly incurred by the farmer, either in cash and kind, on seeds, fertilisers, pesticides, hired labour, leased-in land, fuel, irrigation.
- The average cost of production for all farmers cultivating the crop in a particular region.
- The actual cost of production, including account rent and interest foregone on land and machinery owned by farmers.
- The projected cost of production based on future market trends.

Q.38) Consider the following statements:

Statement-I: India imports over 60% of its edible oil needs.

Statement-II: Imported edible oils have higher nutritional value compared to domestically produced oils.

Which one of the following is correct in respect of the above statements?

- Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- Statement-I is correct but Statement-II is incorrect
- Statement-I is incorrect but Statement-II is correct

Q.39) In the context of government budgeting in India, consider the following statements:

- New Instrument of Service (NIS) refers to expenditure arising from a completely new policy decision that was not presented to the Parliament before.
- A major expansion of an existing social welfare scheme is an example of New Instrument of Service (NIS).

Which of the statement(s) given above is/are correct?

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

Q.40) Consider the following statements:

- The devolution of taxes from the central government to state governments contribute to fiscal decentralization by empowering state governments with greater control over revenue sources and enabling them to fund local projects.
- Fiscal decentralization can promote accountability in government by standardizing tax rates across all regions.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.41) Consider the following statements:

1. Sustainable Horticulture practices contribute to soil degradation.
2. The 1.0 Hectare Model of Integrated Farming is a farming system that promotes the efficient use of land and resources by integrating various agricultural activities on a single hectare of land.
3. India is the second largest producer of fruits and vegetables in the world after China.

Which of the statements given above are correct?

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

### Answer Key

1 - (c)	2 - (b)	3 - (c)	4 - (b)	5 - (b)	6 - (a)	7 - (c)
8 - (b)	9 - (a)	10 - (b)	11 - (b)	12 - (b)	13 - (b)	14 - (a)
15 - (b)	16 - (a)	17 - (a)	18 - (c)	19 - (b)	20 - (d)	21 - (b)
22 - (c)	23 - (c)	24 - (a)	25 - (c)	26 - (a)	27 - (b)	28 - (c)
29 - (b)	30 - (a)	31 - (b)	32 - (b)	33 - (c)	34 - (b)	35 - (a)
36 - (a)	37 - (c)	38 - (c)	39 - (b)	40 - (a)	41 - (b)	

### Answers & Explanations

1. Correct Answer is (C)

- The export of goods and services is considered as a zero-rated supply under GST, which means that the goods and services are relieved of the tax burden, but the exporter can claim a refund of the tax on inputs used to purchase or manufacture the goods. On the other hand, imports are treated as inter-state supplies and are liable to Integrated Goods and Services Tax (IGST).

Source: [Forum IAS](#)

2. Correct Answer is (B)

## 10 PM Compilation for the Month of February 2024

- Statement 1 is incorrect. FDI involves investing in real assets and businesses of a foreign country, like factories, land, and infrastructure projects. This establishes a long-term presence and control over foreign operations. FPI involves investing in financial assets of a foreign country, such as stocks, bonds, and mutual funds. This aims for financial returns through capital appreciation, dividends, or interest income.
- Statements 2 and 3 are correct. FPI is generally considered a passive form of investment, as investors don't actively manage the underlying assets. FDI, on the other hand, is considered active, as investors have more control and influence over the foreign business operations. FPIs are generally considered more volatile than FDIs. This is because financial assets can fluctuate significantly in value, while real assets tend to be more stable. Additionally, FPIs can be withdrawn quickly, leading to potential withdraw of the capital from the host country, whereas FDIs are typically long-term investments.

Source: [Forum IAS](#)

3. Correct Answer is (C)

- Statements 1 and 3 are correct. The Economic Survey is prepared by the Economic Division of the Department of Economic Affairs (DEA) under the guidance of the Chief Economic Adviser. It provides an outlook on various economic indicators, including GDP growth, inflation rate, foreign exchange reserves, and trade deficits.
- Statement 2 is incorrect. The Economic Survey is not a binding document. It serves as an advisory document offering analysis, insights, and recommendations, but it doesn't have any legal mandate or binding force on the government. The first Economic Survey was presented in 1950-51.

Source: [DNA](#)

4. Correct Answer is (B)

- The Cash Reserve Ratio (CRR) is the percentage of deposits that banks are required to maintain with the central bank. By lowering the CRR, the central bank essentially releases more funds that banks can lend out. This, in turn, leads to an expansion of the money supply in the economy. As a result, the lower CRR reserved with the central bank leads to higher overall liquidity in the economy, which increases the money supply.

Source: [CNBC](#)

5. Correct Answer is (B)

- Statements 1 and 3 are incorrect. Trade surpluses, current account balances, and exchange rates are indicators of a country's foreign exchange position, not the components of forex reserve themselves. The main components of forex reserves are: Gold, Foreign currency holdings, Special Drawing Rights (SDRs). A higher level of foreign exchange reserves is often viewed positively by credit rating agencies. Adequate reserves indicate a country's ability to meet its external obligations and provide a buffer against external shocks. Therefore, higher reserves can contribute to a higher credit rating, as they enhance a country's ability to repay its debts and manage financial risks effectively.



## 10 PM Compilation for the Month of February 2024

- Statement 2 is correct. Foreign exchange reserves allow a country's central bank to intervene in the foreign exchange market, buying or selling its own currency to influence its exchange rate. By adjusting the supply of its currency in the market, the central bank can impact its exchange rate and maintain stability.

Source: [Mint](#)

6. Correct Answer is (A)
- Statement-I: Urea is the only fertilizer in India with statutorily controlled price and movement. This control is exercised through the New Pricing Scheme (NPS) implemented by the government.
  - Statement-II: Urea is the most widely used nitrogen-based fertilizer in India, accounting for around 50% of the total nitrogen consumption in the country. It plays a crucial role in crop growth and food production as nitrogen is an essential nutrient for plant development.
  - Statement-II is the correct explanation for Statement-I because the government controls the price and movement of urea to ensure its availability and affordability to farmers, who rely heavily on it for crop growth and food production.

Source: [Forum IAS](#)

7. Correct Answer is (C)
- The Income Tax Department is responsible for collecting income tax in India. It is a part of the Department of Revenue under the Ministry of Finance, Government of India. The department is responsible for administering direct taxes, including income tax, corporate tax, and wealth tax, among others. The department is also responsible for enforcing tax laws, conducting tax audits, and investigating tax evasion and fraud. The Central Board of Direct Taxes (CBDT) is the apex body of the Income Tax Department, which is responsible for formulating policies and procedures for the administration of direct taxes in India.

Source: [Forum IAS](#)

8. Correct Answer is (B)
- Slower Deposit Growth: This represents a challenge for banks as slower growth in deposits can limit their ability to lend and conduct other financial activities.
  - Fintech Competition: With the rise of fintech companies offering innovative and convenient financial services, traditional banks face increased competition, which can impact their market share and profitability.
  - However, large and growing market, is not a challenge for Indian banks. In fact, a large and growing market presents opportunities for banks to expand their customer base and increase their business operations.

Source: [Forum IAS](#)

9. Correct Answer is (A)
- Statement 1 is correct. Disinvestment helps in raising funds for the government, which can aid in managing fiscal deficits. When the government sells its stake in public sector

## 10 PM Compilation for the Month of February 2024

enterprises (PSEs), it generates revenue that can be used to finance various developmental projects or to reduce fiscal deficits.

- Statements 2 and 3 are incorrect. The DOD was dissolved in 2016, and its functions were transferred to the Department of Investment and Public Asset Management (DIPAM) under the Ministry of Finance. DIPAM is currently responsible for overseeing the disinvestment process. Disinvestment involves reducing government control over strategic sectors by divesting its stake in public sector enterprises. By bringing in private investment and ownership, disinvestment enables competition, efficiency, and innovation in these sectors, contributing to overall economic growth and development.

Source: [Forum IAS](#)

10. Correct Answer is (B)

- Statement 1 is incorrect. Foreign Direct Investments (FDI) in India can be made under two routes—Automatic Route and Government Route. Under the Automatic Route, the foreign investor or the Indian company does not require any approval from the Government of India for the investment. Under the Government Route, prior approval of the Government of India, Ministry of Finance, Foreign Investment Promotion Board (FIPB) is required.
- Statements 2 and 3 are correct. Since the economic reforms in 1990s, FDI inflows have shown an upward trend, increasing from \$129 million in 1991 to \$71 billion in 2022-23, which shows a jump of 550 times. According to the 2022 UNCTAD World Investment Report, India received the 3rd-highest FDI inflows into greenfield (new) projects. The last five years saw the highest FDI inflow in the year 2021- 22 at \$85 billion.
- The key difference between FDI and FPI is the level of control the investor exerts in the enterprise. FDI involves a substantial investment with a long-term perspective, giving the investor significant control over the company's operations and management. In contrast, FPI involves passive investments in stocks, bonds, or other financial instruments, where the investor doesn't seek control over the company's operations.

Source: [Forum IAS](#)

11. Correct Answer is (B)

- Statements 1 and 2 are correct. The primary deficit is the difference between government revenues and spending, excluding interest payments on debt. This is a crucial measure of a government's fiscal health, as it shows how much new borrowing is required beyond existing debt obligations. Reducing government expenditure through efficient allocation and cutting unnecessary costs, or increasing tax revenue through various sources, can both positively impact the primary deficit.
- Statement 3 is incorrect. A progressive tax system is one where the average tax burden increases with income, and it imposes a lower tax rate on low-income earners and a higher tax rate on those with a higher income.

Source: [Forum IAS](#)

12. Correct Answer is (B)

## 10 PM Compilation for the Month of February 2024

- A high Tax-to-GDP ratio is generally associated with higher economic development and stability. This ratio is used as an indicator of a country's level of development and its ability to raise tax revenues to fund public services and government expenditure. Countries with higher Tax-to-GDP ratios often have the capacity to invest in infrastructure, education, healthcare, and other public services, contributing to overall economic stability and development.

Source: [Forum IAS](#)

13. Correct Answer is (B)

- Capital Expenditure (Capex): Refers to investments in fixed assets that provide benefits over multiple years. Modernizing the railway network involves purchasing new trains, upgrading tracks, and improving stations, all of which represent long-term capital investments.
- Operating Expenditure (Opex): Refers to the ongoing, day-to-day expenses incurred to run a business or government. This would include things like salaries, maintenance, and supplies.
- Revenue Expenditure: Similar to Opex, these are recurring expenses that don't result in the creation of long-term assets. Examples include government salaries, subsidies, and interest payments on debt.
- Non-Plan Expenditure: This category encompasses government spending that is not included in the planned allocations for specific programs or projects. It typically includes recurrent expenses such as defense spending, interest payments on debt, administrative costs, subsidies, and other routine expenditures.

Source: [Forum IAS](#)

14. Correct Answer is (A)

- As per the recommendations of the Nachiket Mor Committee, Payments Banks were established to operate on a limited scale with minimal exposure to credit risk. Their primary goal is to promote financial inclusion by providing banking and financial services to underserved areas. Payments Banks are registered under the Companies Act 2013 but are subject to various regulations, including the Banking Regulation Act, 1949; RBI Act, 1934; Foreign Exchange Management Act, 1999; Payment and Settlement Systems Act, 2007, among others. Activities that can be performed/restricted by the Payment Banks: Payment banks receive a 'differentiated' bank license from the RBI and hence cannot lend. It cannot issue credit cards. It cannot issue loans. It cannot set up subsidiaries to undertake non-banking financial activities. Payment banks can take deposits up to Rs. 2,00,000. It can accept demand deposits in the form of savings and current accounts. It cannot accept time deposits or NRI deposits. The money received as deposits can be invested in secure government securities only in the form of Statutory Liquidity Ratio (SLR). It generates revenue through fees charged on transactions and services. It can offer remittance services, mobile payments/transfers/purchases, and other banking services like ATM/debit cards, net banking, and third-party fund transfers.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

15. Correct Answer is (B)

- Statements 1 and 2 are correct. The CCI has powers similar to a court of law, including the ability to summon witnesses, collect evidence, and issue orders. It is primarily responsible for promoting and sustaining competition, protecting the interests of consumers, and ensuring freedom of trade in the Indian market.
- Statement 3 is incorrect. The CCI does not consider offering discounts and promotional offers to attract customers as an anti-competitive practice. Instead, it focuses on regulating anti-competitive agreements and abuse of dominant position by enterprises.

Source: [Forum IAS](#)

16. Correct Answer is (A)

- Statement 1 is correct. The Coal Mines Provident Fund Organization (CMPFO) operates as an autonomous body but functions under the overall supervision of the Ministry of Coal, Government of India.
- Statement 2 is incorrect. The primary responsibility of CMPFO lies in the administration of social security schemes for coal mine workers. These schemes include Provident Fund, Pension, and Deposit-Linked Insurance. It was established for administering Provident Fund and Pension schemes to ensure social security for coal sector workers.

Source: [Forum IAS](#)

17. Correct Answer is (A)

- Bilateral Investment Treaties (BITs) are agreements between two countries that protect the rights of investors from each country. They set rules for investments and handle disputes. India's model BITs are characterized by:
  - Stricter Rules: They emphasize protecting India's sovereign interests.
  - Local Remedies Requirement: Foreign investors must use local legal remedies for at least five years before seeking international arbitration.
  - Exclusion of Taxation Measures: Any taxation measures imposed by India are excluded from the BITs.
  - Absence of MFN Clause: The Most Favored Nation (MFN) clause is not included, which typically ensures equal treatment among investors.

Source: [Forum IAS](#)

18. Correct Answer is (C)

- Statement 1 is incorrect. Nano-DAP is not a genetically modified fertilizer designed to enhance crop yields by directly injecting it into plant cells. It is a unique liquid fertilizer product that contains nanoparticles of Diammonium Phosphate (DAP), which is a source of nitrogen and phosphorus.
- Statements 2 and 3 are correct. Nano-DAP can assist the government in lowering its fertilizer subsidy burden. It is more cost-effective compared to conventional DAP, which can contribute to reducing the government's subsidy burden. Nano-DAP can be combined with other nano-fertilizers like nano-urea to increase agricultural benefits. It is designed

## 10 PM Compilation for the Month of February 2024

using nanotechnology for efficient nutrient delivery to plants, and it can be used in combination with other nano-fertilizers to enhance agricultural productivity.

Source: [Forum IAS](#)

19. Correct Answer is (B)

- In the context of the Blue Economy, the term "blue carbon" refers to the carbon sequestration and storage potential of coastal and marine ecosystems. These ecosystems, including mangroves, seagrasses, salt marshes, and other types of coastal vegetation, have the ability to capture and store significant amounts of carbon dioxide from the atmosphere. This process helps mitigate climate change by reducing greenhouse gas emissions.

Source: [Forum IAS](#)

20. Correct Answer is (D)

- Statements 1, 2 and 3 are incorrect. Both the Annual Budget and the Interim Budget require the President's assent to come into effect. Both the Interim Budget and the Annual Budget require approval from both houses of Parliament. An Interim Budget is typically introduced to seek Parliament's approval for government expenditure for a short period until a new government is formed. The main purpose of an Interim Budget is not to outline long-term economic policies and reforms. That is usually the focus of the Annual Budget presented by the government after a general election.

Source: [Forum IAS](#)

21. Correct Answer is (B)

- Statement 1 is incorrect. The NBC refers to the maximum amount a government (in the context of states in India) can borrow in a financial year from all sources, including loans from financial institutions, market borrowings, and external loans. It also takes into account the government's repayment obligations for the same financial year.
- Statements 2 and 3 are correct. If a government consistently exceeds its Net Borrowing Ceiling, it may signal a lack of fiscal discipline and raise concerns about the government's ability to manage its finances responsibly. This could potentially lead to a downgrade in its credit rating, as credit rating agencies consider various factors, including debt levels and fiscal management, when assessing a government's creditworthiness. The Net Borrowing Ceiling can help maintain fiscal discipline by limiting a government's borrowing capacity. This encourages the government to prioritize expenditure and revenue generation to stay within its borrowing limits.

Source: [Forum IAS](#)

22. Correct Answer is (C)

- The body responsible for recommending the devolution of taxes from the central government to states is the Finance Commission. The Finance Commission is a constitutional body that makes recommendations to the President of India regarding the distribution of taxes between the Union and the states, and between states themselves.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

23. Correct Answer is (C)

- Statements 1, 3 and 4 are correct. ASI is the primary source of industrial statistics in the country. It extends to the entire country. It covers all factories registered under Sections 2(m)(i) and 2(m)(ii) of the Factories Act, 1948. The survey also covers Bidi and cigar manufacturing establishments registered under the Bidi and Cigar Workers (Conditions of Employment) Act 1966. All electricity undertakings engaged in generation, transmission and distribution of electricity, not registered with the Central Electricity Authority (CEA) are also covered under ASI. It does not cover unorganised or unregistered or informal sector enterprises.
- Statement 2 is incorrect. The survey is conducted by the Central Statistics Office (CSO) Industrial Statistics (IS) wing under Ministry of Statistics and Programme Implementation.

Source: [Forum IAS](#)

24. Correct Answer is (A)

- Statement 1 is correct. The Monetary Policy Committee (MPC) is a committee of the Reserve Bank of India (RBI) that is responsible for fixing the benchmark interest rate in India. The meetings of the MPC are held at least four times a year, as per the RBI's guidelines. It is headed by the Governor of the RBI.
- Statement 2 is incorrect. The Marginal Standing Facility rate is the interest rate at which banks can borrow overnight funds from the central bank when they face short-term liquidity challenges. Expansionary monetary policy aims to stimulate economic growth by making it cheaper for businesses and individuals to borrow money. To achieve this, the MPC would lower interest rates, including the MSF rate.

Source: [Forum IAS](#)

25. Correct Answer is (C)

- Statement I is correct. Manufacturing sector employment in India is 11.7% of total employment. This is lower than in developing countries like Vietnam (21.4%) and China (28.7%).
- Statement II is incorrect. India generally has a large pool of unskilled labor. The key challenge the manufacturing sector faces is a shortage of skilled labor and more focus on services sector.

Source: [Forum IAS](#)

26. Correct Answer is (A)

- Statement I is correct. Over the last year, retail rice prices increased by 14.51%. Prices of some rice varieties have risen by more than ₹10 per kg.
- Statement II: Price rise of rice has been due to the various factors such as: Increased MSP, Rising Transport and Storage Expenses, Decreased Production in Southern States, Shortfall in Retail Market Supply
- Hence, Statement II explains the reason behind the Statement I.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

27. Correct Answer is (B)

- **Payment Gateway:** A payment gateway is the technology that securely passes a customer's payment information (credit card, debit card, etc.) to the payment processor and communicates the approval or decline of the transaction back to the merchant. Payment gateways primarily serve as intermediaries between customers and merchants for individual transactions, handling the secure transmission of payment data during online purchases.
- **Payment Aggregator:** A payment aggregator simplifies the process for businesses to accept online payments. They gather multiple merchant accounts under one umbrella. Businesses don't need to get individual merchant accounts and integrate separate payment gateways. Act as a third-party facilitator that manages and processes merchants' transactions under one roof. Offer a quick onboarding process but with more strict parameters and less processing freedom. They typically provide a range of payment options to customers, including credit and debit cards, bank transfers, and e-wallets.

Source: [Forum IAS](#)

28. Correct Answer is (C)

- The Quality Council of India (QCI) and ONDC have recently announced the launch of the DigiReady Certification (DRC) portal. It aims to assess and certify digital readiness of Micro, Small, and Medium Enterprises (MSME) entities. This portal is open for self-assessment to all Micro, Small and Medium Enterprises (MSMEs) and small retailers. It will empower MSMEs and make e-commerce more inclusive and accessible. It will amplify MSMEs potential to thrive in the digital economy. It will expand their digital capabilities and business potential.

Source: [Forum IAS](#)

29. Correct Answer is (B)

- Statement 1 is incorrect. Fiscal federalism does not assume equal fiscal powers for all levels of government. Instead, it involves the division of fiscal responsibilities and powers between different tiers of government (central, state, and local) to ensure efficient public service delivery and resource allocation.
- Statements 2 and 3 are correct. Fiscal federalism emphasizes the importance of fiscal discipline and accountability at all levels of government. This means that governments should strive for responsible spending, revenue collection, and debt management while also being transparent and answerable to their constituents. Intergovernmental transfers are an essential aspect of fiscal federalism. These transfers involve the redistribution of resources from higher levels of government (e.g., central) to lower levels (e.g., state or local) to address regional disparities, promote equity, and ensure the provision of public goods and services.

Source: [Forum IAS](#)

30. Correct Answer is (A)

## 10 PM Compilation for the Month of February 2024

- Statements 1 and 2 are correct. Fintech, short for "financial technology," refers to businesses or technologies that use innovative solutions to enhance, streamline, or automate financial services and processes. Fintech encompasses a wide range of applications, such as digital payments, mobile banking, blockchain technology, and artificial intelligence in finance. India has the 3rd largest FinTech ecosystem. 17 Indian Fintech companies have gained 'Unicorn Status' as on Dec 2021.
- Statement 3 is incorrect. Although fintech aims to improve efficiency and reduce manual processes in finance, it does not entirely eliminate the need for human interaction. While some tasks can be automated, many financial activities still require human judgment, expertise, and decision-making.

Source: [Forum IAS](#)

31. Correct Answer is (B)

- Statements 1 and 4 are correct. Retail inflation refers to the Consumer Price Index (CPI) inflation, which measures the average change in prices of goods and services consumed by households over time. Rising retail inflation decreases the value of money over time. As prices increase, the same amount of money can buy fewer goods and services, reducing its real value and purchasing power.
- Statements 2 and 3 are incorrect. Retail inflation doesn't measure the rise in prices of raw materials for industries. It focuses on the prices of goods and services consumed by individuals and households. High retail inflation means an increase in the prices of consumer goods and services, leading to a higher cost of living for consumers. As prices rise, people's purchasing power decreases, making it more expensive to maintain the same standard of living.

Source: [Forum IAS](#)

32. Correct Answer is (B)

- Asset tokenization is the process of converting the value of real-world or financial assets into digital tokens that can be stored and traded on a blockchain platform. These tokens represent ownership or an interest in the underlying asset, such as real estate, artwork, commodities, or financial instruments. Tokenization enables fractional ownership, increased liquidity, and greater accessibility to a broader range of investors while providing transparency and security through the use of blockchain technology. Tokens can act like digital certificates of ownership that can represent almost any object of value such as physical, digital, fungible, and non-fungible assets. It allows a smaller investor to invest in riskier assets with relatively low capital. It allows for the open tracking and auditing of all records due to the fundamentally public nature of many blockchains.

Source: [Forum IAS](#)

33. Correct Answer is (C)

- The subsidies provided by a developed country to its corn farmers, resulting in artificially low prices for corn products in the international market, would likely be classified as Amber Box subsidies. Amber box subsidies include subsidies that are directly linked to production,



## 10 PM Compilation for the Month of February 2024

such as price supports and input subsidies. In this case, the developed country is providing subsidies to its corn farmers, which results in artificially low prices for corn products in the international market. This practice is seen as distorting international trade because it gives the country's corn farmers an unfair advantage over farmers in other countries who may not receive similar subsidies.

Source: [Forum IAS](#)

34. Correct Answer is (B)

- Statements 1 and 3 are correct. India holds the title of the world's largest producer, consumer, and importer of pulses. India contributes 25% to global production, consuming 27% of the world's total, and importing 14%. Gram is the leading pulse, comprising about 40% of total production, followed by Tur/Arhar at 15-20%, and Urad/Black Matpe and Moong at approximately 8-10% each. The government aims to attain self-sufficiency in pulses by the end of 2027. India now produces enough chickpeas (chana) and various other pulse crops to meet its own needs, with only a minor shortfall in pigeon peas (tur) and black gram.
- Statement 2 is incorrect. While pulses are cultivated in both Kharif and Rabi seasons, Rabi pulses contribute over 60% to the total production.

Source: [Forum IAS](#)

35. Correct Answer is (A)

- Statement 2 is correct. NEFT is suitable for both small and large value transactions. NEFT allows individuals to transfer any amount to the recipient's account in a one-on-one transfer basis without a maximum limit for funds that can be transferred in a single day.
- Statements 1 and 3 are incorrect. The Real Time Gross Settlement (RTGS) system is available 24 hours a day, 7 days a week, including weekends and bank holidays. Immediate Payment Service allows for both peer-to-peer transfers and merchant payments. IMPS is available 24/7 throughout the year, including bank holidays, and enables real-time instant inter-bank funds transfer with no upper limit for transactions. There is also no lower limit or minimum transaction amount specified for IMPS.

Source: [Forum IAS](#)

36. Correct Answer is (A)

- The Commission for Agricultural Costs and Prices (CACP) considers the following factors when recommending a Minimum Support Price (MSP): Cost of production, Demand and supply, Market trends, Price parity among different crops, Effect on industrial cost structure, Effect on cost of living, Terms of trade between agriculture and non-agriculture, etc.

Source: [Forum IAS](#)

37. Correct Answer is (C)

- Different Production Costs Considered While Fixing MSP are:

## 10 PM Compilation for the Month of February 2024

- A2: All paid-out costs directly incurred by the farmer, either in cash and kind, on seeds, fertilisers, pesticides, hired labour, leased-in land, fuel, irrigation.
- A2+FL: Imputed value of unpaid family labour is added to the A2 cost to derive A2+FL.
- C2: Estimated land rent and the cost of interest on the money taken for farming is added to A2+FL to get the C2 production cost. It is a more comprehensive production cost.

Source: [Forum IAS](#)

38. Correct Answer is (C)

- Statement-I is correct. India imports over 60% of its edible oil needs. India is one of the largest importers of edible oils, as domestic production does not meet the country's growing demand. The imported edible oils primarily include palm oil, soybean oil, and sunflower oil.
- Statement-II is incorrect. The nutritional quality of edible oils does not depend on whether they are imported or domestically produced. The quality and nutritional value of edible oils are determined by various factors such as the type of oil, processing methods, and storage conditions rather than their origin.

Source: [Forum IAS](#)

39. Correct Answer is (B)

- Statement 1 is incorrect. New Instrument of Service (NIS) refers to relatively large expenditure arising out of important expansion of an existing policy. Whereas, New Service (NS) refers to expenditure arising out of a new policy decision that was not brought to the notice of Parliament earlier. This may include a new activity or a new investment.
- Statement 2 is correct. A major expansion of an existing social welfare scheme is an example of New Instrument of Service (NIS).

Source: [Forum IAS](#)

40. Correct Answer is (A)

- Statement 1 is correct. Devolution of taxes from the central government to state governments is a key aspect of fiscal decentralization. It empowers state governments with greater control over their revenue sources. This increased control allows them to decide how to allocate funds and prioritize spending on local projects that address the specific needs of their citizens.
- Statement 2 is incorrect. Fiscal decentralization typically involves allowing states or local governments to have more authority over taxation and expenditure decisions. However, standardizing tax rates across all regions would go against the principles of fiscal decentralization, as it would centralize tax policy and diminish the autonomy of subnational governments.

Source: [Forum IAS](#)

41. Correct Answer is (B)

- Statement 1 is incorrect. Horticulture practices, when done sustainably, generally do not contribute to soil degradation. Instead, they can improve soil health by enhancing organic

## 10 PM Compilation for the Month of February 2024

matter content, promoting beneficial microbial activity, and reducing erosion. Sustainable horticulture practices, such as crop rotation, mulching, and organic fertilization, can help maintain soil fertility and structure.

- Statements 2 and 3 are correct. The 1.0 Hectare Model of Integrated Farming is designed to promote the efficient use of land and resources by incorporating various agricultural activities on a single hectare of land. This model combines crop production, horticulture, livestock rearing, and other components to create a diversified and self-sustaining farming system. India is the second largest producer of fruits and vegetables in the world, following China. The country's diverse agro-climatic conditions and large population contribute to its significant production of various fruits and vegetables.

Source: [Forum IAS](#)

### Environment

Q.1) Consider the following statements:

1. Hydrocarbon exploration refers to the process of searching for and identifying potential sources of hydrocarbons, such as oil and natural gas, beneath the Earth's surface.
2. Geothermal energy is a major energy source derived from hydrocarbons.
3. Greenhouse gas emissions is environmental concern associated with the incomplete combustion of hydrocarbons in engines or appliances.

Which of the statements given above are correct?

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

Q.2) Consider the following statements:

1. Kumki elephants are trained to assist in mitigating human-elephant conflicts, especially when wild elephants enter human-inhabited areas.
2. The Asian elephant has been classified as "Endangered" on the IUCN Red List.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.3) With reference to the Montreal Protocol, which of the following statement(s) is/are correct?

1. The Montreal Protocol operates on a principle of creating economic incentives for alternative technologies.
2. Phasing out the production and consumption of ozone-depleting substances (ODS) is the mechanism by which the Montreal Protocol has achieved success in reducing ozone depletion.
3. The Kigali Amendment to the Montreal Protocol, adopted in 2016, focuses on controlling Hydrochlorofluorocarbons (HCFCs).

Select the correct answer using the codes given below:

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

Q.4) Which one of the following characteristics sets the Golden Tiger apart from other tiger subspecies?

- a) Its exclusively golden fur coloration
- b) Larger size compared to other tiger subspecies
- c) Adaptation to high-altitude mountain regions
- d) Ability to hibernate during harsh winters

Q.5) With reference to the laughing gull, a migratory bird, consider the following statements:

1. They are known for their adaptability and opportunistic feeding habits.
2. These birds are native to Western Africa.
3. They are categorized 'Least Concern' in the IUCN Red Data List.

Which of the statements given above are correct?

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

Q.6) The Chittari estuary is located in:

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

## 10 PM Compilation for the Month of February 2024

Q.7) Consider the following statements with respect to 'Acid Rain':

1. The main factor responsible for the formation of acid rain is the release of sulfur and nitrogen compounds through industrial emissions.
2. Acid rain is characterized by a decrease in pH levels.
3. In the formation of acid rain, sunlight plays a crucial role as it directly interacts with water vapor, leading to the creation of acidic compounds.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.8) With reference to the Dalma Wildlife Sanctuary, how many of the following statements are correct?

1. The sanctuary lies on the Chotanagpur Plateau of Jharkhand.
2. The sanctuary primarily consists of Boreal Forest.
3. Damodar River flows near the Dalma Wildlife Sanctuary.
4. It is a habitat for endangered species such as Asian elephants.

Select the correct answer using the codes given below:

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.9) "Humboldt's Enigma" was seen in the news recently, is associated with:

- a) Black Hole exploration
- b) Atmospheric circulation
- c) Biodiversity in the mountain regions
- d) Plate tectonics theory

Q.10) In terms of emissions, which one of the following statements is correct with reference to the difference between hybrid vehicles and conventional vehicles?

- a) Hybrid vehicles produce higher emissions due to the use of electric power.
- b) Hybrid vehicles produce overall lower emissions.
- c) Conventional vehicles produce lower emissions because they rely only on internal combustion engines.
- d) Both hybrid and conventional vehicles produce similar emissions as they use the same type of fuel.

## 10 PM Compilation for the Month of February 2024

Q.11) With reference to the Snow Leopard, consider the following statements:

1. It is native to the mountain ranges of Central and South Asia.
2. It is a top predator in mountain ecosystem.
3. They are found in Ladakh in India.
4. They are listed 'Vulnerable' in the IUCN List of Threatened Species.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.12) Consider the following:

1. Karaivetti Bird Sanctuary
2. Rann of Kutch
3. Aghanashini Estuary
4. Valley of Flowers National Park

Which of the above are designated as 'Ramsar Sites' in India?

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

Q.13) With reference to the Black-crowned Night Heron Bird, consider the following statements:

1. It is a migrating species.
2. It is commonly found in open grasslands and meadows.
3. It has been classified as "Least Concern" on the IUCN Red List.

Which of the statement(s) given above is/are correct?

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

Q.14) With reference to the animal 'Manatees', consider the following statements:

1. These are large aquatic mammals.
2. They are herbivores.
3. They are generally solitary animals.
4. They have sharp teeth for hunting prey.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.15) Consider the following statements regarding the Apollo Species of Butterflies:

1. Dusted Apollo Butterfly is known for its distinctive wing patterns and coloration.
2. All species of the Apollo butterfly are migratory, travelling long distances between seasons.
3. They are highly valued butterflies in commercial trade.

Which of the statements given above are correct?

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

Q.16) With reference to the 'Lantana Camara' plant, consider the following statements:

1. It is an invasive species in India.
2. The invasion of Lantana Camara heavily impacts the Nilgiri Biosphere Reserve in the Western Ghats.
3. The species is also responsible for increasing soil fertility.

Which of the statements given above are correct?

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

Q.17) Which one of the following pollutants is primarily responsible for the depletion of the ozone layer?

- a) Chlorofluorocarbons (CFCs)
- b) Carbon monoxide
- c) Hydrocarbons
- d) Sulfur dioxide

Q.18) Consider the following statements with reference to the Black-necked Crane:

1. It is a medium-sized crane in Asia that breeds on the Tibetan Plateau and remote parts of India and Bhutan.
2. Changthang Sanctuary in Ladakh has been notified as a Protected Area for the Black-necked Crane.
3. It is classified as 'Vulnerable' in the IUCN Red Data List.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.19) Thrips parvispinus, see in the news recently, is:

- a) A species of plant
- b) A type of fish
- c) An insect pest
- d) A microorganism

Q.20) With reference to the Aldabra giant tortoise, how many of the following statements are correct?

1. Its solitary lifestyle makes it distinct from other tortoise species.
2. These are endemic to the Aldabra Atoll in the Seychelles.
3. They are listed Vulnerable in the IUCN Red Data List.
4. They are important in keeping the ecological balance within a habitat mosaic.

Select the correct answer using the codes given below:

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.21) With reference to the Environmental Impact Assessment (EIA) process, which one of the following describes the role played by monitoring and enforcement?

- a) It ensures that the proposed project proceeds without any environmental oversight.
- b) It assesses the economic viability of the proposed project.
- c) It verifies compliance with environmental regulations and mitigation measures.
- d) It oversees the financial aspects of the project.

Q.22) In which one of the following states is the 'Sepahijala Wildlife Sanctuary' located?

- a) Assam
- b) Tripura
- c) Manipur
- d) Mizoram

Q.23) Consider the following statements with respect to the Clouded Leopard:

1. It is the state animal of Meghalaya.
2. It is classified as Vulnerable under the IUCN Red List.
3. They inhabit alpine and subalpine zones of mountainous regions of Central and South Asia.

Which of the statements given above are correct?

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



## 10 PM Compilation for the Month of February 2024

Q.24) With reference to The Energy and Resources Institute (TERI), consider the following statements:

1. It is a leading think tank dedicated to conducting research for sustainable development of India and the Global South.
2. It is headquartered in New Delhi.
3. Development and deployment of nuclear power technologies are one of the focus areas of TERI.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.25) Consider the following:

1. They are an important bioindicators of soil ecosystem health.
2. They fix nitrogen from the atmosphere.
3. They break down organic matter, releasing nutrients for plants.

In the context of environmental significance, how many of the above listed factors highlight the importance of 'Nematodes'?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.26) 'Dachigam National Park' best known for protecting, which one of the following species?

- a) Himalayan brown bear
- b) Musk deer
- c) Hangul Deer
- d) Asiatic Lion

Q.27) With reference to the Himalayan Black Bear, consider the following statements:

1. It is known for its role as a primary seed disperser which helps in maintaining ecosystem balance.
2. Tropical rainforest is the primary habitat of the Himalayan Black Bear.
3. They are categorized 'Vulnerable' in the IUCN Red List of Threatened Species.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

## 10 PM Compilation for the Month of February 2024

Q.28) The Paris Agreement recognizes the urgency of staying below 1.5°C to minimize climate change impacts. For which one of the following factors, is the 1.5°C threshold considered critical?

- It represents the point beyond which catastrophic climate change is inevitable.
- It is the most ambitious but achievable target for mitigating climate impacts.
- It aligns with the natural warming cycles of the Earth.
- It was chosen based on political compromises between nations.

Q.29) Consider the following statements:

- Brumation is a winter dormancy state in warm-blooded mammals.
- Estivation, or aestivation, is summer dormancy prompted by high temperatures and dry conditions.
- Brumation is a term commonly associated with birds.

How many of the statements given above are correct?

- Only one
- Only two
- All three
- None

Q.30) Which one of the following statements is NOT correct regarding “Bor Tiger Reserve”?

- It is located in Maharashtra.
- It has Dry Deciduous Forest.
- It is the largest tiger reserve in India by area.
- The Bor River flows through the Reserve.

Q.31) Consider the following pairs:

Turtle-----IUCN Status

- Olive Ridley Turtle-----Vulnerable
- Leatherback Turtle-----Endangered
- Loggerhead Turtle-----Vulnerable
- Hawksbill Turtle-----Near Threatened

How many of the above pairs are correctly matched?

- Only one pair
- Only two pairs
- Only three pairs
- All four pairs

## 10 PM Compilation for the Month of February 2024

Q.32) With reference to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), consider the following statements:

1. It is the only global and UN-based intergovernmental organisation established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species throughout their range.
2. The convention imposes trade sanctions on countries that violate species protection.
3. Its objective is to eliminate trade in wildlife and wildlife products.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.33) Cuscuta dodder is a plant categorized as:

- a) Epiphyte
- b) Parasite
- c) Autotroph
- d) Saprophyte

Q.34) Consider the following statements:

1. Vedanthangal Bird Sanctuary is the oldest water bird sanctuary in the India.
2. Vedanthangal Bird Sanctuary is known for hosting migratory birds during summer seasons.

Which of the statements(s) given above is/are correct?

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

Q.35) In the context of coal gasification, which of the following statements are correct?

1. It is the process of converting coal into natural gas.
2. Methane is the primary gas produced through coal gasification.
3. It is one of the water-intensive modes of energy generation.

Select the correct answer using the codes given below:

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

Q.36) Golden-backed Frog is endemic to:

- a) Western Ghats
- b) Eastern Himalayas
- c) Indo-Burma region
- d) Sundaland

## 10 PM Compilation for the Month of February 2024

Q.37) Bonnet mushroom is classified as:

- a) Autotrophs
- b) Heterotrophs
- c) Saprotrophs
- d) Chemotrophs

Q.38) With reference to the Kanha Tiger Reserve, consider the following statements:

1. It is the largest National Park in Central India.
2. It lies in the Maikal range of the Satpura Mountains.
3. It is the first tiger reserve in India to have an official mascot named 'Bhoorsingh the Barasingha'.
4. Swamp deer are widely recognized for their association with the conservation success of Kanha Tiger Reserve.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.39) Consider the following statements:

1. The Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.
2. Global Connectivity Project is one of the 17 Sustainable Development Goals (SDGs) established by the United Nations.

Which of the statement(s) given above is/are correct?

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

Q.40) With reference to the Intergovernmental Panel on Climate Change (IPCC), consider the following statements:

1. It aims to advance scientific knowledge about climate change caused by human activities.
2. It conducts its own research on the climate change.
3. It considers the socio-economic impacts of climate change while conducting research or preparing the assessment report.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.41) Which one of the following statements is correct in relation to the “Global Stocktake”?

- The Global Stocktake results in legally binding targets for each country.
- The Global Stocktake provides a non-binding, informative assessment of collective progress.
- The Global Stocktake determines which countries have met their climate targets and which have not.
- The Global Stocktake allocates additional funding to countries based on their progress in combating climate change.

Q.42) Consider the following statements:

- International Single Species Action Plan aims to implement coordinated measures to restore migratory waterbird species to a favourable conservation status.
- Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) has been developed under the framework of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Which of the statement(s) given above is/are correct?

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

Q.43) Consider the following statements with respect to the Melghat Tiger Reserve:

- The forest is tropical dry deciduous in nature, dominated by teak.
- The Tapti River and the Gawilgadh ridge of the Satpura Range form the boundaries of the reserve.
- It is situated in Gavilgarh Hill in Maharashtra.
- The Kota tribes are the largest tribal community in Melghat.

How many of the statements given above are correct?

- Only one
- Only two
- Only three
- All four

## Answer Key

1 - (c)	2 - (c)	3 - (b)	4 - (a)	5 - (c)	6 - (d)	7 - (b)	8 - (b)	9 - (c)
10 - (b)	11 - (d)	12 - (c)	13 - (c)	14 - (a)	15 - (c)	16 - (a)	17 - (a)	18 - (a)
19 - (c)	20 - (c)	21 - (c)	22 - (b)	23 - (a)	24 - (b)	25 - (b)	26 - (c)	27 - (b)
28 - (b)	29 - (a)	30 - (c)	31 - (b)	32 - (a)	33 - (b)	34 - (a)	35 - (c)	36 - (a)
37 - (c)	38 - (d)	39 - (a)	40 - (c)	41 - (b)	42 - (a)	43 - (c)		

## Answers & Explanations

1. Correct Answer is (C)

- Statements 1 and 3 are correct. Hydrocarbons are organic compounds made up of hydrogen and carbon atoms. They are the fundamental constituents of fossil fuels, including coal, natural gas, and petroleum. Hydrocarbon exploration refers to the process of searching for and identifying potential sources of hydrocarbons, such as oil and natural gas, beneath the Earth's surface. Greenhouse gas emissions is environmental concern associated with the incomplete combustion of hydrocarbons in engines or appliances.
- Statement 2 is incorrect. Gasoline is a major energy source derived from hydrocarbons. It is a liquid mixture of various hydrocarbons, primarily consisting of alkanes like octane, heptane, and pentane. These hydrocarbons are extracted from crude oil through a process called fractional distillation and further refined into gasoline with specific properties suitable for combustion in internal combustion engines.

Source: [Forum IAS](#)

2. Correct Answer is (C)

- Statements 1 and 2 are correct. Kumki elephants are trained to assist in mitigating human-elephant conflicts, especially when wild elephants enter human-inhabited areas. These are trained captive Asian Elephant. They help in patrolling and rescue operation. The Asian elephant (*Elephas maximus*) is listed as "Endangered" on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species.

Source: [Forum IAS](#)

3. Correct Answer is (B)

- Statements 1 and 3 are incorrect. The Montreal Protocol does not operate on a principle of creating economic incentives for alternative technologies. Instead, it is an international

## 10 PM Compilation for the Month of February 2024

treaty designed to protect the ozone layer by phasing out the production and consumption of ozone-depleting substances (ODS). The Kigali Amendment to the Montreal Protocol, adopted in 2016, focuses on controlling hydrofluorocarbons (HFCs), not hydrochlorofluorocarbons (HCFCs).

- Statement 2 is correct. Phasing out the production and consumption of ODS is the mechanism by which the Montreal Protocol has achieved success in reducing ozone depletion. The protocol has been successful in reducing the production and consumption of ODS, such as chlorofluorocarbons (CFCs), which were widely used in refrigeration, air conditioning, and other applications. The reduction in ODS has led to a decrease in the size of the ozone hole over Antarctica.

Source: [Forum IAS](#)

4. Correct Answer is (A)

- A golden tiger (also known as a golden tabby tiger) is a Bengal tiger exhibiting a color variation resulting from a recessive gene. The golden tiger's coloring originates from a recessive trait known as 'wideband,' which influences the production of black pigments during the hair growth cycle. Golden tigers are not a separate subspecies but rather a result of genetic variation within Bengal tigers. They are exceptionally rare in the wild and even rarer in captivity.

Source: [Forum IAS](#)

5. Correct Answer is (C)

- Statements 1 and 3 are correct. Laughing gulls are known for their adaptability and opportunistic feeding habits. They eat a variety of food sources, including fish, insects, carrion, scraps, and even eggs of other birds. This adaptability allows them to thrive in diverse environments and situations. Laughing gulls are currently listed as Least Concern on the IUCN Red List. This means their populations are stable and not in immediate danger of extinction.
- Statement 2 is incorrect. Laughing gulls are native to North and South America, primarily found along the Atlantic coast, the Caribbean, and northern South America. They do not naturally occur in Western Africa.

Source: [Forum IAS](#)

6. Correct Answer is (D)

- The Chittari estuary refers to a coastal area where a river meets the sea, forming a brackish water environment. It is located in the Kasaragod district of Kerala, India. Chittari estuary encompasses a wide variety species of birds including lesser black-backed gull, slender-billed gull, brown-headed gull, great crested, lesser crested tern, Caspian tern and others.

Source: [Forum IAS](#)

7. Correct Answer is (B)

- Statements 1 and 2 are correct. Acid rain is primarily formed when sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>), emitted from industrial activities, fossil fuel combustion, and other

## 10 PM Compilation for the Month of February 2024

sources, react with atmospheric moisture to create sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) and nitric acid (HNO<sub>3</sub>), leading to acid rain. Pure rainwater naturally has a slightly acidic pH of around 5.6 due to dissolved carbon dioxide. However, acid rain typically has a pH lower than 5.0, sometimes even reaching 4.3 or lower. This increased acidity is caused by the presence of sulfuric and nitric acids.

- Statement 3 is incorrect. The formation of acid rain is mainly caused by the chemical reactions between sulfur dioxide, nitrogen oxides, and water vapor in the atmosphere, facilitated by various atmospheric conditions. While sunlight may indirectly influence these reactions, it doesn't directly interact with water vapor to create acidic compounds in the acid rain formation.

Source: [Forum IAS](#)

8. Correct Answer is (B)

- Statements 1 and 4 are correct. Dalma Wildlife Sanctuary gets its name from the “Dalma mai”, a local goddess who is revered and worshiped by the local people. The sanctuary lies on the Chotanagpur Plateau of Jharkhand. It is situated around the Dalma hills. Medicinal plants like Ananatmula, Satawari, Sarpgandha etc. are abundant in the sanctuary. The sanctuary is known for its elephants.
- Statements 2 and 3 are incorrect. The sanctuary primarily consists of Dry peninsular sal” and “Northern dry mixed deciduous Forest”. The Swarnrekha River flows near the Dalma Wildlife Sanctuary.

Source: [Forum IAS](#)

9. Correct Answer is (C)

- Humboldt's enigma refers to an observation made by the famous naturalist Alexander von Humboldt in the early 19th century. He noticed that mountain regions, despite being located outside the tropics, often exhibit exceptionally high levels of biodiversity. This was surprising because at that time it was held that biodiversity peaked in tropical regions due to their warm temperatures and abundant rainfall. The northern Andes range, which includes Chimborazo, is recognized as the world's most biodiverse location.

Source: [Forum IAS](#)

10. Correct Answer is (B)

- Hybrid vehicles have both an internal combustion engine (running on fossil fuels) and an electric motor (running on clean electric energy). Hybrid vehicles reduce carbon emissions by reducing fuel consumption and utilizing electricity for short distances. They typically produce lower tailpipe emissions than conventional vehicles and zero tailpipe emissions when running only on electricity. Additionally, a study found that hybrids are 14 times better than battery electric vehicles at reducing real-world carbon dioxide emissions.

Source: [Forum IAS](#)



## 10 PM Compilation for the Month of February 2024

11. Correct Answer is (D)

- Statements 1, 2, 3 and 4 are correct. Snow Leopard is a species of large cat in the genus Panthera of the family Felidae. It is native to the mountain ranges of Central and South Asia. It is a top predator in mountain ecosystem. They are distributed across the mountainous landscape of Central Asia that covers different parts of the Himalayas such as Ladakh, Himachal Pradesh, Uttarakhand, and Sikkim. Conservation Status - IUCN List of Threatened Species: Vulnerable. CITES: Appendix I, Indian Wildlife (Protection) Act, 1972: Schedule-I.

Source: [Forum IAS](#)

12. Correct Answer is (C)

- India has increased its tally of Ramsar sites (Wetlands of International Importance) to 80 from existing 75 by designating five more wetlands as Ramsar sites. These are: Karaivetti Bird Sanctuary, Tamil Nadu, Magadi Kere Conservation Reserve, Karnataka, Longwood Shola Reserve Forest, Tamil Nadu, Ankasamudra Bird Conservation Reserve, Karnataka, Aghanashini Estuary, Karnataka.
1. Karaivetti Bird Sanctuary-It is centred around a large freshwater lake. This lake is the focal point of the sanctuary and serves as a crucial habitat for a variety of bird species, both resident and migratory. It supports 1% population of Black-headed ibis and oriental Darter.
  2. Magadi Kere Conservation Reserve-The bar-headed goose is one of the birds which migrate to Magadi wetlands.
  3. Longwood Shola Reserve Forest- It derives its name from the Tamil word, "Solai", which means a 'tropical rain forest'. It maintains the hydrological regime of the region, by capturing rainwater through marshes and then releasing it via streams. It is home to the threatened Nilgiri marten and other rare fauna and flora.
  4. Ankasamudra Bird Conservation Reserve-It is the only place in Karnataka where Great Indian Bustard can be seen.
  5. Aghanashini Estuary- It is formed at the confluence of Aghanashini River with the Arabian sea. The brackish water of the Estuary provides diverse ecosystem services including flood and erosion risk mitigation, biodiversity conservation and livelihood support.

Source: [Forum IAS](#)

13. Correct Answer is (C)

- Statements 1 and 3 are correct. The Black-crowned Night Heron is a migrating species. It is known for its nocturnal habits and is primarily a sedentary bird, with some populations making localized movements in response to changing water levels and food availability. They are small herons with rather squat, thick proportions. They have thick necks, large, flat heads, and heavy, pointed bills. It is found across North America, as well as locally in Central America and the Caribbean. According to the International Union for Conservation of Nature (IUCN), the black-crowned night heron is listed as "Least Concern".
- Statement 2 is incorrect. Black-crowned Night Herons primarily inhabit wetland habitats, including marshes, swamps, mangrove forests, lagoons, and riverbanks. They generally

## 10 PM Compilation for the Month of February 2024

avoid open grasslands and meadows as these lack the water and cover they need for food and shelter.

Source: [Forum IAS](#)

14. Correct Answer is (A)

- Statements 1, 2 and 3 are correct. Manatees are large aquatic mammals. They belong to a group of animals called Sirenia. This group also contains dugongs. There are three species, or types, of manatee: - The Amazonian manatee lives in the Amazon River and in fresh water in South America. This species is only found in freshwater. The African manatee lives in tropical West Africa. The Caribbean manatee is found in Florida and the West Indies. All 3 species are vulnerable. They are herbivores. They spend up to eight hours a day grazing and can consume 4 to 9 percent of their body weight in aquatic vegetation daily. They are generally solitary animals.
- Statement 4 is incorrect. Manatees do not have sharp teeth. Their molars are flat and broad, suited for grinding vegetation, not tearing flesh.

Source: [Forum IAS](#)

15. Correct Answer is (C)

- Statements 1 and 3 are correct. The Dusted Apollo (*Parnassius stenosemus*) is an extremely rare high-altitude butterfly known for its distinctive wing patterns and coloration, and it has been sighted for the first time in Himachal Pradesh. Apollos are highly valued butterflies in commercial trade and command high prices within the poaching industry. Most of the Apollo butterflies are endangered and urgently require conservation and protection measures.
- Statement 2 is incorrect. Some Apollo Butterfly species migrate, while most of them do not.

Source: [Forum IAS](#)

16. Correct Answer is (A)

- Statements 1 and 2 are correct. Lantana Camara is an invasive species in India. Introduced as an ornamental plant, it has aggressively spread, particularly in disturbed areas, impacting biodiversity. It's listed among India's "species of high concern." The invasion of Lantana camara heavily impacts the Nilgiri Biosphere Reserve in the Western Ghats, where it has spread rapidly and formed dense thickets, threatening the wildlife habitat, including the Asian elephant population. The plant is native to the American tropics.
- Statement 3 is incorrect. Lantana camara does not increase soil fertility. In fact, it has been reported to alter biodiversity, suppress native forest regeneration, reduce native plant species richness, and increase the risk of fire, ultimately threatening the biodiversity of the invaded areas.

Source: [Forum IAS](#)

17. Correct Answer is (A)

- Chlorofluorocarbons (CFCs) are primarily responsible for the depletion of the ozone layer. When released into the atmosphere, CFCs break down ozone molecules, leading to thinning

## 10 PM Compilation for the Month of February 2024

of the ozone layer. This thinning allows more ultraviolet (UV) radiation from the sun to reach the Earth's surface, posing risks to human health and the environment.

Source: [Forum IAS](#)

18. Correct Answer is (A)

- Statements 1 and 2 are correct. The black-necked crane is a medium-sized crane in Asia that breeds on the Tibetan Plateau and remote parts of India and Bhutan. Both the sexes are almost of the same size, but male is slightly bigger than female. The high-altitude wetlands of the Tibetan plateau, Sichuan (China), and eastern Ladakh (India) are the main breeding ground of the species. However, the birds spend winter at lower altitudes. It is also found in Arunachal Pradesh's valleys- Sangti valley, Zemithang and Chug valley. The important habitats of Black-necked Crane have been notified as a Protected Areas. For ex- Changthang Sanctuary, Ladakh.
- Statement 3 is incorrect. Conservation status – IUCN Red List- Near Threatened (NT), CITES- Appendix I, Indian Wildlife (Protection) Act, 1972- Schedule I.

Source: [Forum IAS](#)

19. Correct Answer is (C)

- Thrips parvispinus is a harmful insect pest known to inflict significant damage on various crops, including chili, papaya, beans, eggplant, and more. They feed on plant sap, leading to stunted growth, leaf curling, and yield losses. It originated from Southeast Asia and was first found in Florida in 2020. It is a polyphagous pest that causes damage to vegetable, ornamental, and fruit crops. It is now found in France, Greece, Hawaii, Mauritius, Reunion, Spain, Tanzania and the Netherlands, besides India. This species was first reported on Papaya from Bengaluru in 2015.

Source: [Forum IAS](#)

20. Correct Answer is (C)

- Statement 1 is incorrect. The Aldabra giant tortoise is distinct from other tortoise species due to its exceptionally long lifespan. It can live up to 150 years old. It is the world's second-largest land tortoise species, after the Galapagos giant tortoise.
- Statements 2, 3 and 4 are correct. These are endemic to the Aldabra Atoll in the Seychelles, an archipelago in the western Indian Ocean, approximately 930 miles east of Africa and northeast of Madagascar. These tortoises live on land and inhabit diverse environments such as scrub forests, mangrove swamps, and coastal dunes and beaches. Grasslands named "platins" harbour the largest populations of tortoises. They are listed Vulnerable in the IUCN Red Data List and Appendix II in CITES. They are dark gray to black with a strongly domed, thick shell. They play a significant role in maintaining the ecological balance of their habitat mosaic.

Source: [Forum IAS](#)

21. Correct Answer is (C)

## 10 PM Compilation for the Month of February 2024

- Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse. Monitoring and enforcement in the Environmental Impact Assessment (EIA) process involve verifying compliance with environmental regulations and mitigation measures to ensure project adherence to prescribed environmental safeguards and minimize adverse impacts.

Source: [Forum IAS](#)

22. Correct Answer is (B)

- The Sepahijala Wildlife Sanctuary is located in the state of Tripura. It came into existence in 1972. It has moist deciduous forest. It has two natural lakes, namely Abasarika and Amrit Sagar. It is the habitat of different species of primates like Rhesus macaque, Pigtailed macaque, Capped langur, Spectacled monkey, Slow loris and several other wild animals like Leopard, Clouded leopard, Jungle fowl, Civets, Barking, Deer, Wild pig, etc. Clouded Leopard National Park, established in 2007, is a part of this wildlife sanctuary. Sepahijala Wildlife Sanctuary is known for its rich avian diversity.

Source: [Forum IAS](#)

23. Correct Answer is (A)

- Statements 1 and 2 are correct. Clouded Leopard is the state animal of Meghalaya. It is classified as Vulnerable under the IUCN Red List. It is placed under Schedule 1st of the Wildlife (protection) act of 1972. They got their name from the clouds like pattern on their whole body. Clouded leopards have a darker coat color which has smaller and darker cloud markings on them. The fur color includes yellow to brown, which makes them darker. Clouded leopards can hang upside down from branches of trees by making use of their short limbs, broader paws, and sharp nails. They have the longest tail among the cats.
- Statement 3 is incorrect. Clouded Leopards are commonly found tropical rain forests of Nepal, Bhutan, India, Myanmar, China. Southeast Asia is their main habitat.

Source: [Forum IAS](#)

24. Correct Answer is (B)

- Statements 1 and 2 are correct. The Energy and Resources Institute (TERI) is a leading think tank focused on conducting research and providing solutions for sustainable development, with a particular emphasis on India and the Global South. It is headquartered in New Delhi and has regional offices and research centers across the country.
- Statement 3 is incorrect. TERI focuses on promoting clean energy, water management, pollution management, sustainable agriculture, and climate resilience. TERI's research areas include: Biotechnology and bioresources, Earth science and climate change, Environmental and industrial biotechnology, Industrial energy efficiency. However, the development and deployment of nuclear power technologies is not a primary focus area for the organization. Instead, TERI concentrates on renewable energy sources, energy efficiency, and clean technology solutions as part of its efforts to promote sustainable development and address environmental challenges.

## 10 PM Compilation for the Month of February 2024

Source: [Forum IAS](#)

25. Correct Answer is (B)

- Nematodes are roundworms and their size can vary from a tiny 0.2 millimetre to a few metres. They are among the most abundant animals on Earth. They occur as parasites in animals and plants or as free-living forms in soil, fresh water, marine environments. These nematodes play a crucial role in the environment as they are responsible for production of about 19% of ammonia of the soil. They are also important bioindicators of soil ecosystem health. They break down organic matter, releasing nutrients for plants. They feed on bacteria, fungi, or other microscopic creatures. Thus, they are a major component of soil and sediment ecosystems. However, Nematodes themselves do not directly fix nitrogen from the atmosphere.

Source: [Forum IAS](#)

26. Correct Answer is (C)

- Dachigam National Park is specifically known for its conservation efforts to protect the Hangul Deer, also known as the Kashmir Stag. Dachigam National Park is located 22 kms from Srinagar in Jammu and Kashmir at altitudes ranging from 5500 feet to 14,000 feet. Vegetation type includes Himalayan moist temperate forest: sub-alpine forest and alpine forest type.

Source: [Forum IAS](#)

27. Correct Answer is (B)

- Statements 1 and 3 are correct. The Himalayan Black Bear plays a crucial role as a primary seed disperser, contributing to the maintenance of ecosystem balance by promoting plant diversity and growth. The Himalayan Black Bear is categorized as Vulnerable in the IUCN Red List of Threatened Species.
- Statement 2 is incorrect. The primary habitat of the Himalayan Black Bear is not the tropical rainforest, but rather temperate and subalpine forests, as well as high-altitude meadows in the Himalayan region.

Source: [Forum IAS](#)

28. Correct Answer is (B)

- This threshold was chosen based on scientific evidence indicating that exceeding 1.5°C of global warming could result in more severe and widespread consequences, such as extreme weather events, sea-level rise, and ecosystem disruptions. Although achieving the 1.5°C target is challenging, it represents an ambitious yet feasible goal that aligns with the global commitment to reduce greenhouse gas emissions and pursue sustainable development.

Source: [Forum IAS](#)

29. Correct Answer is (A)

- Statements 1 and 3 are incorrect. Brumation is a dormancy state in cold-blooded animals, such as reptiles and amphibians, particularly in temperate regions. During brumation, these

## 10 PM Compilation for the Month of February 2024

animals become inactive, and their metabolic processes slow down to conserve energy during colder months when food is scarce. Whereas, hibernation is a winter dormancy state in warm-blooded mammals. Brumation refers to the dormancy state of cold-blooded animals like reptiles and amphibians during cold weather.

- Statement 2 is correct. Estivation, also known as aestivation, is a state of dormancy that some animals enter during the hot, dry summer months. This period of inactivity helps them conserve energy and water, as food and water sources may be scarce. Animals that undergo estivation include certain insects, fish, amphibians, and reptiles.

Source: [Forum IAS](#)

30. Correct Answer is (C)

- Bor Tiger Reserve is a wildlife sanctuary which was declared a tiger reserve in July 2014. It is located in the Wardha District of Maharashtra. The reserve covers an area of 138.12 sq.km, which includes the drainage basin of the Bor Dam. It has Dry Deciduous Forest. Teak, tendu, bamboo, tarot, and gokhru are some of the abundant species. Apart from tigers, the reserve is home to several other mammals like leopards, sloth bears, sambar deer, Indian bison (gaur), chital, wild boars, and more. It is the smallest tiger reserve in India by area. The Bor Tiger Reserve is traversed by the Bor River, which plays a significant role in the ecology and biodiversity of the reserve. The Bor Tiger Reserve is strategically located between the Pench Tiger Reserve and the Tadoba-Andhari Tiger Reserve in the Nagpur and Chandrapur districts of Maharashtra. This region acts as a crucial tiger corridor connecting these two tiger reserves.

Source: [Forum IAS](#)

31. Correct Answer is (B)

- 1 and 3 are correctly matched.
- Olive Ridley Turtle: The Olive ridley turtles are the smallest and most abundant of all sea turtles found in the world. They are best known for their unique mass nesting called Arribada. They are found in warm waters of the Pacific, Atlantic and Indian oceans. IUCN status- Vulnerable, Indian Wildlife (Protection) Act- Schedule I.
- Leatherback Turtle: It is the largest of the seven sea turtle species. It is found in all oceans except the Arctic and the Antarctic. IUCN Status- Vulnerable, Indian Wildlife (Protection) Act- Schedule I.
- Loggerhead turtle: It is found in the Atlantic, Pacific, and Indian Oceans, as well as the Mediterranean Sea. IUCN Status- Vulnerable, Indian Wildlife (Protection) Act- Schedule I.
- Hawksbill turtle-They have a wide range, found predominantly in tropical reefs of the Indian, Pacific, and Atlantic Oceans. They are primarily found in tropical coral reefs. IUCN status- Critically Endangered, Indian Wildlife (Protection) Act- Schedule I.

Source: [Forum IAS](#)

32. Correct Answer is (A)

- Statement 1 is correct. The Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention) is the only global and United Nations-based

## 10 PM Compilation for the Month of February 2024

intergovernmental organization that focuses exclusively on the conservation and management of migratory species, including terrestrial, aquatic, and avian species, throughout their entire range. This is an environmental treaty under the aegis of the United Nations Environment Programme. The Conference of Parties (COP) is the decision-making organ of this convention.

- Statements 2 and 3 are incorrect. The Bonn Convention does not impose trade sanctions on countries that violate species protection. Its main focus is on promoting cooperation among countries to ensure the conservation and sustainable use of migratory species and their habitats. The primary objective of the Bonn Convention is not to eliminate trade in wildlife and wildlife products but to conserve migratory species throughout their range.

Source: [Forum IAS](#)

33. Correct Answer is (B)

- Cuscuta dodder, commonly known as dodder or amarbel, is a parasitic plant that infests many crops, ornamentals, native plants, and weeds. It belongs to the genus Cuscuta and is classified as a parasitic plant that lacks chlorophyll and depends on host plants for nutrition. Dodder is considered a parasitic plant due to its dependency on other plants for survival and growth. It is an invasive weed native to North America.

Source: [Forum IAS](#)

34. Correct Answer is (A)

- Statement 1 is correct. Vedanthangal Bird Sanctuary, established in 1936, is considered the oldest water bird sanctuary in India. It is located in the Madurantakam taluk of Chengalpattu District in Tamil Nadu and serves as a vital habitat for numerous migratory and resident bird species.
- Statement 2 is incorrect. Vedanthangal Bird Sanctuary is known for hosting migratory birds during the winter season, not the summer season. Migratory birds from various parts of the world, such as Siberia, Europe, and other regions, arrive at the sanctuary during the winter months (typically from November to March) to escape the harsh winters in their native habitats.

Source: [Forum IAS](#)

35. Correct Answer is (C)

- Statements 1 and 3 are correct. Coal gasification is a process that involves converting coal into a gaseous mixture, often referred to as synthesis gas or syngas. This process occurs by subjecting coal to high temperatures and pressure in the presence of steam and controlled amounts of oxygen. The resulting syngas is primarily composed of hydrogen, carbon monoxide, and some methane, along with smaller amounts of other gases. The gasification process requires significant amounts of water for various purposes, including steam production, cooling, and gas cleaning. The water intensity of coal gasification is a concern in regions where water resources are scarce or stressed, as it can exacerbate water scarcity issues and contribute to increased competition for water resources among different sectors.

## 10 PM Compilation for the Month of February 2024

- Statement 2 is incorrect. While coal gasification produces methane as part of the syngas mixture, it is not the primary gas produced. The main components of the syngas are hydrogen and carbon monoxide, which can then be further processed or used in various applications, such as producing synthetic fuels, generating electricity, or manufacturing chemicals.

Source: [Forum IAS](#)

36. Correct Answer is (A)

- The Golden-backed Frog (*Hylarana chalconota*) is endemic to the Western Ghats of India. This species is known for its distinctive golden-yellow dorsal coloration and is primarily found in the tropical wet evergreen forests and semi-evergreen forests of the Western Ghats. These frogs prefer to reside near streams, ponds, and other water bodies, where they can lay their eggs and find their food. They are insectivorous and feed on a range of small insects and arthropods such as ants, beetles, and crickets. It is about the size of a human thumb.

Source: [Forum IAS](#)

37. Correct Answer is (C)

- The Bonnet mushroom (*Mycena*) is classified as a saprotroph. Saprotrophs are organisms that obtain their nutrition by breaking down and feeding on dead organic matter. Mushrooms, including the Bonnet mushroom, are the fruiting bodies of fungi, which play a crucial role in decomposition and nutrient cycling in ecosystems.

Source: [Forum IAS](#)

38. Correct Answer is (D)

- Statements 1, 2, 3 and 4 are correct. Kanha Tiger Reserve is the largest National Park in Central India. It is also called Kanha-Kisli National Park, is a major tiger reserve and the largest national park of the Madhya Pradesh. Presently, Kanha area is split into two protected zones: Hallon and Banjar. It is located in the Maikal range of the Satpura Mountain. It is the first tiger reserve in India to have an official mascot named 'Bhoorsingh the Barasingha'. Swamp deer (Barasingha with IUCN status: Vulnerable) are widely recognized for their association with the conservation success of Kanha Tiger Reserve. The reserve has tropical moist deciduous forests. Kanha used to be the home of the Baiga tribe, a semi-nomadic group from central India.

Source: [Forum IAS](#)

39. Correct Answer is (A)

- Statement 1 is correct. The SDGs are a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. Adopted by the United Nations in 2015, the 17 SDGs cover a broad range of social, economic, and environmental issues, aiming to create a more sustainable and equitable world.
- Statement 2 is incorrect. The 17 Sustainable Development Goals (SDGs) are: SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Wellbeing), SDG 4 (Quality



## 10 PM Compilation for the Month of February 2024

Education), SDG 5 (Gender Equality), SDG 6 (Clear Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), SDG 14 (Life Below Water), SDG 15 (Life on Land), SDG 16 (Peace, Justice and Strong Institutions), and SDG 17 (Partnership for Goals).

Source: [Forum IAS](#)

40. Correct Answer is (C)

- Statements 1 and 3 are correct. The IPCC aims to advance scientific knowledge about climate change caused by human activities. It provides policymakers with regular assessments of the scientific basis of climate change, its impacts, and future risks, as well as options for adaptation and mitigation. The IPCC takes a comprehensive approach to climate change, including analyzing its impact on human societies and economics. This includes areas like health, displacement, poverty, and, employment.
- Statement 2 is incorrect. The IPCC does not conduct its own original research. Instead, its primary role is to assess and synthesize the vast body of existing scientific literature on climate change.

Source: [Forum IAS](#)

41. Correct Answer is (B)

- The Global Stocktake is a process established under the Paris Agreement that periodically assesses the collective progress towards achieving the goals of the agreement. It evaluates the actions and efforts made by countries in mitigating greenhouse gas emissions, adapting to climate change, and providing support for climate finance. It assesses collective progress towards the long-term goals of the Paris Agreement and identifies areas where additional efforts may be needed. UNFCCC countries conduct a 'global stocktake' (GST) to assess the world's progress towards the goals of the Paris Agreement, every five years. The GST is a mechanism to measure collective progress, identify gaps, and chart a better course of climate action.

Source: [Forum IAS](#)

42. Correct Answer is (A)

- Statement 1 is correct. The International Single Species Action Plan (ISSAP) is a key instrument developed under the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA). It aims to implement coordinated measures to restore migratory waterbird species to a favorable conservation status by addressing threats, habitat conservation, and international cooperation.
- Statement 2 is incorrect. The Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) has been developed under the framework of the Convention on Migratory Species (CMS) and administered by the United Nations Environment Programme (UNEP). It is based in Bonn, Germany. It is an intergovernmental treaty dedicated to the conservation of migratory waterbirds and their habitats.

## 10 PM Compilation for the Month of February 2024

Source: [Forum IAS](#)

43. Correct Answer is (C)

- Statements 1, 2 and 3 are correct. Melghat Tiger Reserve was established as a wildlife sanctuary in 1967 and was declared a tiger reserve in 1974. The name 'Melghat' means the confluence of various 'ghats' or valleys. It is located on the southern offshoot of the Satpura Hill Range in Central India, called Gavilgarh Hill in Maharashtra. The forest is tropical dry deciduous in nature, dominated by teak. The reserve is a catchment area for five major rivers: the Khandu, Khapra, Sipna, Gadga, and Dolar. These are tributaries of the river Tapti. The Tapti River and the Gawilgadh ridge of the Satpura Range form the boundaries of the reserve. It was the first tiger reserve in Maharashtra.
- Statement 4 is incorrect. The Korkus are the largest tribal community in Melghat. Other communities include the Gawli community, the Gond tribe etc.

Source: [Forum IAS](#)

### Science & Technology

Q.1) Which one of the following refrigeration methods is the most common method used in refrigeration and air conditioning systems?

- a) Magnetic Cooling Effect
- b) Vapor Compression Cooling
- c) Solid-State Cooling
- d) Stirling Cooling

Q.2) Which one of the following is the primary principle behind "Dynamic Wireless Charging (DWC)" technology for electric vehicles?

- a) Direct physical connection for charging
- b) Inductive charging while in motion
- c) Solar energy conversion
- d) Battery swapping mechanism

Q.3) Consider the following statements:

1. Nitrogen hypoxia refers to a method of causing death by depleting the body of oxygen through the inhalation of nitrogen gas.
2. Nitrogen is a colorless, odorless gas that makes up a significant portion of Earth's atmosphere.
3. Nitrogen is commonly used in industries such as food packaging, electronics manufacturing, and as an inert gas for various purposes.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.4) With reference to the End-to-End Encryption (E2E), consider the following statements:

1. The core principle of E2E is to encrypt data from the sender to the recipient, making it inaccessible to anyone else.
2. Instant messaging apps like WhatsApp uses E2E to secure user messages.
3. The primary benefit of E2E encryption for users is faster data transmission speeds.

Which of the statements given above are correct?

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

Q.5) Which one of the following statements is correct with respect to 'Stunting'?

- a) It refers to a chronic condition characterized by low height for age, indicating impaired growth and development.
- b) It is a severe form of malnutrition characterized by significant muscle and fat loss leading to low weight for height.
- c) It occurs when there is a lack of essential vitamins and minerals in the diet.
- d) It is a condition where a child has excess body weight for their age.

Q.6) Which one of the following display technologies is used in Amazon Kindle?

- a) Liquid Crystal Display (LCD)
- b) Organic Light-Emitting Diode (OLED)
- c) Light-Emitting Diode (LED)
- d) Electronic ink (E Ink) Displays

Q.7) Which one of the following technologies is utilized for the production of lab-grown fish meat?

- a) Gene editing
- b) Aquaponics
- c) Cellular agriculture
- d) Hydroponics

Q.8) Consider the following statements with respect to the differences between the solid-state battery and lithium-ion battery:

1. The electrolyte is solid in the solid- state battery whereas in lithium-ion batteries electrolyte is liquid.
2. A solid-state battery has higher energy density than a Lithium-ion.
3. Solid-state batteries can last longer than traditional lithium-ion batteries due to their improved stability.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.9) Accredited Social Health Activists (ASHA) workers play a crucial role in bridging the gap between:

- a) Urban and rural healthcare access
- b) Public and private healthcare sectors
- c) Healthcare providers and the community
- d) Traditional and modern medical practices

Q.10) Consider the following:

- 1. Improved data collection and analysis
- 2. Lower cost per flight hour
- 3. Increased pilot safety

Which of the above advantages does MQ-9B Reaper drone (UAV) offer over manned aircraft?

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

Q.11) Which one of the following is the reason behind the phenomenon of 'Zodiacal Light'?

- a) Light pollution from urban areas
- b) Reflection of sunlight off interplanetary dust particles
- c) Emission of light from distant galaxies
- d) Scatter of starlight by atmospheric particles

Q.12) Cygnus X-1, seen in the news recently, is classified as a:

- a) Black hole
- b) Neutron star
- c) White dwarf
- d) Supernova remnant

Q.13) Consider the following statements:

- 1. Wheat blast is a disease caused by a weather phenomenon causing sudden temperature fluctuations in wheat-growing regions.
- 2. High humidity and temperatures favor the development of wheat blast.

Select the correct answer using the codes given below:

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

## 10 PM Compilation for the Month of February 2024

Q.14) For which one of the following purposes is X-ray polarimetry primarily used in astronomy?

- a) Identifying the chemical composition of celestial objects
- b) Mapping the distribution of dark matter in galaxies
- c) Locating the source regions of X-ray radiation near black holes
- d) Measuring the temperatures of stars

Q.15) Which one of the following statements is correct regarding 'Ergosphere'?

- a) It is a region around a black hole where photons (light particles) can orbit the black hole in a circular path.
- b) It is a region found outside the event horizon of a rotating black hole, where the black hole's immense gravity drags spacetime itself along with its rotation.
- c) It is the central point within a black hole where matter is infinitely dense and gravitational forces are infinitely strong.
- d) It is the closest orbit around a black hole where an object can stably orbit without eventually spiraling into the black hole.

Q.16) Consider the following statements:

1. Nuclear fission is the process of combining two or more atomic nuclei to form a heavier nucleus.
2. A nuclear reactor produces power without any dependence on weather and other conditions.

Which of the statement(s) given above is/are correct?

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

Q.17) Which one of the following is the primary objective of the Transiting Exoplanet Survey Satellite (TESS)?

- a) Directly imaging exoplanets
- b) Measure the atmospheres of exoplanets
- c) Discover new exoplanets using the transit method
- d) Study the formation and evolution of planetary systems

Q.18) Consider the following:

1. Drug discovery and personalized medicine
2. Advanced materials development
3. Social media content optimization
4. Autonomous vehicles and robotics

In how many of the above areas does 'Deep Tech' find application?

- a) Only one
- b) Only two
- c) Only three
- d) All four

## 10 PM Compilation for the Month of February 2024

Q.19) With reference to the Chimeric antigen receptor (CAR) T-cell therapy, which of the following statement(s) is/are correct?

1. It falls under the category of radiation therapy.
2. This therapy is less demanding and has fewer side effects compared to traditional treatments like chemotherapy.

Select the correct answer using the codes given below:

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

Q.20) With reference to SMART food grain storage system (SAFEETY) technology, consider the following statements:

1. The objective of this system is to reduce transportation costs for grains.
2. Grain bags are tagged with Radio Frequency Identification (RFID) for ensuring its traceability.
3. The SAFEETY system is a step towards achieving the goals of smart city projects.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.21) Consider the following statements:

1. Vaccine Safety Net aims to provide scientifically based information on vaccine safety in various languages.
2. The objective of the Healthy Indian Project is to carry out routine health assessments for elderly individuals across India.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.22) With reference to the Satellite-based toll collection system, consider the following statements:

1. It is a GPS based toll collection system.
2. It will enable vehicles to move freely without the need to stop for toll payments.
3. Every vehicle in this GPS-based toll collection system will need an onboard unit (OBU) linked to a constellation of satellites.
4. It will replace the existing radio frequency identification-based FASTag system.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.23) Who of the following personalities is associated with the development of the theory of 'Photon Gas'?

- a) Werner Heisenberg
- b) Vikram Sarabhai
- c) Enrico Fermi
- d) Satyendra Nath Bose

Q.24) Consider the following:

1. Energy Storage
2. Electromagnetic Shielding
3. Water Purification

In which of the above-mentioned areas does MXene, a class of two-dimensional (2D) ceramic nanomaterials, find application?

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

Q.25) With reference to the High-altitude pseudo satellite vehicle (HAPS), consider the following statements:

1. Solar panels and energy storage systems enables HAPS to stay airborne for extended periods.
2. It can help in monitoring environmental changes and natural disasters.
3. The primary advantage of HAPS compared to traditional satellites is its ability to operate beyond geostationary orbit.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.26) Consider the following statements with respect to the Defence Acquisition Council:

1. It is the highest decision-making body for military procurement.
2. It is responsible for negotiating international defense contracts.

Which of the statement(s) given above is/are correct?

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

Q.27) Which one of the following statements is correct with reference to the Open Radio Access Network (ORAN)?

- a) It separates the control plane from the data plane in network devices, allowing for centralized control and programmability of network infrastructure through software-based controllers.
- b) It is an approach to building cellular network infrastructure that allows for greater flexibility and innovation compared to traditional, vendor-locked systems.
- c) It centralizes and virtualizes radio access network functions, enabling them to be hosted in cloud environments for increased scalability and flexibility.
- d) It refers to software whose source code is freely available for use, modification, and distribution by anyone.

Q.28) Consider the following statements:

1. Pulsar stars emit light and radiation due to nuclear fusion reactions occurring in their cores.
2. Supernova remnants are the bright, expanding clouds of gas and dust formed when massive stars explode.
3. Five-hundred-meter Aperture Spherical radio Telescope (FAST) is the world's biggest single-dish radio telescope.

Which of the statements given above are correct?

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

Q.29) Consider the following statements:

1. Halogens are highly reactive and don't exist freely in nature.
2. In compounds, fluorine is the most prevalent halogen found in Earth's crust.

Which of the statement(s) given above is/are correct?

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



## 10 PM Compilation for the Month of February 2024

Q.30) Consider the following statements:

1. Formaldehyde is a colorless, strong-smelling gas used in various industries for manufacturing building materials and household products.
2. Frozen smoke, also known as aerogel, is primarily composed of carbon dioxide and water vapor.

Which of the statement(s) given above is/are correct?

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

Q.31) Consider the following statements with respect to NASA-ISRO Synthetic Aperture Radar (NISAR) satellite:

1. It is a dual frequency satellite.
2. It will offer detailed observations of Earth's surface, tracking changes in ice sheets, land deformation, and ecosystems.
3. It has been developed for Low Earth Orbit (LEO) observation.

Which of the statements given above are correct?

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

Q.32) Consider the following statements with respect to the Alaskapox disease:

1. They are zoonotic viruses that can infect various mammals, including humans.
2. It is a rhinovirus.
3. It is a double-stranded DNA virus.

Which of the statements given above are correct?

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

Q.33) With reference to the PACE (Plankton, Aerosol, Cloud, ocean Ecosystem) satellite, consider the following statements:

1. Its objective is to study the composition of planetary atmospheres.
2. It is placed in a sun-synchronous orbit.
3. It will help in understanding the influence of particles in the air, like dust and smoke, on cloud formation, warming and cooling of the planet.

Which of the statements given above are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.34) Consider the following statements:

1. An ultracold atom is an atom with a temperature near absolute zero.
2. The Future Circular Collider (FCC) is a particle accelerator currently under design, intended to accommodate the next generation of particle colliders.

Which of the statement(s) given above is/are correct?

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

Q.35) Consider the following statements regarding the Bubonic Plague:

1. It is viral infection caused by Epstein-Barr virus (EBV).
2. It spreads between animals and humans through flea bites, direct contact with infected tissues, and inhaling infected respiratory droplets.
3. There is no cure available for the treatment of the Bubonic Plague.

Which of the statement(s) given above is/are correct?

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

Q.36) Which one of the following is used for effectively removing makeup and sunscreen due to its cleansing properties?

- a) Distilled Water
- b) Micellar Water
- c) Thermal Water
- d) Flower Waters

Q.37) With reference to the disease Diphtheria, consider the following statements:

1. It is a contagious infection of the nose and throat.
2. It is a bacterial disease caused by *Corynebacterium diphtheriae*.

Which of the statement(s) given above is/are correct?

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

## 10 PM Compilation for the Month of February 2024

Q.38) With reference to the Generative AI, consider the following statements:

1. It is an AI technique designed to mimic human decision-making processes.
2. The term 'Generative' refers to the ability of the models to learn how to create new data rather than simply recognising it.

Which of the statement(s) given above is/are correct?

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

Q.39) Which one of the following characteristics is shared by both asteroids and comets?

- a) They have well-defined, circular orbits around the Sun.
- b) They originate from the same region in the early Solar System.
- c) They are primarily composed of gases.
- d) They have a same significant impact on Earth's climate.

Q.40) Consider the following statements with respect to the Stratospheric Observatory for Infrared Astronomy (SOFIA) Mission:

1. It could fly into the stratosphere.
2. It could observe the universe in the widest range of infrared light.
3. It was operated jointly by NASA and the German space agency.

Which of the statements given above are correct?

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

Q.41) With reference to the Geosynchronous Satellite Launch Vehicle (GSLV), consider the following statements:

1. It is a single-stage launch vehicle designed for placing satellites in Low Earth Orbit (LEO).
2. GSLV has been designed for launching communication satellites.
3. It has a lower rate of failure compared to the Polar Satellite Launch Vehicle (PSLV).

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

## 10 PM Compilation for the Month of February 2024

### Answer Key

1 - (b)	2 - (b)	3 - (d)	4 - (a)	5 - (a)	6 - (d)	7 - (c)
8 - (d)	9 - (c)	10 - (d)	11 - (b)	12 - (a)	13 - (b)	14 - (c)
15 - (b)	16 - (b)	17 - (c)	18 - (c)	19 - (b)	20 - (a)	21 - (a)
22 - (d)	23 - (d)	24 - (d)	25 - (a)	26 - (a)	27 - (b)	28 - (b)
29 - (c)	30 - (a)	31 - (d)	32 - (c)	33 - (b)	34 - (c)	35 - (b)
36 - (b)	37 - (c)	38 - (b)	39 - (b)	40 - (d)	41 - (a)	

### Answers & Explanations

1. Correct Answer is (B)

- Vapor compression cooling is the most widely used type of refrigeration. It uses a compressor to lower the pressure of the refrigerant, which causes it to cool and turn into a liquid. This method is more efficient than other types of refrigeration and is used in various applications, including air conditioning and industrial cooling. Other Refrigeration method in news: Magnetic cooling effect (MCE) is defined as the reversible temperature change of a magnetic material when it is subjected to an external applied magnetic field. In the magnetic refrigeration cycle, a magnetic field is applied on the magnetic material under an adiabatic process (no exchange of heat with the surrounding). When the magnetic field is removed during adiabatic demagnetization, the magnetic moments of the material become randomized, resulting in a decrease in temperature below the ambient temperature. This process causes the material to absorb heat from the surrounding heat-transfer medium. Magnetocaloric effect, MCE, is heating or cooling of a magnetic material upon application or removal of magnetic field. Materials that display a significant MCE are called magnetocaloric materials.

Source: [Forum IAS](#)

2. Correct Answer is (B)

- The primary principle behind Dynamic Wireless Charging (DWC) technology for electric vehicles is inductive charging while in motion. DWC is a revolutionary technology that allows electric vehicles to charge on the go, eliminating the need for frequent stops and allowing EV drivers to enjoy seamless charging. Unlike conventional charging methods that

## 10 PM Compilation for the Month of February 2024

require EVs to be stationary for an extended period, DWC utilizes an inductive power transfer system to charge the vehicle's battery while it is in motion. It refers to a system that enables electric vehicles (EVs) to charge while moving by using base pads embedded under the surface of the road. It would help in decarbonising the transportation sector.

Source: [Forum IAS](#)

3. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. Nitrogen hypoxia refers to a method of causing death by depleting the body of oxygen through the inhalation of nitrogen gas. Recently, the US state of Alabama used nitrogen gas to execute a man. Nitrogen gas is a colorless, odorless gas that makes up roughly 78% of Earth's atmosphere. It's essential for life and plays various roles in the environment. Nitrogen has diverse applications in various industries. It's used in food packaging to prevent spoilage, in electronics manufacturing to create inert environments, and as a general inert gas for various purposes like fire prevention.

Source: [Forum IAS](#)

4. Correct Answer is (A)

- Statements 1 and 2 are correct. The core principle of E2E is to encrypt data from the sender to the recipient, making it inaccessible to anyone else, including third-party platforms, service providers, and even governments in some cases. Instant messaging apps like WhatsApp use E2E to secure user messages. Encryption serves as a method to safeguard data against unauthorized access or manipulation.
- Statement 3 is incorrect. The primary benefit of E2E encryption for users is a high level of data privacy, ensuring that only the sender and the intended recipient can read the message. It does not guarantee faster data transmission speeds.

Source: [Forum IAS](#)

5. Correct Answer is (A)

- Stunting refers to a chronic condition characterized by low height for age, which indicates that a child's growth and development have been impaired over a long period. This condition is typically a result of inadequate nutrition, repeated infections, and poor socio-economic conditions, especially during the critical early years of a child's life. Stunting reflects long-term nutritional deficiencies and can have lasting effects on physical and cognitive development. Stunting is one of the leading measures used to assess childhood malnutrition.

Source: [Forum IAS](#)

6. Correct Answer is (D)

- The Amazon Kindle uses electronic ink (E Ink) displays. An E-ink display is a screen that aims to replicate the experience of reading and writing on paper. The screens work by using tiny microcapsules. They consume less power compared to LCD and OLED displays. They cause less strain on the user's eyes. They have slow refresh rate compared to LCD and

## 10 PM Compilation for the Month of February 2024

OLED displays. This makes them unsuitable for video or animation. They have limitations of colour and resolution compared to other display technologies. They are being used at bus stop displays, walking direction signs, and some restaurants' menu boards.

Source: [Forum IAS](#)

7. Correct Answer is (C)

- Lab-grown meat is produced through cellular agriculture, which involves extracting a sample of cells from a living animal and cultivating it to grow meat in a lab. The method is based on in vitro cell culture techniques, in order to grow cells away from their native habitat. The technology is commercially viable and aims to provide a pleasant and secure environment for natural proliferation and healthy tissue growth. It will address the ever-growing demand for seafood, and reduce excessive pressure on wild resources. It would help in minimizing overfishing and protect marine environment. It would ensure food and nutritional security. Lab grown fish meat would be antibiotics- and environmental contamination-free.

Source: [Forum IAS](#)

8. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. Solid-state batteries have almost the same mechanism as lithium-ion batteries for extracting electricity from the batteries. However, the key difference is solid-state batteries use a solid electrolyte, while lithium-ion batteries use a liquid electrolyte. Solid-state batteries have the potential for significantly higher energy density compared to lithium-ion batteries. This means they can store more energy per unit weight or volume, leading to longer range for electric vehicles or increased capacity for portable devices. Solid-state batteries are expected to have a longer lifespan compared to traditional lithium-ion batteries.

Source: [Forum IAS](#)

9. Correct Answer is (C)

- ASHA workers, or Accredited Social Health Activists, act as intermediaries between the community and the health system, promoting access to healthcare, providing essential health services at the community level, and increasing awareness about health-related issues. They play a vital role in connecting communities with government health schemes, promoting maternal and child health, disease surveillance, and providing practical support for accessing public health services. ASHA worker must be a woman resident of the village married/ widowed/ divorced, preferably in the age group of 25 to 45 years. ASHA must be chosen through a systematic process by involving various community groups, self-help groups, the Block Nodal officer, District Nodal officer, the village Health Committee and the Gram Sabha.

Source: [Forum IAS](#)

10. Correct Answer is (D)

## 10 PM Compilation for the Month of February 2024

- Improved data collection and analysis: Drones can carry sophisticated sensor payloads, stay airborne for longer durations, and transmit data in real-time for rapid analysis. This can outperform the capabilities of a pilot in a manned aircraft.
- Lower cost per flight hour: Reapers and similar UAVs, due to smaller size, lower fuel consumption, and reduced maintenance needs, often have a significantly lower cost per flight hour compared to crewed aircraft.
- Increased pilot safety: A key advantage of drones is their ability to operate without a human pilot onboard, reducing risks to pilots in challenging environments or missions.

Source: [Forum IAS](#)

11. Correct Answer is (B)

- Zodiacal light is a faint, triangular-shaped glow that appears in the western sky after sunset or the eastern sky before sunrise. It is caused by sunlight reflecting off interplanetary dust particles concentrated in the plane of the zodiac. It is sunlight scattered by interplanetary dust. This is visible from the earth as a faint, diffuse glow on completely dark nights. Interplanetary dust consists of cosmic dust (small particles floating in outer space) that pervades the space between planets in solar system. It is present across the entire path of the ecliptic. This is the path along which the Sun moves in the sky over the course of a year.

Source: [Forum IAS](#)

12. Correct Answer is (A)

- Cygnus X-1 is one of the first confirmed black hole systems in our galaxy that was discovered over four decades ago. Its distance from the earth is about 400 times of the distance between Earth and Sun. It is 20 times heavier than the Sun, and has a companion – a heavy supergiant star (40 times more massive than the Sun) in a binary system.

Source: [Forum IAS](#)

13. Correct Answer is (B)

- Statement 1 is incorrect. Wheat blast is not caused by a weather phenomenon causing sudden temperature fluctuations in wheat-growing regions. Instead, it is a fungal disease caused by the pathogen *Magnaporthe oryzae*. Wheat blast is a fungal disease that affects wheat production in tropical and subtropical regions. It spreads through infected seeds, crop residues, and spores that can travel long distances in the air. It causes progressive bleaching of the heads, lower yields, and poor seed quality. Stems and leaves are discoloured, with dark brown, eye-shaped lesions on leaves.
- Statement 2 is correct. Warm and humid conditions are highly favorable to the spread and severity of wheat blast. The fungus thrives in such environments.

Source: [Forum IAS](#)

14. Correct Answer is (C)

- X-ray polarimetry is a tool used to study the polarization of X-rays from various celestial objects, including black holes. It helps in understanding the physical nature and geometry

## 10 PM Compilation for the Month of February 2024

of various classes of astrophysical sources, including the location of the source regions of X-ray radiation near black holes. Unlike normal X-ray measurements which measure only the energy or intensity of the radiations, polarisation characteristics of X-rays tells about the orientation of the oscillating electric field. This hold clues on the geometry and other properties of the black hole. The Imaging X-ray Polarimetry Explorer (IXPE) is NASA's first mission to study polarisation of X-rays from celestial objects.

Source: [Forum IAS](#)

15. Correct Answer is (B)

- The ergosphere is an oblate spheroid-shaped region surrounding a rotating black hole, also known as a Kerr black hole. In this region, the black hole's immense gravity causes the spacetime to rotate along with it. This phenomenon is known as the "frame-dragging" or "Lense-Thirring effect." Inside the ergosphere, it is impossible for any particle to remain stationary with respect to the outside universe; all particles are inevitably drawn into the rotation of the black hole. It is the region in between the event horizon and the stationary limit. Objects within the ergosphere are forced to rotate along with the black hole's spin due to the distortion of spacetime caused by its immense gravitational pull.

Source: [Forum IAS](#)

16. Correct Answer is (B)

- Statement 1 is incorrect. Nuclear fission is the process of splitting the nucleus of an atom into two or more smaller nuclei to release a large amount of energy.
- Statement 2 is correct. A nuclear reactor produces power without any dependence on weather and other conditions. It generates electricity by using the heat produced during nuclear fission to boil water and produce pressurized steam, which then drives turbines to generate electricity. This makes nuclear power a reliable source of energy, as it is not affected by factors such as weather variations.

Source: [Forum IAS](#)

17. Correct Answer is (C)

- The primary objective of the Transiting Exoplanet Survey Satellite (TESS) is to discover new exoplanets using the transit method. TESS is a space telescope designed to search for exoplanets by monitoring the brightness of stars for periodic dips in light caused by planets passing in front of them, or transiting. It is a NASA mission dedicated to locating planets that orbit the brightest stars visible from Earth. It is a successor to NASA's Kepler space telescope, which discovered thousands of exoplanets over a decade following its launch in 2009. TESS discovers planets of various sizes and compositions, from small rocky ones to giant ones, demonstrating the galaxy's planet diversity. It employs the transit technique to identify planets.

Source: [Forum IAS](#)



## 10 PM Compilation for the Month of February 2024

18. Correct Answer is (C)

- Deep tech refers to advanced and disruptive technologies that have the potential to cause transformative change and provide solutions for the future. It is used to describe cutting-edge research in nanotechnology, biotechnology, material sciences, quantum technologies, semiconductors, artificial intelligence, data sciences, robotics, 3D printing, etc. Social media content optimization falls outside the scope of Deep Tech. Deep Tech usually involves complex scientific and engineering principles to address fundamental challenges.

Source: [Forum IAS](#)

19. Correct Answer is (B)

- Statement 1 is incorrect. CAR T-cell therapy is a form of immunotherapy and gene therapy, not radiation therapy. Radiation therapy utilizes high-energy rays to target and kill cancer cells. In CAR T-cell therapy, a patient's T-cells (a type of immune cell) are genetically modified to express chimeric antigen receptors that allow them to recognize and target specific cancer cells more effectively.
- Statement 2 is correct. This therapy is less demanding and has fewer side effects compared to traditional treatments like chemotherapy.

Source: [Forum IAS](#)

20. Correct Answer is (A)

- Statements 1 and 3 are incorrect. The objective of the SMART food grain storage system (SAFEETY) technology is to reduce post-harvest losses, improve food quality and safety, and enhance food security in the country. It also aims to improve the efficiency and safety of food grain storage by reducing storage losses, ensuring better preservation of grain quality, and enhancing the overall management of grain stocks. The SAFEETY system is a step towards achieving the goals of Digital India initiative. It aligns with the objectives of the Digital India initiative by incorporating advanced technologies such as RFID, automation, and real-time tracking to improve the efficiency, transparency, and accountability in food grain storage management.
- Statement 2 is correct. The SAFEETY system uses RFID tags on grain bags to enable real-time tracking and monitoring of grain stocks. This helps in maintaining accurate inventory records, preventing pilferage, and ensuring better control over the movement of grain bags within the storage facility.

Source: [Forum IAS](#)

21. Correct Answer is (A)

- Statement 1 is correct. The Vaccine Safety Net is a global network of websites established by the World Health Organization (WHO) that provides reliable information on vaccine safety in various languages. They provide vaccine safety information in 43 languages.
- Statement 2 is incorrect. The objective of the Healthy Indian Project is to provide credible, evidence-based health information and fact-checking in multiple Indian languages, including information about vaccines.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

22. Correct Answer is (D)

- Satellite-based toll collection system: It is a GPS based toll collection system. The National Highways Authority of India (NHAI) will implement this system. It will enable vehicles to move freely without the need to stop for toll payments. It will capture the vehicle's registration plate photo and debit the toll amount based on the actual distance traveled by the vehicle on the highway. Every vehicle in this GPS-based toll collection system will need an onboard unit (OBU) linked to a constellation of satellites. The OBU will also connect to a wallet for toll deductions. It will replace the existing radio frequency identification-based FASTag system. Currently, this GPS based toll collection system is in the trial phase.

Source: [Forum IAS](#)

23. Correct Answer is (D)

- The generally accepted foundations of the theory of photon gas were proposed by Planck, Einstein, and Bose. Satyendra Nath Bose was a renowned Indian physicist who made significant contributions to the field of quantum mechanics. His work, in collaboration with Albert Einstein, laid the foundation for Bose-Einstein statistics and the concept of Bose-Einstein Condensates. Bose also developed a new way to derive Planck's Law for blackbody radiation. His approach involved treating photons as indistinguishable particles, leading to a statistical description of the photon gas.

Source: [Forum IAS](#)

24. Correct Answer is (D)

- MXenes are an emerging class of two-dimensional (2D) ceramic nanomaterials that were first discovered in 2011. MXenes uniquely combine metallic conductivity, hydrophilic surfaces, and excellent mechanical properties. They are made from a bulk crystal called MAX. Its properties: High electrical conductivity, Hydrophilic and clay-like surface terminating layers, very high volumetric capacitance, Broad optical absorption, Excellent mechanical properties. Application: Energy Storage, Electromagnetic Shielding, Water Purification, Composites.

Source: [Forum IAS](#)

25. Correct Answer is (A)

- Statements 1 and 2 are correct. HAPS is an unmanned aerial vehicle (UAV). It is designed for extended periods of operation at high altitudes, typically in the stratosphere. HAPS are equipped with solar panels and energy storage systems, enabling them to stay airborne for extended periods, often weeks or months, by harnessing solar energy during the day and utilizing stored energy during the night. HAPS operating cost is significantly lower than that of a satellite. HAPS can provide high-speed data transmission for large-scale events, as well as for various applications such as disaster management, environmental monitoring, and telecommunications, acting as a valuable alternative or complement to traditional satellite systems.
- Statement 3 is incorrect. The primary advantage of HAPS compared to traditional satellites is not their ability to operate beyond geostationary orbit, but rather their lower altitude

## 10 PM Compilation for the Month of February 2024

operations (typically in the stratosphere, around 20-50 km above Earth's surface). This altitude allows HAPS to provide more targeted coverage, better resolution for imaging and data collection, and potential cost savings compared to satellite systems in higher orbits. HAPS are significantly less expensive to develop, launch, and operate compared to traditional satellites.

Source: [Forum IAS](#)

26. Correct Answer is (A)

- Statement 1 is correct. The Defence Acquisition Council is the apex body for decision-making in matters related to military procurement in India. It is responsible for approving major defence acquisitions, including weapons, platforms, and equipment, to meet the operational requirements of the Indian armed forces. The council was formed in 2001. It is headed by Defence minister.
- Statement 2 is incorrect. The DAC's primary role is to provide approvals and policy direction for defense acquisitions. Contract negotiations for international deals are typically handled by separate teams within the Ministry of Defence.

Source: [Forum IAS](#)

27. Correct Answer is (B)

- ORAN promotes interoperability and open interfaces within the Radio Access Network (RAN) ecosystem, enabling mobile network operators to mix and match components from various vendors. This approach enables innovation, reduces reliance on a single vendor, and creates a more competitive and diverse market for RAN equipment. ORAN is based on open standards and architectures, allowing for a more flexible, scalable, and cost-effective deployment of mobile networks, including 5G. It features an open, multi-vendor architecture for deploying mobile networks, contrasting with the single-vendor proprietary architecture.

Source: [Forum IAS](#)

28. Correct Answer is (B)

- Statement 1 is incorrect. Pulsar stars do not emit light and radiation due to nuclear fusion reactions in their cores. Pulsars are neutron stars with strong magnetic fields that emit electromagnetic radiation in the form of rapid pulses as they rotate. These pulses are a result of the interaction between the neutron star's magnetic field and its surrounding environment, not nuclear fusion reactions.
- Statements 2 and 3 are correct. Supernova remnants are the bright, expanding clouds of gas and dust formed when massive stars explode in a supernova event. These remnants are rich in heavy elements produced during the star's lifetime and can provide valuable insights into the processes governing stellar evolution and the recycling of matter in the universe. The Five-hundred-meter Aperture Spherical radio Telescope (FAST) is the world's largest single-dish radio telescope, located in Guizhou Province, China. FAST's immense size and advanced technology enable astronomers to study a wide range of astronomical

## 10 PM Compilation for the Month of February 2024

phenomena, including pulsars, supernova remnants, and other objects that emit radio waves.

Source: [Forum IAS](#)

29. Correct Answer is (C)

- Statements 1 and 2 are correct. Halogens refer to the six nonmetallic elements found in Group 17 (Group VIIa) of the periodic table. The halogen elements are-fluorine (F), chlorine (Cl), bromine (Br), iodine (I), astatine (At), and tennessine (Ts). Halogens are highly reactive and don't exist freely in nature. They are the most reactive nonmetals. Halogens are the only group on the periodic table where elements exist as solids, liquids, and gases at room temperature. They are strong oxidizers and have very high electronegativities. Fluorine is obtained from a calcium salt known as calcium fluoride, or fluorspar. It is a highly reactive element. In compounds, fluorine is the most prevalent halogen found in Earth's crust. It is used in making fluorochemicals, plastics, agrochemicals, lithium-ion batteries, and drugs.

Source: [Forum IAS](#)

30. Correct Answer is (A)

- Statement 1 is correct. Formaldehyde is a colorless, strong-smelling gas widely used in various industries for producing building materials, such as plywood and adhesives, as well as household products like cosmetics and certain fabrics.
- Statement 2 is incorrect. Frozen smoke, or aerogel, are highly porous, lightweight materials typically made from silica, metal oxides, or other materials, using a process called sol-gel. They exhibit unique properties, such as low thermal conductivity and high surface area, making them useful in various applications, including insulation, filtration, and even aerospace technology. The term "frozen smoke" refers to a technology rather than a natural phenomenon. It describes sensors made from highly porous materials called aerogels, which are designed to detect toxic substances like formaldehyde in real time. Aerogels are also referred to as "liquid smoke" due to being more than 99% air by volume, allowing gases to easily move through their open structure.

Source: [Forum IAS](#)

31. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. The NASA-ISRO Synthetic Aperture Radar (NISAR) satellite is a dual-frequency satellite, operating at L-band and S-band frequencies. This dual-frequency capability allows for better discrimination between various land cover types and improved monitoring of Earth's surface changes. NISAR will provide detailed observations of Earth's surface, capturing changes in ice sheets, land deformation, and ecosystems. It will help scientists better understand the impacts of climate change, natural hazards, and human activities on the planet's surface. The satellite has been developed for Low Earth Orbit (LEO) observation, with an altitude of 747 km.

Source: [Forum IAS](#)

## 10 PM Compilation for the Month of February 2024

32. Correct Answer is (C)

- Statements 1 and 3 are correct. Alaskapox viruses are zoonotic, meaning they can be transmitted from animals to humans. These viruses can infect various mammals, including humans, often through direct contact with infected animals or their bodily fluids. It is a double-stranded DNA virus, meaning its genetic material consists of two complementary strands of DNA. This characteristic distinguishes it from other types of viruses, such as single-stranded DNA or RNA viruses.
- Statement 2 is incorrect. Alaskapox belongs to the Orthopoxvirus. Orthopoxvirus is a genus of viruses in the family Poxviridae. Vertebrates, including mammals and humans, and arthropods serve as natural hosts of this virus. Diseases caused by this virus are smallpox, cowpox, horsepox, camelpox, and monkeypox.

Source: [Forum IAS](#)

33. Correct Answer is (B)

- Statement 1 is incorrect. The Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) satellite is a NASA mission designed to study the interplay of light, aerosols, and clouds. It aims to collect information on ocean ecology and global biogeochemistry. PACE's mission is to observe the Earth's ocean color, biogeochemistry, ecology, carbon cycle, aerosols, and clouds. The satellite will also help researchers learn more about the relationship between the atmosphere and ocean.
- Statements 2 and 3 are correct. PACE is placed in a sun-synchronous orbit, which means it maintains a consistent angle between the sun and the satellite's orbital plane. This orbit allows PACE to observe Earth's surface under similar lighting conditions throughout the year, making it easier to compare data over time. Sun-synchronous orbit means that it will always be synced to the same position relative to the Sun. The mission will help understand the influence of particles in the air, like dust and smoke, on cloud formation, warming and cooling of the planet.

Source: [Forum IAS](#)

34. Correct Answer is (C)

- Statements 1 and 2 are correct. An ultracold atom is an atom with a temperature near absolute zero. At low temperatures near absolute zero, atoms behave according to the principles of quantum mechanics rather than classical physics. The commonly used techniques for the study of ultracold atoms is by deploying magneto-optical traps with high-power laser cooling techniques. Cold atoms of elements like sodium, potassium, rubidium are commonly studied. Detection techniques like the fluorescence, absorption or phase-contrast imaging techniques are used. The imaging through fluorescence or absorption techniques are widely used. The Future Circular Collider (FCC) is a particle accelerator currently under design, intended to accommodate the next generation of particle colliders. The FCC aims to design a hadron collider with a center-of-mass energy of about 100 TeV (trillion electron volts), which is eight times more powerful than the Large Hadron Collider's 13 TeV. The FCC aims to build upon the ongoing research at the Large Hadron Collider (LHC). It will enhance our understanding of

## 10 PM Compilation for the Month of February 2024

fundamental physics. It will foster advancements in fields such as cryogenics, superconductivity, vacuum tech, and detector instruments.

Source: [Forum IAS](#)

35. Correct Answer is (B)

- Statements 1 and 3 are incorrect. Bubonic plague is a bacterial infection caused by the bacterium *Yersinia pestis*. It is a severe bacterial infection caused by a bacteria called *Yersinia pestis*, which is typically found in small mammals and their fleas. Bubonic plague is treatable with antibiotics. It can be cured with antibiotics like Ciprofloxacin, levofloxacin, moxifloxacin, Gentamicin, and Doxycycline. Bubonic plague is named after the swollen lymph nodes (buboes) it causes. It resulted in millions of deaths in Europe during the Middle Ages. The plague is also known as the Black Death.
- Statement 2 is correct. The Bubonic Plague spreads between animals and humans through flea bites, direct contact with infected tissues, and inhaling infected respiratory droplets.

Source: [Forum IAS](#)

36. Correct Answer is (B)

- Micellar water is used for effectively removing makeup and sunscreen due to its cleansing properties. Micellar water is a gentle solution with a mild detergent. It is a skincare product made up of tiny oil molecules called micelles – groups of molecules that are good at removing oil. The micelles in micellar water are created by special molecules called surfactants. These molecules have both hydrophilic (water-loving) and hydrophobic (water-hating) properties. These micelles molecules have water-friendly outer layer that easily mixes with water. It is a skincare product that consists of purified water, hydrating ingredients like glycerin, and mild surfactants that form micelles. These micelles act like magnets, attracting and lifting dirt, makeup, and sunscreen from the skin without requiring vigorous rubbing or rinsing.

Source: [Forum IAS](#)

37. Correct Answer is (C)

- Statements 1 and 2 are correct. Diphtheria is a serious contagious bacterial infection that primarily affects the nose and throat. It can lead to the formation of a thick, gray coating in the throat, making it difficult to breathe and swallow. The infection can also produce a toxin that can spread to other organs and cause complications such as heart and nerve damage. Diphtheria is caused by the bacterium *Corynebacterium diphtheriae*. The bacteria can spread from person to person through respiratory droplets, such as those produced by coughing or sneezing, or by direct contact with contaminated objects. A person can also be infected by breathing in infected respiratory droplets in the air.

Source: [Forum IAS](#)

38. Correct Answer is (B)

- Statement 1 is incorrect. Generative AI is not designed primarily to mimic human decision-making processes. Instead, it focuses on learning the underlying patterns and structure of data to generate new, original content that resembles the input data. These models can

## 10 PM Compilation for the Month of February 2024

generate images, text, audio, and other forms of data, making them useful for various applications, including art, music, writing, and even scientific research.

- Statement 2 is correct. The term "Generative" in Generative AI refers to the ability of these models to learn how to create new data, rather than simply recognizing or classifying existing data. They learn the patterns and structures within a dataset and use that knowledge to generate new, similar data points. This could be text, images, code, and more. For example, a generative model may learn how to generate images that resemble faces given a set of parameters (such as the eyes, hair, or skin colour etc.).

Source: [Forum IAS](#)

39. Correct Answer is (B)

- Both asteroids and comets originate from the same region in the early Solar System, known as the protoplanetary disk. This region consisted of dust, gas, and ice, from which celestial bodies like asteroids and comets formed. Over time, asteroids and comets diverged in composition and characteristics but share a common origin in this primordial disk of material around the young Sun.

Source: [Forum IAS](#)

40. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. SOFIA was a modified Boeing 747SP aircraft that operated at altitudes of 38,000-45,000 feet, flying into the stratosphere. It was used to make observations of complex molecules, new solar systems, and planets in the solar system. It used infrared light to observe the universe. It could observe the universe in the widest range of infrared light. It is operated jointly by NASA and the German space agency. However, the mission was cancelled 2022 due to its high cost and inadequate scientific output.

Source: [Forum IAS](#)

41. Correct Answer is (A)

- Statements 1 and 3 are incorrect. GSLV is a three-stage launch vehicle designed to place satellites in Geosynchronous Transfer Orbit (GTO) or Geosynchronous Earth Orbit (GEO), primarily for communication purposes. GSLV has a higher failure rate compared to PSLV. PSLV is considered one of the most reliable launch vehicles in the world. GSLV has the capability to put a heavier payload in orbit than the Polar Satellite Launch Vehicle (PSLV).
- Statement 2 is correct. GSLV has been primarily designed for launching communication satellites, which require placement in GTO or GEO to maintain a fixed position relative to the Earth's surface.

Source: [Forum IAS](#)