# DAILY MCQs COMPILATION with EXPLANATIONS

FEBRUARY, 2025



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# HISTORY, ART & CULTURE

1.	Which renowned Indian poet dedicated his only science book, Visva-Parichay, to Satyeno Nath Bose?							
	(a) (c)	Bankim Chandra Sarat Chandra C			ау	(b) (d)	Rabindranath Tag Premchand	ore
2.	Whi (a) (b) (c) (d)	It is a tribal dand	e per ions omer	formed i are inspir n particip	n Tamil ed by t ate in t	Nadu heme he Dh	es such as mytholog nimsa dance.	
3.	Con: 1. 2.	Both men and w	omer	n particip	ate in K	Kalbel		angible Cultural Heritage of
	Whi	ch of the stateme	nts g	iven abov	e is/are	e corr	rect?	
	(a) (c)	1 only Both 1 and 2				(b) (d)	2 only Neither 1 nor 2	
4.	Con	sider the followin	g sta	tements	regardi	ng th	e of Fort William:	
	1.		captı		_	_		Villiam during the Siege of
	2.	The present Fort after their victor					by the British as a d	efensive military fortification
	Whi	ch of the stateme	nts g	iven abov	e is/are	e corr	rect?	
	(a)	1 only				(b)	2 only	
	(c)	Both 1 and 2				(d)	Neither 1 nor 2	
5.	Con	sider the followin	g sta	tements	regardi	ng Ba	ali Jatra:	
	1. Bali Jatra is celebrated in Odisha, to commemorate ancient maritime trade with Southeast Asia.							
	2.	The festival is ob- women float ligh						Boita Bandana' ritual, where
	Whi	ch of the stateme	nts g	iven abov	e is/are	e corr	rect?	
	(a)	1 only				(b)	2 only	
	(c)	Both 1 and 2				(d)	Neither 1 nor 2	
6.	With	n reference to tra	ditior	nal dance	forms	, Con	sider the following	pairs:
	D	ance form		State				
	1. K	Calbelia Dance		Odisha				
	2. 6	otipua dance		Gujarat				

Kerala

3. Seethakali



	How many of the above pairs are correctly matched?							
	(a)	Only one pair		(b)	Only two pairs			
	(c)	All three pairs		(d)	None of the pair	S		
7.	The	Zamindari Systen	n was introdu	iced in Britis	h India under whic	ch of the following acts?		
	(a)	Ryotwari Settlen	nent Act, 1792	2 (b)	Permanent Settl	ement Act, 1793		
	(c) Mahalwari Settlement Act, 1833 (d) Land Revenue Regulation Act, 1810							
8.	With	n reference to the	Sant Guru R	avidas, cons	ider the following	statements:		
	1.	He was a disciple	e of Tulsidas a	nd actively o	opposed caste-base	ed discrimination.		
	2.	Ravidas's devoti Sahib.	onal verses w	vere include	d in the Sikh scrip	tures known as Guru Granth		
	Whi	ch of the stateme	ents given abo	ove is/are co	rrect?			
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 nor 2			
9.	Con	sider the followin	g statements	:				
	1.	Dhokra is the protection technique.	ocess of castir	ng brass, bel	l-metal, and bronze	e objects through the lost wax		
	2.	Dhokra is preva Chhattisgarh.	lent across va	arious Indian	states, with a sign	ificant concentration being in		
	Whi	ch of the followin	ig statements	is /are corr	ect ?			
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 nor 2			
10.	The	Golden Threshold	d (1905), a lite	erary work, is	s related to which o	of the following personalities?		
	(a)	Rabindranath Ta		(b)	Mahatma Gandh			
	(c)	Sarojini Naidu		(d)	Annie Besant			
11.	With	n reference to the	Chhatrapati	Shivaji Mah	araj, consider the	following statements:		
	1.	His administration		lized, with th	ne king as the supro	eme authority, assisted by the		
	2.	He implemented	l revenue refo	orms like Cha	outh and Sardeshm	ukhi.		
	Whi	ch of the stateme	ents given abo	ove is/are co	rrect?			
	(a)	1 only	J	(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 nor 2			
12.	Whi	ch among the foll	lowing was th	ne founder o	f the Chalukya dyr	nastv?		
	(a)	Someswara I	0	(b)	Pulakesin I	,		
	(c)	Dantidurga		(d)	Rajendra I			
13.	Con	sider the followin	g statements	regarding V	iiavdurg Fort:			
	1.	It served as a nav	_	•				
	2.			•	River in West Benga	ıl.		
	3.				ll of the Maratha E			
	Whi	ch of the stateme						
	(a)	1 and 2 only		(b)	1 and 3 only			
	(c)	2 and 3 only		(d)	1, 2, and 3			



14.	Cons	sider the following	g statements r	egarding th	e Jhumoir Binandin	i dance:	
	1.	It is a traditional	folk dance perf	formed prin	narily by the Adivasi	tea tribes.	
	2.	It is accompanied	d by traditional	instrument	s like the Madal, Dh	ol, Taal and Flute.	
	Which of the statements given above is/are <i>not</i> correct?						
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		
<b>15.</b>	Cons	sider the following	g statements w	vith referen	ce to Lepakshi tem	ple:	
	1.	It is located in Ar	unachal Prades	sh.			
	2.	It is famous for it	s Dravidian-sty	le architect	ure.		
	3.	UNESCO annound	ced its inclusio	n in the pro	visional list of UNES	CO Heritage Sites in 2023.	
	How	many of the abov	ve statements	are correct	?		
	(a)	Only one		(b)	Only two		
	(c)	All three		(d)	None		
16.	Wit	h reference to the	Buddhism, co	nsider the	following statemen	ts:	
	1.	Theravada Buddh Buddha's teachin	-	es personal	enlightenment thro	ough strict adherence to the	
	2.	Mahayana Buddh	nism includes e	arliest Budo	dhist scripture like T	ripitaka.	
	Whi	ch of the stateme	nts given abov	e is/are cor	rect?		
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		
17.		ch of the followi fications?	ng forts was	known as	the 'Gibraltar of t	he East' due to its strong	
	(a)	Raigad		(b)	Sindhudurg		
	(c)	Vijaydurg		(d)	Torna		
18.			_		_	Ali Ai Ligang festival?	
	(a)	_			deities Shiva and Par		
	(b) (c)	•			lus agricultural prod	with agricultural prosperity.	
	(d)	It is a tribal war d	•	_		with agricultural prosperity.	
19.		ch of the following		_	_		
	(a)	Hind Swaraj	0	(b)	India Wins Freedo	m	
	(c)	Anandmath		(d)	The First War of In	dian Independence	
20.	'Her	ath festival' is mai	inly celebrated	l in which o	f the following regi	ons in India?	
	(a)	Jammu and Kashi	mir	(b)	Rajasthan		
	(c)	Assam		(d)	Goa		
21.	With	n reference to the	'Khadi', consid	der the follo	owing statements:		
	1.				· · · · · · · · · · · · · · · · · · ·	woven cotton, silk, or wool.	
	2.	It is associated w	ith the Indian i	ndependen	ce movement led b	y Mahatma Gandhi.	
		ch of the stateme	nts given abov				
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		



**22.** Consider the following pairs related to sufism:

Term Meaning

1. Murid Spiritual guide or teacher in Sufism.

2. Pir A saint.

3. Sheikh (Murshid) A disciple or follower of a Sufi order.

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

(a) 1 and 2

(b) 2 only

(c) 1 and 3

(d) 3 only

- **23.** Consider the following statements regarding Nanaji Deshmukh:
  - 1. He was a key figure in the Sampoorna Kranti (Total Revolution) movement led by Acharya Vinoba Bhave.
  - 2. He established the Deendayal Research Institute (DRI) to promote the principles of Integral Humanism.
  - 3. He was posthumously awarded the Bharat Ratna for his contributions to rural development.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2, and 3

#### **EXPLANATIONS**

# 1. (b)

Context: February 4 marks the death anniversary of Satyendra Nath Bose (1894-1974).

#### **About Satyendra Nath Bose**

- He was an Indian mathematician and physicist known for his work on quantum mechanics.
- He developed the foundation for Bose-Einstein statistics (B-E statistics) and Bose-Einstein condensate (BEC).
- Boson, a class of particles that obey Bose statistics, is named after him.
  - In particle physics, a boson is a subatomic particle whose spin quantum number has an integer value (0,1,2 ...).

#### **Honours**

- Rabindranath Tagore dedicated his only book on science, Visva-Parichay, to Bose.
- He was awarded Padma Vibhushan in 1954.
- In 1958, he became a Fellow of the Royal Society.
- He was nominated as member of Rajya Sabha.

#### 2. (a)

<u>In News</u>: Tribal families in Neelabandha celebrated their first electricity supply since Independence with the 'Dhimsa' dance.

#### **Dhimsa Dance**

- Dimsa is a popular dance performed by tribes, including Bagata, Valmiki, Poraja, Khond, Gadaba, Kondadora, Mukadora, Kotia in **Andhra Pradesh**.
- It represents the unity and cultural heritage of the tribal communities.
- Themes: The dance variants are based on themes like mythology, folktales, economic activities, kinship, and marital life.
- Music and Instruments: Music is essential to the dance, with instruments like dappu, tudumu, mori, kidgi, gilka, and jodukommulu (now almost out of use) played by men.



• **Performance:** It is performed during festivals, marriages, and religious occasions, with a strong presence during Chaitrapurab (Eetela Panduga) in the agency area of ASR District. **Both men and women** participate in the Dhimsa dance.

# 3. (c)

#### Context

- A year-old night school in Ajmer's Kishangarh tehsil is unlocking new opportunities for Kalbeliya women, providing them with access to education and empowerment.
  - The Kalbeliya are a nomadic tribe from Rajasthan, historically known for snake charming, folk songs, and dances.

# Kalbelia Dance: A Living Heritage

- Kalbelia dance, also known as Sapera dance, is an integral part of Kalbelia culture and a symbol of their identity.
- Both men and women participate:
  - Women wear flowing black skirts, twirl gracefully, and imitate serpent movements.
  - Men accompany them with musical instruments such as the khanjari (percussion instrument) and poongi (woodwind instrument), traditionally used for snake charming.
- Dancers adorn traditional tattoo designs, intricate jewellery, and richly embroidered garments with mirror work and silver thread.
- Recognized globally, Kalbelia dance was inscribed in 2010 on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity.

# 4. (a)

**Statement 1** is correct: The Black Hole of Calcutta was a small dungeon (underground prison cell) in Fort William, Calcutta (now Kolkata), where British prisoners of war were held during the Bengal War. In 1756, the Nawab of Bengal, Siraj-ud-Daula, captured the fort and subjected around 126 British prisoners, including the governor, to inhumane conditions, resulting in the deaths of many. The term "Black Hole" was coined due to the extremely overcrowded and poorly ventilated nature of the dungeon, which led to asphyxiation and death of the prisoners.

**Statement 2 is not correct:** While the present Fort William was built by the British, it was constructed after the Battle of Plassey (1757), not the Battle of Buxar (1764). The Battle of Plassey solidified British control in the region, leading to the construction of the new fort as a symbol of their power and a key defensive structure.

#### 5. (a)

**Context:** The Central Government has officially granted the prestigious 'National Fair' status to Odisha's iconic Baliyatra (Bali Jatra).

#### **About**

- Bali Jatra is an annual festival held in **Cuttack, Odisha**, commemorating the maritime trade links between ancient Odisha and Southeast Asia, particularly Bali (Indonesia).
- Held on **Kartika Purnima**, it features fairs, rides, food, dance, and the 'Boita Bandana' ritual, where women float lighted boats on the Mahanadi. The festival honors the skill of ancient sailors of the Kalinga empire.

#### 6. (a)

# Kalbeliya dance

• The Kalbeliya are a nomadic tribe from Rajasthan, historically known for snake charming, folk songs, and dances.



• Kalbelia dance, also known as Sapera dance, is an integral part of Kalbelia culture and a symbol of their identity.

#### Seethakali

- Seethakali is believed to have originated at Perinad in Kollam district of Kerala.
- It is a centuries-old **Dravidian dance form** which is a blend of songs, storytelling and fast movements.
- This art form was first performed some 150 years back by the people of **Vedar** and **Pulayar** communities. The folk art form was a part of **Onam festivities** in the past.

# Gotipua dance

- It is a traditional dance form in the state of **Odisha**, and the precursor of Odissi classical dance.
- The dance is **executed by a group of boys** who perform acrobatic figures inspired by the life of Radha and Krishna.
  - They dress as women to praise Lord Jagannath and Lord Krishna.

# 7. (?)

The Zamindari System was introduced by **Lord Cornwallis in 1793** under the **Permanent Settlement Act**. It established zamindars (landlords) as intermediaries responsible for collecting land revenue from peasants and paying a fixed amount to the British government.

#### **Revenue Collection**

- 89% of the collected revenue went to the British.
- Zamindars retained 11% as their commission.
- Failure to pay the fixed revenue on time resulted in confiscation of zamindari rights.

# **Ownership Rights**

- Zamindars had absolute control over the land.
- They could lease, sell, or transfer their land at will.
- Peasants, however, had no ownership rights and were often exploited.

The Zamindari System was mainly practiced in: West Bengal, Bihar, Uttar Pradesh, Madhya Pradesh, Odisha, parts of Tamil Nadu and Andhra Pradesh.

# 8. (b)

**Context:** PM Modi paid tributes to Sant Guru Ravidas on his birth anniversary.

#### **About**

- Guru Ravidas, a revered saint of the Bhakti movement in the **15th and 16th centuries**, is known for his powerful message of unity, devotion, and service to humanity.
- He was a disciple of **Sant Kabir**, and is considered the founder of the **Ravidassia religion**.

#### Life and Teachings

- He was a staunch advocate against **caste-based discrimination** and worked tirelessly for the **upliftment of marginalized communities.**
- He promoted the principles of human **equality**, **love**, **and brotherhood**, transcending religious and social barriers.
- He gave a very broad message of 'karma' to society by coining in the popular Hindi saying 'Mann Changa to Kathauti Mein Ganga' (If your mind is pure, the Ganges is in your tub).

#### Legacy

- Ravidas's devotional verses were included in the Sikh scriptures known as Guru Granth Sahib.
- The Panch Vani text of the Dadu Panthi tradition within Hinduism also includes numerous poems of Ravidas.



• The Chief Architect of our Constitution, **Dr. B.R. Ambedkar** embodied the Constitutional principles around the values expressed by Guru Ravidasji.

# 9. (c)

**In News**: Prime Minister Narendra Modi gifted French President Emmanuel Macron a traditional Dokra artwork depicting musicians playing Indian instruments.

**Statements 1 and 2 are correct:** Dokra art from Chhattisgarh is a traditional metal-casting craft using the ancient lost-wax technique.

- It is also practiced in states like Jharkhand, Odisha, West Bengal and Telangana.
- The artwork, depicting musicians in dynamic poses, emphasizes the cultural significance of music in Indian heritage.

# 10. (c)

**In News:** India celebrates Sarojini Naidu's birth anniversary on February 13 as National Women's Day, marking her 146th birth anniversary in 2025.

# **About Sarijini Naidu**

- Sarojini Naidu, born on February 13, 1879, in Hyderabad, was an inspiring poet and political activist.
- She is famously known as the Nightingale of India.
- She became the first female governor of independent India when she was appointed as the Governor of Uttar Pradesh in 1947.
- Poetry and Recognition: Naidu began writing poetry at a young age, penning her first long poem, The Lady of the Lake.
  - She was elected as fellow of the Royal Society of Literature in 1914 after publishing her first poetry collection.
  - Naidu's poetry collection The Golden Threshold (1905) earned her the title "Bul Bul e Hind" and recognition worldwide.

#### 11. (c)

**Context:** The Prime Minister, Narendra Modi has paid homage to Chhatrapati Shivaji Maharaj on his Jayanti.

# Chhatrapati Shivaji Maharaj

- Born on February 19, 1630, he was the **founder of Maratha empire** and is known for his bravery as well as for his **good governance**.
- Over the course of his life, Shivaji engaged in both alliances and hostilities with the Mughal Empire, the Sultanate of Golkonda, the Sultanate of Bijapur and the European colonial powers.
- Shivaji's administration was characterized by a **centralized system** with the king as the head, assisted by the **Ashtapradhan council**.
- Other main characteristics of Shivaji's administration that helped in consolidating the Maratha Kingdom were the levy of **two new taxes**, namely 'chauth' and 'Sardeshmukhi'.

# 12. (b)

#### In News

• Three Kannada inscriptions from the Kalyana <u>Chalukya</u> era were noticed for the first time in Kankal village of Telangana.

#### Chalukyas

• The Chalukyas of Badami began their rule in North Karnataka.



- Pulakesin I (543-66 CE), the founder of the Chalukya dynasty, fortified Badami and began territorial expansion.
- **Pulakesin II** defeated Harsha of Kanauj, securing a major victory and assuming the title "Parameshvara" (Supreme Lord).
- The Chalukyan rule in Badami **ended around 750 CE** when Rashtrakuta feudatory Dantidurga defeated Kirtivarman II, bringing an end to the Chalukya dynasty.

# Chalukyas of Kalyana (Later Chalukyas):

- Known as the Later Chalukyas or Kalyani Chalukyas, descended from the Badami Chalukyas.
- Taila II, a key figure, rose to power under the Rashtrakutas around 957 CE.
- Defeated Rajaraja Chola (992 CE), Latas, Gurjaras, Chedis, and Paramaras.

# 13. (b)

**Statement 1 is correct:** Vijaydurg Fort was a significant naval base for the Maratha Empire under the leadership of Chhatrapati Shivaji Maharaj. It played a crucial role in his naval strategies.

**Statement 2 is not correct:** Vijaydurg Fort is located on the western coast of Maharashtra, India, not on the banks of the Hooghly River in West Bengal.

**Statement 3 is correct**: The British did capture Vijaydurg Fort in 1818, after the decline of the Maratha Empire.

# 14. (d)

#### In News

• More than 8,000 artists from tea garden areas across Assam will participate in a spectacular performance of the traditional **Jhumoir dance**.

#### **About Jhumoir Binandini dance**

- It is a traditional folk dance performed primarily by the Adivasi tea tribes during the harvest season.
- It is accompanied by traditional instruments like the Madal, Dhol, Taal and Flute.
- It involves performers standing in rows, holding each other's waists and swaying rhythmically while singing couplets and clapping hands.
- The dance is a celebration of community, culture and the rich heritage of the tea tribes.

#### 15. (b)

**In News**: Historian urged government to take steps to get Lepakshi temple included in UNESCO heritage list

**Statement 1 is not correct :** Lepakshi temple is located in Lepakshi, **Andhra Pradesh**, is a remarkable 16th-century architectural and historical site.

**Statements 2 and 3 are correct**: Lepakshi temple is famous for its **Dravidian-style architecture**, intricate stone carvings, and monolithic structures.

- It is dedicated to Lord Veerabhadra, a form of Lord Shiva.
- In March, 2023, UNESCO included the Lepakshi Veerabhadra Temple complex in its provisional list of Heritage Sites.

#### 16. (a)

**In News:** Recent excavations and discovery of **ancient relics in Ratnagiri in Odisha** have unearthed significant historical artifacts, shedding **new light on the region's rich Buddhist heritage.** 



Buddhism was separated into the Hinayana and Mahayana sects in the Fourth Buddhist Council
(72 AD) held in Kashmir, under the patronage of Kushan King Kanishka because of differences
in philosophy, practice, and interpretation of Buddhist teachings.

Statement 1 is correct: Hinayana Buddhism (Lesser Vehicle, aka Theravāda Buddhism) emphasizes personal enlightenment (Arhat ideal) through strict adherence to the Buddha's teachings.

• It focuses on monastic discipline and the earliest Buddhist scriptures (Pali Canon or Tripitaka).

Statement 2 is not correct: Mahayana Buddhism (Greater Vehicle) was developed later (around the 1st century BCE) emphasizing compassion (Karuna) and the Bodhisattva ideal (seeking enlightenment for all beings i.e Universal enlightenment or Bodhisattva path).

• It includes many texts beyond the Pali Canon (Tripitaka), such as the Lotus Sutra and Prajnaparamita Sutras (Sanskrit and Chinese texts).

# 17. (c)

#### Context

- A high-level delegation led by Maharashtra Cultural Affairs Minister is in Paris to seek **UNESCO World Heritage status for 12 forts** associated with Chhatrapati Shivaji Maharaj.
  - The forts of Raigad, Rajgad, Pratapgad, Panhala, Shivneri, Lohagad, Salher, Sindhudurg, Suvarnadurg, Vijaydurg, Khanderi and Jinji have been included in the proposal.
  - Vijaydurg Fort, strategically located along the Konkan coast, was considered the 'Gibraltar of the East' due to its strong naval defense.

# 18. (c)

# **About Ali Al Ligang Festival**

- Celebrated on the **first Wednesday of Fagun** (February-March), the festival is deeply rooted in agriculture, tradition, and cultural heritage.
- Ali Ai Ligang has been celebrated for centuries in rural Mising villages. The Mising people have transitioned to settled wet paddy farming and practicing Jhum Cultivation.
- The festival begins with the hoisting of the Laitom Tomchar (festival flag). Offerings are made to Donyi Polo (Sun and Moon gods) for agricultural prosperity.
- Men and women perform **Gumrag Dance**, symbolizing joy and prosperity.

#### 19. (d)

# Context

PM Modi paid tribute to Veer Savarkar on his death anniversary.

#### **About**

- Veer Savarkar wrote The First War of Indian Independence in 1909, arguing that the 1857 Revolt was India's first organized struggle for freedom.
- India Wins Freedom was written by Maulana Abul Kalam Azad.
- Hind Swaraj was written by Mahatma Gandhi.
- Anandmath was a novel by Bankim Chandra Chattopadhyay.

## 20. (a)

Herath festival holds deep religious and cultural significance for the Kashmiri Hindu community.

#### **About 'Herath' Festival**

- The name Herath is derived from the Sanskrit term Hararatri, meaning "The Night of Hara", a reference to Lord Shiva.
- The festival is observed with a night of prayers, followed by a day of feasting and celebrations.



- Key Rituals and Practices:
  - Vatuk Pooja: Main worship using a Kalash filled with water and walnuts, symbolizing the four Vedas.
  - Dooni-Mavas: Walnuts are distributed as sacred offerings.
  - Greetings: "Herath Poshte" is used to wish others well.
  - **Food:** Fish and mutton are prepared and consumed, unlike other fasting traditions for Maha Shivratri.

# 21. (c)

**Both the statements are correct:** Khadi is a traditional Indian fabric made from hand-spun and hand-woven cotton, silk, or wool.

- It is associated with the Indian independence movement led by Mahatma Gandhi.
  - It symbolizes self-reliance and the promotion of indigenous products.
- Key Characteristics of Khadi:
  - Hand-Spun: The yarn is spun by hand using a spinning wheel (charkha).
  - Hand-Woven: The yarn is woven into fabric using traditional looms.
  - **Eco-Friendly:** Since it is hand-made, Khadi is more sustainable compared to machine-made fabrics.
  - Natural Fabric: It is made from cotton, silk, or wool, all of which are natural fibers.

# 22. (b)

Sufis contributed to spirituality, poetry, and music in India.

- Key figures like Moinuddin Chisti, Nizamuddin Auliya, Amir Khusrau, and Kabir shaped the Bhakti movement, merging Hindu and Sufi practices.
- Saints like Namdev, Tukaram, and Guru Nanak Dev integrated Sufi and Hindu devotion.

#### **Terms Related to Sufism**

- Tariga: Spiritual path or order followed by Sufi practitioners.
- Pir: A saint. Hence, Pair 2 is correct.
- Sheikh (Murshid): Spiritual guide or teacher in Sufism. Hence, Pair 3 is not correct.
- Murid: A disciple or follower of a Sufi order. Hence, Pair 1 is not correct.
- Khanqah: A Sufi lodge or retreat for spiritual practices.
- Qalb: The heart, spiritual center of understanding.
- Wali: A saint or friend of God.
- Muragaba: Meditation or contemplation on God's presence.

## 23. (b)

**In News:** Union Home Minister paid tribute to Bharat Ratna Nanaji Deshmukh on his 15th death anniversary.

#### **About**

- Born on 11th October 1916 in Maharashtra, Chandikadas Amritrao Deshmukh, widely known as **Nanaji Deshmukh**, emerged as a prominent figure in social reform, politics, and rural development.
- Inspired by **Lokamanya Tilak's nationalism** and the teachings of Dr. Keshav Baliram Hedgewar, the founder of the Rashtriya Swayamsevak Sangh (RSS), dedicated his life to nation-building through grassroots empowerment.



- He was a firm believer in self-reliant villages, aligning with **Mahatma Gandhi's Gram Swaraj model** and Pandit Deendayal Upadhyaya's 'Antyodaya' philosophy.
- Founded **Chitrakoot Gramoday Vishwavidyalaya**, India's first rural university, providing education tailored to rural needs.
- Established **Saraswati Shishu Mandirs**, schools that continue to impart traditional Indian values and modern education to thousands of children.
- Was **nominated to the Rajya Sabha in 1999**, recognizing his contributions to public service.





# **ECONOMY**

1.	Wit	ith reference to the Middle Income Countries, consider the following statements:						
	1.	They are home to	75% of the world's	popul	llation and 66% of the world's poor.			
	2.	Saudi Arabia, Latvia, Bulgaria and South Korea have transitioned to higher income levels.						
	Wh	ich of the stateme	nts given above is/a	re cor	rrect?			
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 nor 2			
2.	Wit	h reference to the	debt market in eco	nomy,	, consider the following statements:			
	1.	It is the market w traded.	here fixed income s	ecurit	ties of various types and features are issued an	ıd		
	2.	It can be issued b	y commercial entition	es like	e financial Institutions.			
	Wh	ich of the stateme	nts given above is/a	re cor	rrect?			
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 nor 2			
3.	Con	nsider the following	g statements:					
	1.	The Union Budge the Constitution.		to as	the annual Financial Statement in Article 112 (	of		
	2.	Former Prime Mi	nister Morarji Desai	holds	s the record for presenting the most budgets.			
	3.	In 2019, Finance I the budget after		arama	an became the second woman to have presente	d		
	Wh	ich of the stateme	nts given above are	corre	ect?			
	(a)	1 and 2 only		(b)	2 and 3 only			
	(c)	1 and 3 only		(d)	1, 2 and 3			
4.	Con	nsider the following	g statements with re	eferen	nce to Economic Survey 2024-25.			
	1.	India accounts fo	r the seventh-larges	t shar	re in global services exports.			
	2.	The 'Agriculture a	and Allied Activities	secto	or contributes 45 per cent of the GDP.			
	3.	In FY24, the India	in automobile dome	stic sa	ales grew by 12.5 per cent.			
	Hov	w many of the abov	ve statements are c	orrect	t?			
	(a)	Only one		(b)	Only two			
	(c)	All three		(d)	None			
5.		`		•	ne Union Budget 2025-26:			
	1. 2.		s the theme of this		•	٠, ٨		
	۷.	Exports.	Rinoco 4 Eligilles Ol	Devel	elopment – Agriculture, MSME, Investment an	ıu		



Which of the statements given above is/are correct?

	(a)	1 only			(b)	2 only			
	(c)	Both 1 and 2			(d)	Neither 1 nor	2		
6.	Cons	sider the following statements with reference to Union Budget 2025-2026							
	1.	The FDI limit for invest their entire				reased from 74	% to 100% for companies which		
	2.	Fiscal deficit is targeted at 4.4% of GDP in 2025-26.							
	3.	Individuals earning up to ₹12 lakh annually will not have to pay any income tax under the new tax regime.							
	4.	The Makhana Bo	oard in U	ttar Prades	sh will be	e established to	improve production.		
	Whi	ch of the stateme	ents give	n above ar	e correc	ct?			
	(a)	1, 2 and 3 only			(b)	2 and 4 only			
	(c)	4 only			(d)	1, 3 and 4 only	У		
7.	Cons	sider the followin	ig statem	nents:					
	1.	India is the largest producer of pulses in the world.							
	2.	Uttar Pradesh is	the large	est produce	er of pul	ses in India.			
	Whi	ch of the stateme	ents give	n above is/	are cor	rect?			
	(a)	1 only			(b)	2 only			
	(c)	Both 1 and 2			(d)	Neither 1 nor	2		
8.	With	With reference to Cardamom, consider the following statements:							
	1.	It belongs to the	same bo	otanical fan	nily as g	inger and turm	eric (Zingiberaceae).		
	2.	India is the world's largest producer of cardamom.							
	3.	Kerala is the larg	gest carda	amom prod	ducing st	tate in India.			
	Whi	ch of the stateme	ents give	n above ar	e correc	ct?			
	(a)	1 and 2 only			(b)	2 and 3 only			
	(c)	1 and 3 only			(d)	1, 2 and 3			
9.	Cons	sider the followin	ig statem	nents regar	ding Ma	akhana:			
	1.	It is also known as fox nuts and is harvested from the Euryale ferox plant.							
	2.	West Bengal alo	ne contri	butes appr	oximate	ely 90% of the w	vorld's total production.		
	Whi	ch of the stateme	ents give	n above is/	are cor	rect?			
	(a)	1 only			(b)	2 only			
	(c)	Both 1 and 2			(d)	Neither 1 nor	2		
10.		at is the primary one Union Budget 2	-		ime Mir	nister Dhan-Dha	aanya Krishi Yojana' introduced		
	(a)	Providing free in	rigation	facilities to	farmer	S			
	(b)	Enhancing agric	ultural p	roductivity	in 100 l	ow-yield distric	ts		
	(c)	Expanding rural	banking	services to	the ma	rginalized farm	ers		
	(d)	Providing direct	financia	l assistance	e to all fa	armers			
11.	Whi	ch among the fol	lowing a	re the reas	ons for	a rise in Gig Wo	orkers in India?		
	1.	Freedom to wor	k from ar	nywhere.					
	2.	Rise of Technolo	gy and Ir	nternet.					
	3.	Beneficial for Sn	nall Organ	nizations.					



	Sele	ect the correct ans	swer using the cod	de given	below:			
	(a)	1 and 2 only		(b)	2 and 3 only	,		
	(c)	1 and 3 only		(d)	1, 2 and 3			
12.		h reference to the ements:	the Cotton Produ	uction and	d Consumptic	on in India, con	isider the follow	/ing
	1.	India is the 2nd l	largest consumer of	of cotton	in the world.			
	2.	Odisha and Tami	il Nadu are not kn	own for p	roducing cott	on in India.		
	Whi	ch of the stateme	ents given above i	s/are cor	rect?			
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2		
13.	Witl	h reference to the	Debt-GDP ratio in	India, wl	nich of the fol	lowing statem	ents is/are corre	ct?
	1.	_	overnment the ra					
	2.	The NK Singh co limit.	mmittee recomm	ended th	e debt to GD	P ratio for the	centre with a 4	ŀ <b>0</b> %
			swer using the co	de given				
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2		
14.		sider the followin	_					
	1.		d's largest supplie	_				
	2.		globally in drug a			duction by vol	ume.	
			ents given above is					
	(a)	1 only		(b)	2 only	2		
4=	(c)	Both 1 and 2	5	(d)	Neither 1 no			
15.			Retail Inflation, o				nurchasa typis	برالد
	1.		ncrease in prices o the Wholesale Pri			iat consumers	purchase, typic	ally
	2.	_	on target is 4% wit		•	·/- 2 percentag	ge points.	
	Whi	ch of the stateme	ents given above is	s/are cor	rect?			
	(a)	1 only	_	(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2		
16.	Whi	ch of the followin	ng states are the n	najor palı	m oil produce	rs in India?		
	(a)	Tamil Nadu, Ma	harashtra, and Kai	rnataka				
	(b)	Andhra Pradesh	, Telangana, and k	(erala				
	(c)	-	an, and Madhya P	radesh				
	(d)	West Bengal, As	ssam, and Odisha					
17.	Con	sider the followin	g statements:					
	1.		e debt instruments		•		•	
	2.	An issuer typical	ly offers green bo	nds at lov	ver yields tha	n conventional	bonds.	
	Whi	ch of the stateme	ents given above is	s/are cor	rect?			
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2		



- Daily MCQs Compilation with Explanations | February 2025 18. Which among the following are the reasons responsible for the transition of the Working Middle Class in India from Public sector to Private sector? 1. Economic Liberalization. 2. Limited Public Sector Jobs. Increased employment in the Agriculture Sector. Select the correct answer using the code given below:
  - 1 and 2 only (a)

2 and 3 only (b)

(c) 1 and 3 only

- (d) 1, 2 and 3
- 19. With reference to India's Textile Industry, which of the following statements is/are correct?
  - India is the sixth-largest exporter of textiles globally, contributing 18.21% to the country's total exports in 2023-24.
  - The United States and European Union account for 47% of India's textile and apparel exports.

Select the correct answer using the code given below:

(a) 1 only

2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- 20. Consider the following statements regarding Urban Cooperative Banks (UCBs):
  - Urban Cooperative Banks (UCBs) operate only in urban areas and cannot function in semiurban regions.
  - UCBs are regulated by both the Reserve Bank of India (RBI) and respective State Governments.

Which of the statements given above is/are correct?

(a) 1 only

2 only (b)

Both 1 and 2 (c)

- (d) Neither 1 nor 2
- 21. Consider the following statements regarding the Purchasing Managers' Index (PMI):
  - PMI is derived from quarterly business surveys conducted across industries.
  - 2. It tracks activity at the input stage rather than actual output.
  - A PMI value above 50 indicates economic contraction.

Which of the statements given above is/are correct?

1 and 3 only (a)

2 only (b)

(c) 2 and 3 only

(d) 1, 2, and 3

#### **EXPLANATIONs**

1. (c)

Both the statements are correct: Low-income countries are those with a gross national income (GNI) per capita of \$1,145 or less in 2023.

- Lower-middle-income countries are those with a GNI per capita between \$1,146 and \$4,515 in 2023.
- Upper-middle-income countries are those with a GNI per capita between \$4,516 and \$14,005 in 2023.
- High-income countries are those with a GNI per capita of more than \$14,005 in 2023.



- **Middle income countries** are home to **75%** of the world's population and 66% of the world's poor.
  - At the same time, MICs represent about **one third of global GDP** and are responsible for 40% global economic output.
- Over the last 34 years, only 34 middle-income economies have transitioned to higher income levels, most countries were part of the **European Union**.
  - It also includes Saudi Arabia, Latvia, Bulgaria and South Korea.

# 2. (c)

**In News:** The **Economic Survey 2024-25** highlighted that **India's debt market** remains undercapitalised, and risky borrowers are unable to access it.

#### Statement 1 is correct

• Debt Market is the market where **fixed income securities** of various types and features are issued and traded.

#### Statement 2 is correct

- These are issued by the *Central and State Governments, Municipal Corporations, Govt. bodies* and *commercial entities,* like *Financial Institutions, Banks, Public Sector Units, Public Ltd. companies* and also *structured finance instruments.* 
  - Corporate bonds are issued by companies to raise funds for their operations and expansion projects.

# 3. (d)

**All three statements are correct:** The Union Budget of India is referred to as the **annual Financial Statement in Article 112** of the Constitution, presented each year by the Finance Minister.

- It outlines the government's expected income and spending for the coming year.
- The first-ever Union Budget of independent India was presented on November 26, 1947, first finance minister R.K. Shanmukham Chetty.
- Former Prime Minister Morarji Desai holds the record for presenting the most budgets.
  - He has presented a total of 10 budgets during his tenure as finance minister.
- In 2019, **Nirmala Sitharaman became the second woman** to have presented the budget after Indira Gandhi.
  - She was appointed as India's first full-time woman finance minister.

#### 4. (b)

**In News**: Union Minister of Finance and Corporate Affairs, Smt Nirmala Sitharaman presented the Economic Survey 2024-25 in the Parliament.

**Statements 1 and 3 are correct**: India accounts for **seventh-largest share in global services exports**, underscoring India's global competitiveness in the sector.

The industrial sector is expected to grow by 6.2 per cent in FY-25 (first advance estimates), driven by robust growth in electricity and construction.

The government has been actively promoting Smart Manufacturing and Industry 4.0, supporting the establishment of SAMARTH Udyog centres.

In FY24, the Indian automobile domestic sales grew by 12.5 per cent.

Statement 2 is not correct: The 'Agriculture and Allied Activities' sector contributes approximately 16 per cent of the country's GDP for FY24 (PE) at current prices.

High-value sectors like horticulture, livestock, and fisheries have become key drivers of overall agricultural growth.



# 5. (c)

**Context:** Union Finance Minister Nirmala Sitharaman has presented the union budget 2025-26 with the theme "Sabka Vikas" stimulating balanced growth of all regions.

• This year's budget recognises **4 Engines of Development** – Agriculture, MSME, Investment and Exports.

# 1st Engine: Agriculture

- Prime Minister Dhan-Dhaanya Krishi Yojana was announced to benefit 1.7 crore farmers.
- A 6-year "Mission for Aatmanirbharta in Pulses" will be launched with focus on Tur, Urad and Masoor.
- Loan limits have been increased from Rs. 3 lakh to Rs. 5 lakh for loans taken through Kisan Credit Cards.

# **2nd Engine: MSMEs**

- A **National Manufacturing Mission** covering small, medium and large industries for furthering "**Make in India**" was announced.
- A new scheme will be launched to make India a global hub for toys, showcasing the 'Made in India' brand.

# 3rd Engine: Investment

- A Centre of Excellence in Artificial Intelligence for education will be set up with a total outlay of 500 crore.
- **Bharatiya Bhasha Pustak Scheme** will be implemented to provide digital-form Indian language books for school and higher education.
- Gig-workers to get identity cards, registration on e-Shram portal and healthcare under PM Jan Arogya Yojna.
- The Nuclear Energy Mission for Viksit Bharat was also announced.

# 4th Engine: Exports

- An Export Promotion Mission was announced that will enhance India's export competitiveness.
- To streamline international trade processes, the government will also launch **Bharat Trade Net** (BTN).

#### 6. (a)

**In News:** The Union Budget 2025-26 was framed around the theme **"Sabka Vikas**," emphasizing balanced growth across all regions of India.

**Statements 1, 2 and 3 are correct**: The total receipts other than borrowings and the total expenditure are estimated at ₹ 34.96 lakh crore and ₹ 50.65 lakh crore respectively.

- The net tax receipts are estimated at ₹ 28.37 lakh crore.
- The fiscal deficit is estimated to be 4.4 per cent of GDP.
- The Union Finance Minister proposed to raise the Foreign Direct Investment (FDI) limit for the insurance from 74 to 100 per cent, to be available for those companies that invest the entire premium in India.
- Union Budget 2025-26 proposes new direct tax slabs and rates under the new income tax regime so that no income tax is needed to be paid for total income upto ₹ 12 Lakh per annum, i.e. average income of Rs 1 Lakh per month, other than special rate income such as Capital Gain. Salaried individuals earning upto ₹ 12.75 Lakh per annum will pay NIL tax, due to standard deduction of ₹ 75,000.



**Statement 4 is not correct :** A **Makhana Board in Bihar** to be established to improve production, processing, value addition, and marketing of makhana.

# 7. (a)

Statement 1 is correct: India is the largest producer (25% of global production), consumer (27% of world consumption) and importer (14%) of pulses in the world.

- Pulses account for around 23% of the area under food grains and contribute around 9-10% of the total foodgrains production in the country.
  - Rabi pulses contribute more than 60 percent of the total production.

**Statement 2 is not correct: Madhya Pradesh, Maharashtra and Rajasthan** are the top three pulses producing states in the country.

- **Domestic pulses production increased** from 192.55 lt in 2013-14 to 273.02 lt in 2021-22 and 260.58 lt in 2022-23.
  - This was mainly courtesy two crops: chana and moong (green gram).

# 8. (c)

**Statement 1 is correct:** Cardamom is one of the world's most exotic spices - along with Saffron and Vanilla.

It belongs to the same botanical family as ginger and turmeric (Zingiberaceae).

**Statement 2 is not correct: Evergreen forests of Western Ghats of South India** are considered as the centre origin of cardamom.

• Guatemala is the world's largest producer of cardamom, India is the second largest producer.

**Statement 3 is correct: Top Producing States: Kerala (56.71%),** Karnataka (35.91%) and Tamil Nadu (7.31%).

# 9. (a)

**Context:** This superfood stole the spotlight in this year's budget, while Gen Z likes to call it 'Plant Pop,' others know it as fox nuts, lotus seeds, or simply, Makhana.

# About

- Harvested from the **Euryale ferox plant**, Makhana is a powerhouse of essential nutrients, including protein, fibre, magnesium, potassium, phosphorus, iron, and zinc.
- Though it is grown in countries like China, Japan, and Russia, **Bihar** alone contributes approximately 90% of the world's total production.
- The farming and harvesting of Makhana is almost entirely carried out by the Mallah community (fisherfolk and boatmen), one of the most economically disadvantaged groups.
- The Makhana industry is labour-intensive, meaning any boost to this sector will not only generate employment but also uplift marginalized communities.

# 10. (b)

The Prime Minister Dhan-Dhanya Krishi Yojana (PMDDKY) was announced in the Union Budget 2025-26 to boost agricultural productivity and rural prosperity. The scheme focuses on 100 low-yield districts across India, aiming to increase crop intensity, improve soil fertility, and provide financial & technological support to farmers.

# 11. (d)

All three statements are correct: Non-standard or gig work consists of income-earning activities outside of standard, long-term employer-employee relationships.

• It relies heavily on temporary and part-time positions filled by independent contractors and freelancers rather than full-time permanent employees.



# Reasons for a rise in Gig Workers

- Post Pandemic: The trend accelerated during the 2020 COVID-19 pandemic, as gig workers delivered necessities to home-bound consumers, and those whose jobs had been eliminated turned to part-time and contract work for income.
- **Freedom to work from anywhere:** These types of positions facilitate independent contracting work, with many of them not requiring a freelancer to come into an office.
- **Rise of Technology and Internet:** Rise of fast internet and smartphones have made it easier to work from anywhere easily.
- Convenient for Small Organisations: Employers who cannot afford to hire full-time employees to do all the work will often hire part-time or temporary employees to take care of busier times or specific projects.
- **Benefits Employers:** Employers do not need to provide related benefits, such as medical insurance, Provident Fund, and year-end bonuses which make it a better option for them to pay only for work on a unit basis.

# 12. (a)

**Statement 1 is correct: India is the 2nd largest consumer** of cotton in the world with estimated consumption of 22.24% of world cotton consumption.

**Statement 2 is not correct:** Majority of cotton production comes from **9 major cotton growing states,** which are grouped into three diverse agro-ecological zones, as under:

- Northern Zone Punjab, Haryana and Rajasthan
- Central Zone Gujarat, Maharashtra and Madhya Pradesh
- Southern Zone Telangana, Andhra Pradesh and Karnataka.
- Apart from the above the cotton is also grown in the state of Odisha and Tamil Nadu.

## 13. (b)

#### **Context**

- The central government has announced a shift towards the "debt-GDP ratio" as the fiscal anchor, beginning from the **2026-27** financial year.
- **NK Singh committee recommendation: Debt to GDP ratio:** The Committee suggested using debt as the primary target for fiscal policy. A debt to GDP ratio of **60%** should be targeted with a **40%** limit for the center and **20%** limit for the states by FY23.
- **Debt-GDP ratio in India:** For the central government, the ratio is estimated to be **57.1% in 2024-25** and **56.1% in 2025-26.** 
  - The government aims to reduce the debt-GDP ratio to 50±1 per cent by 2031.

# 14. (c)

#### In News

• India's Pharmaceutical exports are projected to reach \$350 billion by 2047, a 10-15 times increase from current levels.

#### **About India's Pharmaceutical industry**

- It has gained international recognition as the "Pharmacy of the World," particularly for its imperative role in supplying vaccines, essential medicines, and medical supplies during the COVID-19 pandemic and beyond.
- The sector has showcased its innovative capabilities and established itself as a crucial global pharmaceutical value chain member.

# **Current Status in the Global Market:**

- India is the largest supplier of generic drugs globally, accounting for 20% of global sales.
- India ranks third globally in drug and pharmaceutical production by volume.



- India exports to approximately 200 countries and territories.
  - The top five destinations for these exports are the USA, Belgium, South Africa, the UK, and Brazil.
- **India ranks 11th** in pharmaceutical export value, despite being a major global supplier of generics.
- The total annual turnover of pharmaceuticals in FY24 was ₹4.17 lakh crore, growing at an average rate of 10.1 per cent in the last five years.

# 15. (b)

**Statement 1 is not correct:** Retail inflation refers to the **increase in prices of goods and services** that consumers purchase, typically measured over a specific period.

- It's often gauged using the **Consumer Price Index (CPI)**, which tracks changes in the cost of a basket of consumer goods and services over time.
- When retail inflation rises, it means that the cost of living is increasing, which can affect household budgets and purchasing power.
- Statement 2 is correct: The RBI's inflation target is 4% with a tolerance band of +/- 2 percentage points, meaning that the target is within the range of 2% to 6%.

# 16. (b)

## **About Palm Oil**

- **Definition:** Palm oil is extracted from the fruit of the African oil palm tree (Elaeis guineensis) and is one of the most widely used vegetable oils in the world.
- Types of Palm Oil
  - Crude Palm Oil (CPO): Extracted from the fruit pulp, used mainly for cooking and food processing.
  - Palm Kernel Oil: Extracted from the seed, primarily used in cosmetics, pharmaceuticals, and industrial applications.
- Global Palm Oil Production:
  - Indonesia & Malaysia together produce over 85% of the global supply.
  - Other significant producers: Thailand, Colombia, Nigeria, Papua New Guinea.
- Palm Oil Production in India
  - Major Producing States: Andhra Pradesh, Telangana, Kerala (accounting for 98% of total production).
  - India still relies heavily on imports to meet domestic demand.

# 17. b

**Context:** Like several emerging markets, India also turned to sovereign green bonds to help fund its transition to a low-carbon economy, but investor demand remains weak.

#### What are green bonds?

- Green bonds are debt instruments issued by **governments**, **corporations**, **and multilateral banks** to raise funds for projects that reduce emissions or enhance climate resilience.
- Issuers typically offer green bonds at **lower yields** than conventional bonds, assuring investors that the proceeds will be used exclusively for green investments.
- The difference in yield known as the green premium, or greenium determines the cost advantage of green bonds.
- A higher greenium allows issuers to raise funds at lower costs, making green investments more attractive.



## 18. (a)

**Statement 1 and 2 is correct:** India's middle class after Independence was largely created by the **public sector.** 

# Reasons for the Transformation of Working Middle Class in India:

- **Economic Liberalization:** Post-1991 reforms opened up the economy, leading to the growth of the private sector and more job opportunities.
- **Higher Salaries and Benefits:** The private sector often offers better pay, career growth, and benefits compared to public sector jobs, attracting the middle class.
- Improved Work Culture: It provides a more dynamic and performance-driven environment, which appeals to the ambitious working middle class.
- **Limited Public Sector Jobs:** The growth of public sector jobs has stagnated, and competition for these positions is high, making private sector jobs more attractive.
- **Entrepreneurial Opportunities:** The rise in entrepreneurial ventures and startups has encouraged the middle class to shift towards private businesses and self-employment.

**Statement 3 is not correct:** Increased employment in Agriculture is one of the employment challenges of the Indian economy but is not a direct factor responsible for the transition of the Working Middle Class in India from Public sector to Private sector.

- **Employment in the Agriculture Sector:** India has not experienced structural transformation of surplus labour from agriculture to other sectors.
  - As per the Periodic Labour Force Surveys (PLFS) farm sector's share in India's workforce decreased from 64% in 1993-94 to 42.5% in 2018-19, but is subsequently going up to 46.2% in 2023-24.

# 19. (b)

#### Context

• **Bharat Tex 2025**, India's largest global textile event, took place in New Delhi, highlighting the country's textile innovations and international trade opportunities.

#### India's Textile Industry

- India is the **sixth-largest exporter** of textiles globally, contributing **8.21**% to the country's total exports in **2023-24**.
- The sector holds a **4.5% share** in global trade, with the **United States and European Union** accounting for **47%** of India's textile and apparel exports.
- The industry provides direct employment to over **45 million** people.

#### 20. (b)

**Statement 1 is not correct:** While UCBs primarily operate in urban and semi-urban areas, the definition of "urban" can be somewhat flexible. They are not strictly limited to only core urban centers and can have a presence in areas that are transitioning or classified as semi-urban.

**Statement 2 is correct:** UCBs operate under a dual regulatory framework. The Reserve Bank of India (RBI) provides overall regulation and supervision, while the respective State Governments also have a role, primarily in areas like registration, auditing, and liquidation.

# 21. (b)

The Purchasing Managers' Index (PMI) is a leading economic indicator derived from monthly business surveys. It measures business activity at the purchasing/input stage, providing insights into economic trends before actual production data is available.

# **Types of PMI**

Manufacturing PMI – Measures industrial and factory activity.

Services PMI – Assesses growth in the services sector.



# **PMI Interpretation**

PMI > 50 → Economic Expansion

 $PMI < 50 \rightarrow Economic Contraction$ 

PMI =  $50 \rightarrow No$  change in activity

**Significance of PMI** 

**Early Economic Indicator:** Provides real-time insights into economic expansion or slowdown.

Guides Policy Decisions: Used by governments and central banks for economic planning.

Investor & Business Confidence: Helps businesses, investors, and analysts assess market conditions.





# INDIAN POLITY & CONSTITUTION

1.	Con	sider the followin	g statements:			
	1.	Karnataka has be Die with Dignity.		tate in Ind	ia to implement a p	policy related to the 'Right to
	2.	The Supreme Co dignity under Ar		egalized pa	assive euthanasia, a	affirming the right to die with
	Wh	ich of the stateme	nts given above i	is/are corr	ect?	
	(a)	1 only		(b)	2 only	
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	
2.	Wit	h reference to the	e Census in India,	, consider	the following state	ements:
	1.	It was primarily a	aimed at assessir	ng revenue	e and taxation need	ls under British colonial rule.
	2.	It is conducted u	nder the provision	ons of the	Census Act of 1871	
	Wh	ich of the stateme	nts given above i	is/are corr	ect?	
	(a)	1 only		(b)	2 only	
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	
3.	Wit	h reference to the	power exercised	by Gover	nor of state, consid	er the following statements:
	1.	The Governor ca	n send the bill ba	ack to the	legislature with sug	ggestions.
	2.		ed for the Preside ture for reconsid		deration, the Presid	ent may send the bill back to
	Wh	ich of the stateme	nts given above i	is/are corr	ect?	
	(a)	1 only		(b)	2 only	
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	
4.		ording to Article ranteed to an arre		ian Const	itution, which of t	he following is NOT a right
	(a)	The right to be in	nformed of the gi	rounds of	arrest	
	(b)	The right to cons	sult a legal practif	tioner		
	(c)	The right to bail	in all circumstand	ces		
	(d)	The right to not	be detained with	out being	informed of the ch	arges
5.	Con (NC		ng statements re	garding tl	he National Comm	ission for Safai Karamcharis
	1.	It was establishe	d under the Nati	onal Com	mission for Safai Ka	ramcharis Act, 1993.
	2.	It is a statutory b	oody under the M	linistry of	Law and Justice.	
	Wh	ich of the stateme	nts given above i	is/are corr	ect?	
	(a)	1 only		(b)	2 only	
	(c)	Roth 1 and 2		(4)	Neither 1 nor 2	



6.	Con	sider the following	g statements regardi	ing Pr	ivate Member's Bil	ls in India:		
	1.	The responsibility	y of drafting the bill I	lies w	ith the member intr	oducing it.		
	<ol> <li>In Rajya Sabha, every Friday is allotted for the discussion of Private Member's Bills.</li> <li>Since independence, only 14 Private Member's Bills have been enacted into law.</li> </ol>							
	Whi	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			
7.	Witl	n reference to the	Zero Hour of the Pa	rliam	ent, consider the fo	ollowing statements:		
	1.	The phrase does	not find mention in t	the ru	lles of procedure of	the Parliament.		
	2.	It is the period of time immediately after the Question Hour is over and before the regular business of the Parliament.						
	3.	The Government	is obliged to respon	d to t	he matters raised d	uring the 'Zero Hour'.		
	How	many of the state	ements given above	are c	orrect?			
	(a)	Only one		(b)	Only two			
	(c)	All three		(d)	None			
8.	The	case of S R Bomm	ıai v Union of India (	1994	) is related to which	of the following aspects of		
	the	Indian Constitutio	n?					
	(a)	Separation of po	wers	(b)	Parliamentary priv	vileges		
	(c)	Fundamental Rig	hts	(d)	President's Rule u	nder Article 356		
9.	Witl	n reference to the	President in India, v	which	of the following sta	atements is/are correct?		
	1.	The President is oboth Houses of P	•	ral co	llege consisting of c	only the elected members of		
	2.	The President co	an resign from his o	ffice b	by addressing the r	esignation letter to the Vice		
	Sele	ect the correct answ	wer using the code g	iven k	pelow:			
	(a)	1 only		(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 nor 2			
10.	The	case of Lily Thoma	as (2013) is related t	to wh	ich of the following	?		
	(a)	Parliamentary Pr	ivileges					
	(b)	Reservation in Pr	omotions					
	(c)	Disqualification of	of convicted legislato	rs				
	(d)	Online Free Spee	ch					
11.	Witl	n reference to the	President rule in Ind	lia, wl	hich of the followin	g statements is/are correct?		
	1.	Under the Presid	ent's rule, the electe	d stat	te government pow	ers are suspended.		
	2.	The President's r	ule in the state can la	ast fo	r six months and be	extended up to a maximum		
	Sele	·	wer using the code g	iven k	pelow:			
	(a)	1 only	5	(b)	2 only			
	(c)	Both 1 and 2		(d)	Neither 1 nor 2			



12.	Arti	cle 224A of the Co	onstitution of Indi	a, is rela	ted to which of the	following?
	(a)	President's asser	nt to a bill.			
	(b)	Language used in	n Parliament.			
	(c)	Jurisdiction of a	High Court			
	(d)	Appointment of	retired HC judges	on an ad	l-hoc basis.	
13.	Witl	n reference to the	removal of judge	s in Indi	a, consider the follo	owing statements:
	1.	A judge can be r both Houses of F	-	n order	of the President, ba	ased on a motion passed by
	2.		removed on the g 217 of the Constit		of 'proved misbeha	viour' or 'incapacity' as per
	Whi	ch of the stateme	ents given above is	s/are cor	rect?	
	(a)	1 only		(b)	2 only	
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	
14.	'Jose	eph Shine v. Unior	n of India (2018) c	ase' is re	elated to which of t	he following?
	(a)	Legality of Triple	Talaq	(b)	Uniform Civil Code	(UCC)
	(c)	Decriminalizing A	Adultery	(d)	Right to Privacy	
15.	Witl	n reference to th	e Medical Termin	ation of	Pregnancy (MTP)	Act, consider the following
	state	ements:				
	1.	Before the enacti	ment of the MTP A	ct in 1971	1, the termination of	pregnancy was criminalised.
	2.	Under the Act a	pregnancy can be	termina	ted only upto 20 we	eks without any exceptions.
	Whi	ch of the stateme	nts given above is	/are corr	rect?	
	(a)	1 only		(b)	2 only	
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	
16.	Witl	n reference to the	Panchayati Raj in	India, c	onsider the following	ng statements:
	1.	Balwant Rai Meh	nta Committee rec	ommeno	ded the three-tier Pa	anchayati Raj system.
	2.		nittee emphasized narginalized comm		d for regular electio	ns and greater participation
	Whi	ch of the stateme	nts given above is	/are corr	rect?	
	(a)	1 only		(b)	2 only	
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	
<b>17.</b>	Con	sider the followin	g:			
	1.	Decriminalisation	n of Homosexualit	У		
	2.	Right to Privacy a	as a Fundamental	Right		
	3.	Decriminalization	n of Adultery			
	4.	Sabarimala Temp	ole Entry Case			
		v many of the aboundia?	ve judgement(s) is	/are inte	erpreted on the bas	is of Constitutional Morality
	(a)	Only one		(b)	Only two	
	(c)	Only three		(d)	All four	



•		•					
18.		sider the followi		arding	the eligibility crite	ria for	CEC and Election
	1.	The candidate m	nust be a person of in	tegrit	V.		
	2.		·	_	, as a judge of the Sup	reme C	Court.
	3.		·		xperience in election		
	4.		_		etary (or equivalent)	_	
			tatements are correc		coary (or equirement)		80.0
	(a)	1 and 3 only		(b)	1, 3, and 4 only		
	(c)	1, 2, and 4 only		(d)	All of the above		
20.	. ,		Inion of India (2022)		, is related to which o	of tha f	ollowing?
20.		Judicial appointr		i case,	, is related to willcir (	n the i	ollowing:
	(a)		ssion appointments				
	(b) (c)		eaker Section reserva	tions			
	(c) (d)	Governor's power		1110113			
	. ,	·					
21.			·	•	is Act, 2013, consider	the to	llowing statements:
	1.		pal are appointed by				
	2.		_		o international relati	ons, ex	tternal and internal
	\\/bi		order, atomic energy ents given above is/ar				
	(a)	1 only	ints given above is/ai		2 only		
	(a) (c)	Both 1 and 2		(b) (d)	Neither 1 nor 2		
22	. ,		Ladia Caratil dia				2
22.		` '			with which of the fo	llowing	<b>3</b>
	(a)	•	the Council of States.				
	(b)	9	ssions of Parliament.				
	(c) (d)		d Passing bills in Parli of a Member of Parli				
	` ,	·					
23.		n reference to the wing statements		e Ma	nagement Act (FEM	A) of 1	1999', consider the
	1.	_		sult in	monetary penalties,	not cri	minal charges
	2.	•	· ·		t in foreign assets, de		9
	۷.	RBI approval.	ransactions like lives	Jennen	tili foreign assets, ac	56 111561	aments, etc. require
	Whi	ch of the stateme	ents given above is/ar	e corr	rect?		
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		
24.	With	n reference to the	e Pro-tem Speaker, c	onside	er the following state	ments	:
	1.		•		appointed to preside o		
		•	e Legislative Assembl		• •		
	2.		= =	ie Pro	Tem Speaker, usuall	y from	among the senior-
		most members of			.2		
			ents given above is/ar				
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		



- **25.** With reference to the Three Language Formula under the New Education Policy 2020, consider the following statements:
  - 1. States, regions, and students can choose the three languages, as long as at least two are native to India.
  - 2. Sanskrit is a compulsory language in the hindi-speaking states under it.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- **26.** With reference to the Right to Information (RTI) Act, 2005, consider the following statements:
  - 1. Any citizen of India can request information from a public authority.
  - 2. It applies to all levels of government including government-funded NGOs and institutions.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- **27.** With reference to the Delimitation Commission, consider the following statements:
  - 1. The Delimitation Commission consists of a retired Supreme Court judge, the Chief Election Commissioner, and the State Election Commissioners.
  - 2. The Commission's decisions are final and cannot be challenged in court in any case.
  - 3. The Delimitation Commission has been set up only four times since Independence.

Which of the statements given above are correct?

(a) 1 and 3 only

(b) 1 and 2 only

(c) 2 and 3 only

- (d) 1, 2, and 3
- **28.** Which of the following statements is not correct regarding the Public Accounts Committee (PAC)?
  - (a) The PAC consists of 22 members, with 15 from Lok Sabha and 7 from Rajya Sabha.
  - (b) Ministers can also be appointed as members of the PAC.
  - (c) Members are elected annually using proportional representation through a single transferable vote.
  - (d) The Chairperson of the PAC is appointed by the Speaker of the Lok Sabha.

# **EXPLANATIONs**

# 1. (b)

#### Context:

- In a historic move, the Karnataka Health Department issued an order to implement the Supreme Court's ruling allowing terminally ill patients to die with dignity.
  - Karnataka is the second State after Kerala to implement the directive.
  - **Euthanasia** is the intentional act of ending a person's life to relieve suffering caused by a painful, incurable disease or disorder.

# **Supreme Court's Directives on Passive Euthanasia**

- Legal Recognition (2018 & 2023 Rulings): The Supreme Court legalized passive euthanasia in 2018, recognizing the right to die with dignity under Article 21 of the Constitution.
  - In 2023, the court simplified procedures for withdrawing life support, ensuring a structured and ethical approach.



- Conditions for Passive Euthanasia: Applicable to terminally ill patients with no hope of recovery.
  - Allowed when the patient is in a persistent vegetative state or prolonged suffering from an incurable condition.

# 2. (b)

#### Statement 1 is correct

- Census in India has been conducted regularly since 1871, and the first complete Census was conducted in 1881.
- Initially, the Census was **primarily aimed at assessing revenue and taxation needs** under British colonial rule.
- Over time, its scope expanded to include demographic, social, and economic data.

#### Statement 2 is not correct

- Census in India is conducted under the **provisions of the Census Act of 1948**, which empowers the Government of India to conduct periodic population surveys.
  - It outlines the procedures, responsibilities, and penalties related to census activities.

# 3. (c)

#### Statement 1 is correct

- Article 200 of the Indian Constitution: It outlines the Governor's role in the assent process. When a bill is presented to the Governor after being passed by the State Legislature, they have four options:
  - Grant Assent The Governor may approve the bill, making it a law.
  - Withhold Assent The Governor may reject the bill, effectively stopping it from becoming law.
  - Return the Bill for Reconsideration The Governor can send the bill back to the legislature with suggestions. However, if the legislature passes the bill again without modifications, the Governor is bound to give assent.
  - Reserve the Bill for Presidential Assent If the bill is contrary to the Constitution, affects
    the powers of the High Court, or contradicts central laws, the Governor may reserve it for
    the President's decision.

#### Statement 2 is correct

- Article 201 (President's Role in Reserved Bills): If a bill is reserved for the President's consideration under Article 200, the President has two options:
  - Give Assent: The bill becomes law.
  - Withhold Assent or Direct Reconsideration: The President may send the bill back to the State Legislature for reconsideration. If the Legislature re-passes the bill, the President is not bound to give assent.

#### 4. (c)

#### Context

• The Supreme Court of India has ruled that informing an accused of the grounds of arrest is not a mere formality but a mandatory constitutional requirement.

#### Supreme court ruling

- The Court held that failing to inform the accused of the reasons for arrest amounts to a **violation of fundamental rights** enshrined under **Article 22**, **Part III** of the Constitution.
  - The information must be conveyed in a manner that effectively communicates the grounds of arrest to the accused in a language they understand.



• The court also referred to **Article 21** and said no person could be deprived of their liberty except in accordance with the legal procedure.

## **Constitutional Provisions**

- Article 22(1) of the Indian Constitution states; No person who is arrested shall be detained in custody without being informed, as soon as possible, of the grounds for such arrest.
  - The arrested person shall not be denied the right to consult and be defended by a legal practitioner of their choice.

# 5. (a)

<u>In News</u>: The Union Cabinet has approved the extension of the **National Commission for Safai Karamcharis (NCSK)** tenure until March 31, 2028, with a financial implication of around Rs 51 crore.

# About the National Commission for Safai Karamcharis (NCSK)

- It was established on 12th August 1994 under the National Commission for Safai Karamcharis Act, 1993, initially for a period of 3 years as a statutory body.
- The Act was extended until 2004, after which the Commission became a **non-statutory body** under the Ministry of Social Justice and Empowerment.
  - The Commission takes suo-motu notice of issues affecting Safai Karamcharis based on media reports or observations.
- **Composition**: The Commission consists of a Chairperson (Union Minister of State rank), a Vice-Chairperson (Secretary rank), five members (including one woman member), and a Secretary (Joint Secretary rank).

# 6. (c)

**Statement 1 is correct:** A Private Member's Bill is introduced by any Member of Parliament (MP) who is not a Minister, whether elected or nominated. The responsibility of drafting a Private Member's Bill lies with the MP introducing it, unlike Government Bills, which are drafted by government departments.

**Statement 2 is not correct:** In Rajya Sabha, every alternate Friday is reserved for discussing Private Member's Bills, not every Friday.

**Statement 3 is correct:** Since independence, only 14 Private Member's Bills have been enacted into law, with the last one passed in 1970.

#### 7. (b)

**Statement 1 and 2 are correct:** The phrase does not find mention in the rules of procedure.

- The concept of Zero Hour started organically in the first decade of Indian Parliament, when MPs felt the need for raising important constituency and national issues.
- It is the period of time immediately after the **Question Hour** is over and before the regular business.

**Statement 3 is not correct:** The Government is **under no obligation** to respond to the matters raised during the 'Zero Hour'.

#### 8. (d)

#### Context

• The resignation of the Chief Minister of Manipur has loomed the possibility of President's Rule in the state.

#### S R Bommai v Union of India (1994) Case

- The Supreme Court, in the landmark **S R Bommai v. The Union of India** case placed restrictions on the misuse of **Article 356.**
- The judgment established that;
  - The President's decision is subject to judicial review.



- Courts can strike down the imposition if found illegal, malafide, or based on extraneous considerations.
- The state legislature alone would be suspended, and the executive and other arms of governance would continue unless Parliament ratified the proclamation within two months.

# 9. (b)

#### **President in India**

- The President is elected by an electoral college comprising elected members of both Houses of Parliament and elected members of the Legislative Assemblies of States and Union Territories with legislatures (e.g., Delhi, Puducherry, Jammu & Kashmir).
- The President holds office for a **term of five years** from the date on which he enters upon his office.
- He can resign from his office at any time by addressing the resignation letter to the **Vice President.**
- The President can hold office beyond his term of five years until his successor assumes charge.
  - He is also eligible for re-election to that office.

# 10. (c)

<u>Context</u>: The Supreme Court is hearing petitions seeking a <u>lifetime ban on convicted persons from contesting elections.</u>

# Past Judgements of SC

- Association for Democratic Reforms (ADR) case (2002): It mandated the disclosure of criminal records of all candidates contesting elections.
- The CEC vs Jan Chaukidar case (2013): It upheld that persons who are under trial prisoners cease to be 'electors' and hence not qualified to contest elections.
  - However, the Parliament amended the act in 2013 to overturn this judgment allowing under trial prisoners to contest elections.
- Lily Thomas (2013) Case: The court struck down section 8(4) of the RP Act, 1951, that allowed a sitting legislator to continue as a member even after being convicted if they filed an appeal, as unconstitutional and against political justice.
  - After this judgment, a sitting legislator is disqualified immediately after the sentencing for a conviction.

#### 11. (a)

#### Context

• The Ministry of Home Affairs (MHA) has announced the <u>imposition of President's Rule in</u>
<u>Manipur</u>, with the state assembly placed under suspended animation.

# **Constitutional Provisions of Imposition of President's Rule**

- **Article 356** empowers the President of India to impose **President's Rule** in a state when governance cannot be carried out as per constitutional provisions.
- **Grounds:** If the President receives a report from the state's Governor or otherwise is convinced or satisfied that the state's situation is such that the state government cannot carry on the governance according to the provisions of the Constitution.
- Under the President's rule, the elected **state government is dismissed** and its powers are suspended.
  - The Governor becomes the executive head of the state and runs the administration on behalf of the President.
- The proclamation remains valid for up to two months but must be approved by both Houses of Parliament to extend further.
  - If approved, the Rule can last for six months and be extended in increments of six months, up to a maximum of three years.



# 12. (d)

The Supreme Court permitted **High Courts to appoint retired judges on an ad-hoc basis** to address the mounting backlog of cases.

- Article 224A of the Indian Constitution allows the Chief Justice of a High Court to request retired HC judges to perform the duties of a judge again, with the permission of the **President of India**.
  - Such appointees are entitled to allowances as determined by the President's order and have all the jurisdiction, powers and privileges of a Judge of that High Court.

# 13. (c)

In News: Rajya Sabha Chairman emphasized that only Parliament has the constitutional authority to remove a High Court judge

# **About Removal of judges**

- A judge can be removed on the grounds of 'proved misbehaviour' or 'incapacity' as per Articles 124 and 217 of the Constitution.
  - The Constitution does not define 'proved misbehaviour' or 'incapacity.'
  - Supreme Court rulings clarify that wilful misconduct, corruption, lack of integrity, or offenses involving moral turpitude are grounds for misbehaviour.
  - Incapacity refers to a medical condition, either physical or mental.

#### **Procedure for Removal**

- **Procedure for Removal:** A judge can be removed only by an order of the President, based on a motion passed by both Houses of Parliament.
  - The Judges Inquiry Act, 1968, outlines the removal procedure.

# 14. (c)

The Supreme Court of India, in the landmark judgment of Joseph Shine v. Union of India (2018), struck down Section 497 IPC, declaring it unconstitutional. The court held that:

- Adultery is a private matter and does not warrant criminal prosecution.
- It violates Article 14 (Right to Equality) and Article 21 (Right to Life and Personal Liberty) of the Constitution.
- Marriage is a personal relationship, and the state should not interfere by imposing criminal liability.
- However, the SC clarified that adultery would remain a moral wrong and could be invoked as
  a ground in civil proceedings.

#### 15. (a)

**Statement 1 is correct: Before the enactment of the MTP Act in 1971,** the medical termination of pregnancy was governed by the **Indian Penal Code (IPC).** 

- Most of these provisions aimed at **criminalising abortions**, except where the procedure was done in good faith in order to save the woman's life.
- The provisions failed to make a distinction between wanted and unwanted pregnancies, making it extremely onerous for women to access safe abortions.

**Statement 2** is not correct: In 1971, the MTP Act was enacted by Parliament as a "health" measure, to decriminalise abortion in certain defined circumstances and under due supervision of registered medical practitioners.

- A pregnancy could only be terminated under Section 3(2) if it did not exceed 20 weeks.
- The 2021 amendment to the MTP Act: Rule 3B permitted abortion up to 24 weeks for women due to change of marital status during the ongoing pregnancy, besides in cases of survivors of rape, victims of incest, and other vulnerable women.



# 16. (c)

**In News:** Recent discussions in Parliament on the **75th anniversary of the Indian Constitution** highlighted that the momentum towards deepening local governance has stalled.

#### Statement 1 is correct

- Balwant Rai Mehta Committee (1957) recommended the three-tier Panchayati Raj system, with Gram Panchayats (village level), Panchayat Samitis (block level), and Zilla Parishads (district level).
  - Ashok Mehta Committee (1977) focused on strengthening financial resources and functional autonomy of Panchayats.

#### Statement 2 is correct

- **G.V.K.** Rao Committee (1985) emphasized the need for regular elections and greater participation of women and marginalized communities.
  - L.M. Singhvi Committee (1986) recommended measures to address financial constraints and improve administrative efficiency of Panchayats.

# 17. (d)

- **Constitutional Morality** is a fundamental principle that guides democratic governance and legal interpretation in constitutional democracies.
  - It signifies adherence to the core values enshrined in the Constitution, ensuring justice, liberty, equality, and fraternity.

# **Decriminalisation of Homosexuality**

- The Supreme Court, in **Navtej Singh Johar v. Union of India (2018),** decriminalized **Section 377**, reiterating that constitutional morality prevails over societal morality.
  - Earlier, the Delhi High Court, in Naz Foundation v. Government of NCT of Delhi (2009), invoked constitutional morality to decriminalize homosexuality under Section 377 of the IPC, emphasizing dignity and individual rights.

#### Right to Privacy as a Fundamental Right

• The Supreme Court, in **K.S. Puttaswamy v. Union of India (2017)**, upheld the right to privacy as a fundamental right, interpreting it as an essential aspect of constitutional morality.

#### **Decriminalization of Adultery**

• The Supreme Court, in **Joseph Shine vs. Union of India (2018) Case**, invoked constitutional morality to **strike down the criminalization of adultery**, emphasizing the need for a progressive interpretation of constitutional values.

#### Sabarimala Temple Entry Case (2018)

• The Supreme Court upheld women's right to worship, ruling that constitutional morality ensures equality and non-discrimination, even in matters of religious tradition.

## 19. (b)

**Previously:** The CEC was appointed by the President based on the Prime Minister's recommendation.

- Under the 2023 Act:
  - A Selection Committee (comprising the Prime Minister, a Union Cabinet Minister, and the Leader of the Opposition in the Lok Sabha) recommends candidates.
  - A Search Committee, chaired by the Law Minister, shortlists names for consideration.
- Eligibility Criteria:
  - Must be a person of integrity.



- Should have knowledge and experience in election management and conduct.
- Must be or have been a Secretary (or equivalent) to the Government.
- Term:
  - **Tenure:** 6 years or until the age of 65 years, whichever is earlier.

# 20. (b)

# Context

• President Droupadi Murmu appointed Gyanesh Kumar as the chief election commissioner of India under the Chief Election Commissioner and Other Election Commissioner Act, 2023.

#### About

- This 2023 Act replaces the Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991, introducing significant changes to enhance the autonomy and functioning of the Election Commission of India (ECI).
- The CEC name was recommended by a three-member committee comprising:
  - Prime Minister of India (Chairperson),
  - Union Home Minister (Cabinet Minister nominated by the PM).
  - Leader of Opposition in Lok Sabha.

# Background (Anoop Baranwal case)

- In Anoop Baranwal vs. Union of India (2023), the Supreme Court ruled that the appointment of the Chief Election Commissioner (CEC) and Election Commissioners (ECs) should not be made solely by the Executive.
- The Court directed that the appointment should be done by the President on the recommendation of a Selection Committee, until Parliament made a law.
- The Selection Committee will consist of: The Prime Minister, The Leader of Opposition in Lok Sabha, and The Chief Justice of India.

# 21. (c)

Both the statements are correct: The Lokpal and Lokayuktas Act, 2013 came into effect in 2014.

- **Purpose:** Establish Lokpal at the Centre and Lokayuktas in states for investigating corruption in public servants.
- **Concept:** The concept was inspired by the Scandinavian Countries Ombudsman system.
  - The first Lokayukta was constituted in Maharashtra in 1971.
- **Appointment Process:** Members of Lokpal (and Lokayuktas) appointed by the President (Governor), based on recommendations from a Selection Committee.
- Jurisdiction of Lokpal: Can inquire into offences under the Prevention of Corruption Act, 1988, committed by the PM (with safeguards), Union Ministers, MPs, officers (Group A-D), and certain private entities.
  - **PM's Inquiry:** Inquiry against the PM must be in-camera, approved by a 2/3 majority of the Lokpal, and cannot involve certain sensitive areas like national security.
  - The PM cannot be investigated related to international relations, external and internal security, public order, atomic energy and space.

# 22. (d)

**Article 101(4) of the Indian Constitution** deals with the disqualification of a Member of Parliament (MP) due to their absence from the sessions of Parliament.

• **Disqualification for Absence:** A MP can be disqualified if they are absent from all meetings of either the Lok Sabha (House of the People) or Rajya Sabha (Council of States) for a period of 60 days without seeking permission from the House.



- Effectively, the period of absence is only calculated based on the actual sittings of Parliament.
- **Permission:** The absence must be without permission from the respective House of Parliament. If the MP obtains permission, the disqualification does not apply.
- This provision ensures that MPs actively participate in legislative proceedings and remain accountable to the people they represent.

# 23. (c)

In News: Recently, the Enforcement Directorate (ED) has issued an adjudication order imposing a penalty of over ₹3.44 crore on BBC World Service India (BBC WS India) for alleged violations of the Foreign Exchange Management Act (FEMA) of 1999.

- Foreign Exchange Management Act (FEMA), 1999 was enacted in response to India's economic liberalization in the 1990s and aimed to ensure compliance with global financial norms, and to facilitate external trade and payments while ensuring the orderly development and maintenance of the foreign exchange market in India.
- The Reserve Bank of India (RBI) and the Enforcement Directorate (ED) are the primary regulators enforcing FEMA.

#### Statement 1 is correct:

- FEMA is a civil law, meaning violations result in monetary penalties, not criminal charges.
- The ED can impose penalties up to three times the amount involved in the violation.

#### Statement 2 is correct:

- FEMA permits Indian residents to hold foreign exchange within specified limits but prohibits unauthorized dealings.
- While current account transactions (trade, remittances, etc.) are generally allowed, capital
  account transactions (investment in foreign assets, debt instruments, etc.) require RBI
  approval.

#### 24. (c)

**Both the statements are correct:** A Pro Tem Speaker is a **temporary speaker** appointed to preside over the **proceedings of the Lok Sabha or the Legislative Assembly of a state.** 

- Appointed typically during the initial phase of the first session after a general election or during special circumstances when the Speaker's office is vacant.
- **Role:** Performs the functions of the Speaker, including administering the oath to newly elected members, conducting the election of the new Speaker, and ensuring smooth parliamentary proceedings in the interim.
- **Appointment:** The President/Governor appoints the Pro Tem Speaker, usually from among the senior-most members of the House.
- **Duration:** The Pro Tem Speaker serves for a very short period, generally until the new Speaker is elected.

# 25. (a)

- Statement 1 is correct: NEP 2020 retains the three-language formula, introduced in the NEP of 1968.
  - States, regions, and students can choose the three languages, as long as at least two are native to India.
  - In addition to the state language, children must learn one other Indian language (not necessarily Hindi).
  - Emphasizes bilingual teaching, focusing on the home language/mother tongue and English.



**Statement 2 is not correct: NEP 1968** made **Hindi compulsory across the nation,** with specific language requirements for states.

- **Hindi-speaking states** were to teach Hindi, English, and a modern Indian language (preferably a South Indian language).
- Non-Hindi-speaking states were expected to teach local language, Hindi, and English.
- Sanskrit is given special emphasis as an optional choice in the three-language formula.

## 26. (c)

Right to Information (RTI) Act, 2005 recognized citizens as the rightful owners of government information and aimed to restore the concept of 'swaraj' (self-rule).

• It provides a legal framework for individuals to access information related to government decisions, policies, and operations.

**Statement 1** is correct: Any citizen of India can request information from a public authority, which is obligated to provide a response within 30 days (or 48 hours in cases concerning life and liberty).

**Statement 2 is correct:** The Act applies to **all levels of government**—central, state, and local bodies, including government-funded NGOs and institutions.

• If an applicant is not satisfied with the response, they can appeal to the **First Appellate Authority** and then to the **Central or State Information Commission.** 

# 27. (a)

The **Delimitation Commission is an independent body** established through a Parliamentary Act, is responsible for overseeing the process.

- The authority, and its decisions cannot be challenged in court. However, the Supreme Court has ruled in **2024 that delimitation orders** can be reviewed if they **violate constitutional values.**
- Composition: Chairperson: A retired Supreme Court judge
  - Members: The Chief Election Commissioner (CEC) or a commissioner appointed by the CEC.
  - State Election Commissioners of the respective states
- The power of delimitation (deciding the number and boundaries of constituencies) is vested in the Parliament.
  - This power has been exercised four times through the Delimitation Commission Acts of 1952, 1962, 1972, and 2002.

# 28. (b)

**In News:** Delhi Congress leaders welcomed the CAG report on AAP's 2021-22 excise policy and urged the immediate formation of the Public Accounts Committee (PAC) for review and public discussion.

#### **Public Accounts Committee**

- **Definition:** The PAC is a committee in the Indian Parliament responsible for auditing the revenue and expenditure of the Government of India.
  - It ensures that parliamentary control over the executive is maintained, particularly regarding government spending.
- **Composition:** The PAC consists of up to 22 members: 15 from the Lok Sabha (Lower House) and 7 from the Rajya Sabha (Upper House).
  - No ministers can be members of the PAC.
  - Members are elected annually by their respective houses using proportional representation through a single transferable vote.
  - The chairperson is appointed by the Speaker of the Lok Sabha.
  - The term of office for members is one year.

# **GEOGRAPHY**

1.	Consider the following countries:		
	Uganda	2.	Zambia
	3. Kenya	4.	Rwanda
	5. Namibia		
	Which of the following countries share	s borders	s with Democratic Republic of Congo (DRC)?
	(a) 1, 2 and 4 only	(b)	1 and 3 only
	(c) 2 and 5 only	(d)	3, 4 and 5 only
2.	Consider the following statements:		
		tan platea	u near Lake Mansarovar and Mount Kailash.
			e Kailash range, just south of Lake Konggyu Tsho
	Which of the statements given above i	s/are corr	rect?
	(a) 1 only	(b)	2 only
	(c) Both 1 and 2	(d)	Neither 1 nor 2
3.	Demchok, recently seen in the news, i		
<b>J.</b>	(a) Arunachal Pradesh	(b)	Sikkim
	(c) Himachal Pradesh	(d)	Ladakh
4.	Consider the following statements reg		
	The Gomti River originates from (		
	2. It is a right-bank tributary of the (		
	<ol><li>The river flows through Lucknow.</li></ol>	•	
	Which of the statements given above i	s/are corr	rect?
	(a) 1 and 2 only	(b)	2 and 3 only
	(c) 1 and 3 only	(d)	1, 2, and 3
5.	The Darien Gap, recently in the news,	is located	d between which two countries?
	(a) Mexico and Guatemala	(b)	Colombia and Panama
	(c) Venezuela and Brazil	(d)	Argentina and Chile
6.	Consider the following statements reg	garding th	e Western Disturbance (WD):
	1. It is an extra-tropical storm that o	riginates	in the Mediterranean region.
	2. WD is important for the agricultu	re of the	Rabi crop in the Northern subcontinent.
	Which of the statements given above i	s/are corr	rect?
	(a) 1 only	(b)	2 only
	(c) Both 1 and 2	(d)	Neither 1 nor 2



7.	Whi	ch of the followir	ng statements a	about the	Atacama De	sert is NC	T correct?					
	(a)	It is one of the d	riest places on	Earth.								
	(b)	It receives high i	rainfall due to t	he Humbo	ldt Current.							
	(c)	It lies between t	he Andes Moui	ntains and	the Pacific (	Ocean.						
	(d)	It has clear skies	, making it idea	al for astro	nomical stud	dies.						
	8.	India's potash reserves are primarily found in which geological basin?										
	(a)	Vindhyan Basin (b) Krishna-Godavari Basin										
	(c)	Nagaur-Ganganagar Basin (d) Gondwana Basin										
9.	Whi	ch of the followir	ng Indian states	has the la	argest gold r	reserves?						
	(a)	Rajasthan		(b)	Karnatak	a						
	(c)	Bihar		(d)	Andhra P	radesh						
10.	Whi	ch of the followir	ng countries are	e collectiv	ely known a	s the Balt	ic States?					
	1.	Estonia		2.	Germany							
	3.	Latvia		4.	Lithuania							
	Sele	ect the correct ans	swer using the	code given	below:							
	(a)	1 and 2 only		(b)	2, 3 and 4	4 only						
	(c)	1, 3 and 4 only		(d)	1, 2, 3 an	d 4						
11.	The	Cook Islands are	located betwe	en which o	of the follow	ing island	d territories?					
	(a)	American Samo	a and French Po	olynesia								
	(b)	Fiji and Tonga										
	(c)	Solomon Islands	and Vanuatu									
	(d)	Samoa and New	Caledonia									
12.	The	Netzarim Corrido	or, recently in t	he news, i	s associated	with whi	ch of the following?					
	(a)	A newly develop	ed economic c	orridor co	nnecting Isra	el and Eg	ypt.					
	(b)	A strategic milita	ary buffer zone	establishe	d by Israel d	luring the	Gaza conflict.					
	(c)	A United Nation	-			za and the	e West Bank.					
	(d)	A disputed territ	ory between Is	rael and L	ebanon.							
13.	Whi	_	•	•	•	a Nixa in t	he eastern Pacific Ocean?					
	(a)	It makes the wa										
	(b)	It causes heavy										
	(c)	It makes the wat		n normal.								
	(d)	It has no signific	ant impact.									
14.	'Kat		', sometimes ap	opeared in			r exclusive sovereignty of:					
	(a)	India		(b)								
	(c)	Bangladesh		(d)	Sri Lanka							
15.	Con	sider the followir	ig statements v	with refere	ence to the i	nterior of	the Earth:					
	1.	Crust consists of	silica, alumina	and magn	iesium.							
	2.	The upper portion			-	nere.						
		ch of the stateme	ents given abov									
	(a)	1 only		(b)	· ·							
	(c)	Both 1 and 2		(d)	Neither 1	nor 2						



16.	Saga	ar Island is locate	d in whic	ch of the	following	states?	
	(a)	Odisha			(b)	West Bengal	
	(c)	Gujarat			(d)	Maharashtra	
<b>17.</b>	Wit	h reference to the	e Yarlung	Tsangpo	(Zangbo	) River, consider the	e following statements:
	1.	It originates in T	ibet and	is known	as the Sia	ang in Arunachal Pr	adesh.
	2.	In Assam, after Brahmaputra.	being jo	oined by	tributari	es such as Dibang	and Lohit, it is called the
	Wh	ich of the stateme	ents giver	n above i	s/are not	correct?	
	(a)	1 only			(b)	2 only	
	(c)	Both 1 and 2			(d)	Neither 1 nor 2	
18.		dam Valley, some <sup>.</sup> nerable Tribal Gro		•	n the new	s, is home to which	of the following Particularly
	(a)	Koraga			(b)	Parhaiyas	
	(c)	Konda Reddis			(d)	Chuktia Bhunjia	
19.	Con	sider the followin	ng statem	nents reg	arding th	e Gulf of Eilat (Gulf	of Aqaba):
	1.	It is located at th Arabia.	ne north	of the Re	ed Sea and	d is bordered by Egy	pt, Israel, Jordan, and Saudi
	2.	The Gulf of Aqab	oa is dee	per than	the Gulf o	of Suez.	
	3.	The world's nort resilient reefs gl		st coral re	eef is foun	d near Aqaba, Jorda	n, making it one of the most
	Wh	ich of the stateme	ents giver	n ab <mark>o</mark> ve i	s/are corr	ect?	
	(a)	1 and 2 only			(b)	1 and 3 only	
	(c)	1, 2, and 3			(d)	2 and 3 only	
20.	Para	ambikulam Tiger f	Reserve i	is part of	which ge	ographical landsca	pe?
	(a)	Satpura Range			(b)	Eastern Ghats	
	(c)	Western Ghats			(d)	Aravalli Range	
21.	Wit	h reference to the	e Anticyc	lone Syst	tem, cons	ider the following s	statements:
	1.	The air pressure	in the ce	enter of t	he system	n is higher compared	d to the areas around it.
	2.	Air moves inwar	d toward	ls the cer	nter of an	anticyclone.	
	3.	Anticyclones ca prolonged dry sp				er patterns signifi	cantly, sometimes causing
	Hov	v many of the stat	ements ;	given abo	ove are co	rrect?	
	(a)	Only one			(b)	Only two	
	(c)	All three			(d)	None	
22.	Con	sider the followin	ng pairs:				
		Locations			Seisı	mic Zones	
	1.	Kohima			Zone	e III	
	2.	Delhi			Zone	e IV	
	3.	Andaman & Nico	obar		Zone	e V	
	Hov	v many of the abo	ve pair(s	s) is/are c	orrectly n	natched?	
	(a)	Only one			(b)	Only two	
	(c)	All three			(d)	None of the above	



23.	VVIII	ch among the for	lowing countri	es are a par	t of the Littlit	JIII IIIC	iligic:
	1.	Argentina					
	2.	Brazil					
	3.	Chile					
	Sele	ect the correct ans	swer using the	code given b	pelow:		
	(a)	1 and 2 only		(b)	2 and 3 only	/	
	(c)	1 and 3 only		(d)	1, 2 and 3		
24.	Witl	h reference to the	e India-Myanm	nar border, c	onsider the f	ollowin	ng statements:
	1.	Manipur shares	the longest bo	rder with M	yanmar amor	ng India	an states.
	2.	People residing	on either side	of the borde	r can cross th	e bord	er without a visa.
	Whi	ich of the stateme	ents given abov	e is/are cori	rect?		
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2	
25.	'Pat	uca and Ulúa' rive	ers are located	l in which of	the following	g conti	nents?
	(a)	Africa		(b)	North Amer	_	
	(c)	South America		(d)	Asia		
26.	` ,	h reference to Gr	oonland which			onts is	/ara carract?
20.	1.	It is the world's			_		
	2.				een North Ar	Herica	and Europe.
		It is an autonom			a a la ver		
		ect the correct ans	swer using the				
	(a)	1 only		(b)	2 only	or 2	
	(c)	Both 1 and 2		(d)	Neither 1 no		
27.			Port, formerly				ted in which Indian state?
	(a)	Kerala		(b)	Andhra Prac	desh	
	(c)	Tamil Nadu		(d)	Karnataka		
28.			_	as recently	shifted from	the lis	t of minor minerals to the
		gory of major mi	nerals?				
	1.	Barytes		2.	Felspar		
	3.	Mica		4.	Quartz		
	5.	Sand					
		ect the correct ans	_	•			
	(a)	1, 2, 3 and 4 onl	У	(b)	1, 2 and 4 o	•	
	(c)	3, 4 and 5 only		(d)	1, 3, 4 and	5 only	
				EXPLANAT	IONs		
1. (	a)						
,	•	. = 1					of Congo, raising fears of a

regional war and a public health crisis.

# **About: Democratic Republic of Congo (DRC)**

• It is the second-largest country in Africa after Algeria and also Africa's most ethnically diverse, with over 200 ethnic groups.



- It shares borders with nine countries: Angola, Burundi, Central African Republic, Republic of the Congo, Rwanda, Sudan, Tanzania, Uganda, and Zambia, extending from Eastern Africa to the Atlantic Ocean.
- Kinshasa is the capital and largest city of the DRC, situated on the banks of the Congo River.



**In News:** A recent study has revealed that the eastern Himalayas of Arunachal Pradesh have lost 110 glaciers over a span of 32 years (1988-2020) and highlights the rapid retreat of glaciers, which has significant implications for the region's hydrology and climate.

## Statement 1 is correct

• The Indus River originates in the Tibetan plateau near Lake Mansarovar and Mount Kailash and flows westward, south of Karakoram Range and north of the Great Himalayas to Mt. Naga Parbat where it turns sharply to the south flowing through Pakistan into the Arabian Sea near Karachi after travelling for 2,880 kilometres.

# **Statement 2 is correct**

- Brahmaputra River (Yalu Zangbu or Tsang Po) rises in the glacier of the Kailash range, just south of Lake Konggyu Tsho in Tibet.
- It ranks amongst the longest rivers of the world. It traverses its first 1,625 kilometres in Tibet, 918 kilometres in India and the remaining 337 kilometres in Bangladesh before it drains into the Bay of Bengal.

# 3. (d)

**Context:** Demchok, which was among the two main points of the recent border row with China, has now been opened for civilian visitors as part of the Centre's new initiative of Battlefield Tourism.

## About

- Demchok is a village and military encampment in the Indian-administered Demchok sector that is disputed between India and China. It is located in the Leh district of Ladakh at an elevation of 4,200 meters.
- Demchok is a historic area of Ladakh, having been part of the kingdom from its inception in the 10th century. The village is named after Demchok Karpo, the rocky white peak behind the present Ladakhi village of Demchok.

## 4. (b)

**Statement 1 is not correct:** The Gomti River originates from Gomat Taal, also known as Fulhaar Jheel, but it's located in Uttar Pradesh, not Uttarakhand.

**Statement 2 is correct:** The Gomti is a tributary of the Ganga River, and it joins the Ganga on its right bank.



**Statement 3 is correct:** Lucknow, the capital of Uttar Pradesh, is situated on the banks of the Gomti River.

# 5. (b)

#### Context

• Darien Gap was in the news for being a major route for the illegal migration to the US.

## **Darien Gap**

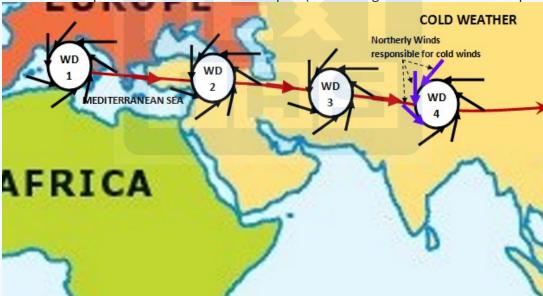
- The Darien Gap is a dense, swampy rainforest spanning approximately 97 km (60 miles) between northern Colombia in South America and southern Panama in North America.
- Environment: The terrain is characterized by muddy trails, wetlands, and steep mountains, making it one of the most inhospitable and dangerous regions in the world.

# 6. (c)

**In Context:** The India Meteorological Department (IMD) has reported a sharp temperature drop across North India due to an active western disturbance positioned over North Pakistan.

# What is Western Disturbance (WD)?

- It is an extra-tropical storm that originates in the Mediterranean region.
  - The disturbance travels from the "western" to the eastern direction and gradually travels across the middle-east from Iran, Afghanistan and Pakistan to enter the Indian subcontinent.
  - Disturbance means an area of "disturbed" or reduced air pressure.
    - Equilibrium exists in nature due to which the air in a region tries to normalize its pressure.
  - In the term "extra-tropical storm", the storm refers to low pressure.
    - "Extra-tropical" means outside the tropics (as WD originates outside the tropical region).



## **Impacts**

- It brings rainfall, snowfall, and fog to northern India.
- WD is important for the agriculture of the Rabi crop in the Northern subcontinent.
- The WD is not always the harbinger of good weather and sometimes, they can cause extreme weather events like floods, flash floods, landslides, dust storms, hail storms and cold waves killing people, destroying infrastructure and impacting livelihoods.

## 7. (b)

The Humboldt Current is a cold current. Cold currents are associated with low rainfall, not high rainfall. The Atacama Desert's extreme aridity is largely because of the Humboldt Current, which



cools the air and prevents moisture from evaporating and forming rain clouds. The rain shadow created by the Andes Mountains also contributes significantly to the desert's dryness.

# 8. (c)

In News: Punjab has become the second Indian state to report significant potash reserves, after Rajasthan. Potash deposits were earlier found in the northwestern Nagaur-Ganganagar basin, covering: Ganganagar & Hanumangarh.

Potash refers to potassium-bearing minerals primarily used in fertilizers. It is a key agricultural nutrient, forming one of the three essential components of N-P-K fertilizers (Nitrogen, Phosphorus, and Potassium). India imports approximately 50 lakh tonnes of potash annually, primarily for use in fertilizers and industries. The discovery of domestic reserves could significantly reduce import dependence and enhance agricultural self-sufficiency.

# 9. (c)

**Context:** Gold investments in India surged by 60% in 2024, reaching \$18 billion (approx Rs 1.5 lakh crore), compared to 2023, according to the World Gold Council (WGC) report.

## **Key facts related to Gold**

- Gold accounts for over 5% of India's total imports.
- Reserves in India: Bihar (44%) followed by Rajasthan (25%), Karnataka (21%), West Bengal (3%), Andhra Pradesh (3%), and Jharkhand (2%).
- Reserves in the world: United States of America, Germany, Italy, and France.

# 10. (c)

**In News**: The three Baltic states disconnected their electricity systems from Russia's power grid to integrate the countries more closely with the European Union and boost security.

- Baltic states are in the northeastern region of Europe and contain the countries of Estonia, Latvia, and Lithuania, on the eastern shores of the Baltic Sea.
- They are bounded on the west and north by the Baltic Sea, which gives the region its name, on the east by Russia, on the southeast by Belarus, and on the southwest by Poland.

# 11. (a)

#### Context

• New Zealand has raised significant concern regarding the Cook Islands' preparation to sign a cooperation deal with China.

#### **About**

- Political Status: The Cook Islands is a self-governing nation in free association with New Zealand.
   It was formerly a dependent New Zealand colony from 1901 to 1965.
- Geography: The Cook Islands are located in Polynesia, Oceania, in the South Pacific Ocean.
  - They are situated northeast of New Zealand, between American Samoa and French Polynesia.
  - The nation consists of 15 islands, with a total land area of approximately 236.7 square kilometers. These islands were formed by volcanic activity.
- The administrative seat is Avarua, located on the island of Rarotonga.



## 12. (b)



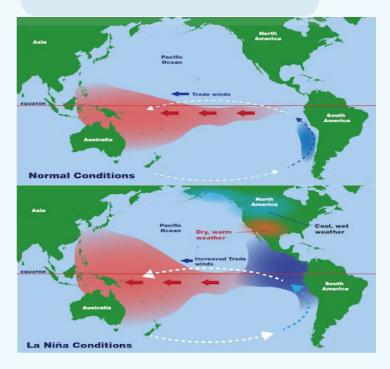
- <u>About Netzarim Corridor</u>The Netzarim Corridor was a strip of land in the Gaza Strip that was under Israeli military control during the conflict.
- It was a strategic military zone established by the Israel Defense Forces (IDF) during the 2023-2025 Gaza War.
- It stretched from the Gaza-Israel border to the Mediterranean Sea, effectively bisecting the Gaza Strip.
- The corridor was named after the former Israeli settlement of Netzarim that once existed in the area.

## 13. (c)

**Context:** Despite the arrival of the La Niña phase, the global average surface air temperature breached the 1.5 degree Celsius threshold.

### What is La Nina?

- It means Little Girl in Spanish. La Niña is also sometimes called El Viejo, anti-El Niño, or simply "a cold event."
- The trade winds become stronger than usual, pushing more warmer waters towards the Indonesian coast, and making the eastern Pacific Ocean colder than normal.





# 14. (d)

**In News:** The maritime boundary between India and Sri Lanka, particularly in the Palk Strait, has long been a contentious zone that revolves around allegations of illegal fishing and the use of destructive fishing practices, leading to frequent arrests and seizures by the Sri Lankan Navy.

- The India-Sri Lanka maritime boundary is defined by a series of agreements between the two countries, primarily focusing on *territorial waters*, the exclusive economic zone (EEZ), and fishing rights.
  - 1974 Agreement: India recognized Sri Lanka's sovereignty over Katchatheevu, an uninhabited island in the Palk Strait.
  - 1976 Agreement: Extended the maritime boundary agreements and restricted fishing rights to respective countries.

# 15. (c)

**In News**: A recent study published in Nature Geoscience suggests that the Earth's inner core is undergoing structural changes.

#### **About**

- Earth is a dynamic planet that undergoes continuous changes inside and outside.
- The Earth is made up of several concentric layers:
  - Crust: The outermost and thinnest layer (35 km on continents, 5 km on ocean floors). It consists of sial (silica and alumina) on continents and sima (silica and magnesium) on ocean floors.
  - Mantle: Located beneath the crust, extending to 2,900 km depth. The upper part is the asthenosphere (up to 400 km), the source of magma. The crust and upper mantle form the lithosphere, which is 10-200 km thick. The lower mantle is solid and extends beyond the asthenosphere.
  - Core: Beneath the mantle, consisting of the outer core (liquid) and inner core (solid). The core is mostly made of nickel and iron (nife layer), with extremely high temperature and pressure.

## 16. (b)

Sagar Island is situated at the mouth of the Bay of Bengal about 120 km from the State capital Kolkata.

- It is the largest island in the Sundarbans archipelago.
- Lakhs of pilgrims visit the island every year to participate in the religious fair and take a dip at the confluence of the Ganga and the sea on the occasion of Makar Sankranti.
- The site is considered sacred and is home to the Kapil Muni temple.

## 17. (d)

#### **Context**

• China's plan to construct the world's largest hydropower dam on the Brahmaputra River, known as the Yarlung Tsangpo in Tibet, has raised significant concerns among downstream countries, particularly India and Bangladesh.

## Yarlung Tsangpo (Zangbo) River

- It originates in Tibet, and enters Arunachal Pradesh, where it is known as the Siang.
- In Assam, it is joined by tributaries such as Dibang and Lohit, and is called the Brahmaputra.
- The river then enters Bangladesh, and makes its way to the Bay of Bengal.
  - The main river does not flow through Bhutan, but 96% of the country's area is within the basin.



**Context:** The Konda Reddi tribe in Andhra Pradesh is exploring the commercial use of bamboo products, including sticks for tobacco farming and supporting banana plants.

#### **About**

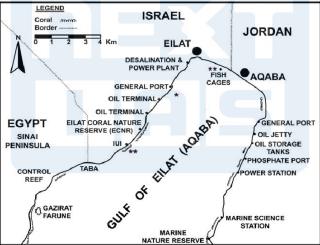
- Hidden in the rugged hills of Jaladam Valley in Andhra Pradesh's Kakinada district lies Gillaram village, home to the Konda Reddi tribe, a Particularly Vulnerable Tribal Group (PVTG).
- Konda Reddies have their own institution of social control called 'Kula Panchayat'. Each village has a traditional headman called 'Pedda Kapu'.
- Their mother tongue is Telugu.

# 19. (a)

**In News:** Recent research has uncovered a significant pause in coral reef growth in the Gulf of Eilat (Gulf of Agaba).

#### **About Gulf of Eilat**

- Location: Northern tip of the Red Sea, between the Sinai & Arabian Peninsulas.Bordering Countries: Egypt, Israel, Jordan, Saudi Arabia.
- Depth & Contrast: The Gulf of Aqaba is deep (1,850 meters), unlike the much shallower Gulf of Suez (100 meters).
- Coral Resources: The Gulf of Aqaba is also notable for its coral reef ecosystems, which are among the world's northernmost coral reefs
- Northernmost Coral Reef: Found near Eilat, Israel, making it one of the most resilient reefs globally.



#### 20. (c)

### Context

• A faunal survey by the Forest Department at the Parambikulam Tiger Reserve in Palakkad has added 15 new species to the protected area's checklist.

#### **About**

- Location: Parambikulam Tiger Reserve is nestled in the AnamalaiNelliyampathy landscape of the Western Ghats Mountains in Palakkad and Thrissur districts of Kerala.
- **Tribes:** The Tiger Reserve is the home of four different tribes of indigenous peoples including the **Kadar, Malasar tribe, Muduvar and Mala Malasar** settled in six colonies.
- **Flora:** The reserve supports diverse habitat types viz., evergreen, semi-evergreen, moist deciduous, dry deciduous and shola forests.



- Other unique habitats like montane and marshy grasslands, locally known as 'vayals', are also found.
- The sanctuary has a variety of trees mainly **teak**, **neem**, **sandalwood** and **rosewood**. The oldest ever teak tree, **Kannimara Teak** exists here.
- **Fauna:** It has a rich biodiversity of animal life including mammals, birds, fishes etc. Parambikulam is referred to as the "**state capital for the massive gaur**".

Tomopterna parambikulamana (Parambikulam Frog) and one species of sucker fish, Garro surendranathanii, are endemic to the reserve.

## 21. (b)

**Statement 1 is correct:** Weather experts said the anomalous spike in temperatures in Mumbai was spurred by the presence of an **anticyclone system along the western coast.** 

- An anticyclone is a **high-pressure weather system** where the air pressure at the surface is higher than the surrounding areas.
- **High pressure at the center:** The air pressure in the center of the system is higher compared to the areas around it.

Statement 2 is not correct: Air movement: Air moves outward from the center of an anticyclone.

• **Sinking air:** The air within an anticyclone sinks rather than rising, preventing cloud formation and often leading to dry and clear conditions.

**Statement 3 is correct: Impact:** Anticyclones can influence local weather patterns significantly, sometimes causing prolonged dry spells or heatwaves.

# 22. (b)

India is highly vulnerable to earthquakes, with **58.6% of India's landmass** is prone to moderate to very high intensity earthquakes.

 Approximately 11% area falls in Zone V, about 18% in Zone IV, about 30% in Zone III and remaining in Zone II.

Pair 1 is not correctly matched, and Pair 3 is correctly matched:

- Zone V (Highest Risk): Northeast India including Kohima, Himachal Pradesh, Uttarakhand, Andaman & Nicobar, parts of Bihar and Gujarat.
- These are the most vulnerable areas in India, corresponding to MSK-9 levels of intensity or higher.

# Pair 2 is correctly matched:

- **Zone IV: Delhi**, parts of Maharashtra, Jammu & Kashmir. It includes areas that are expected to experience **MSK-8-level** intensity during an earthquake.
- **Zone III:** Southern and central states with moderate seismic activity.
- **Zone II:** Least risk, including parts of southern India.

#### 23. (c)

## **Lithium Triangle**

- The "Lithium Triangle" refers to a region in South America that contains some of the world's largest lithium reserves.
- This triangular-shaped region encompasses parts of Argentina, Bolivia, and Chile; they possess 58% of the world's known lithium reserves.





# 24. (b)

**In News:** The recent political instability in Myanmar, coupled with the influx of refugees into India, particularly the border regions with Myanmar, has strained the already fragile border management and security infrastructure.

## Statement 1 is not correct

 The India-Myanmar border shares 1643 kms and passes through the States of Arunachal Pradesh (520 km, longest border with Myanmar), Mizoram (510 km), Nagaland (215 km) and Manipur (398 km).

## Statement 2 is correct

- The Free Movement Regime (FMR) allows people residing within 16 km on either side of the border to cross without a visa for up to 14 days, and was designed to facilitate traditional and cultural exchanges.
- However, border regions of Manipur (sharing a border with Myanmar's Chin state), have long been a site of ethnic tensions, insurgency, and geopolitical complexities.

# 25. (b)

Honduras is a country of **Central America (North America)** situated between **Guatemala and El Salvador to the west and Nicaragua to the south and east.** 

- In the north, the country shares a vast stretch of coast with the **Caribbean Sea.** On the south, it shares a small stretch with the **Pacific Ocean.**
- Honduras is the second largest country in Central America, following Nicaragua.
- Official Language: Spanish.
- Major Rivers: Patuca, Ulúa.
- Major Mountain Ranges: Volcanic Highlands, Central American Cordillera.

# 26. (a)

#### Greenland

 Greenland, the world's largest island, is an autonomous territory of Denmark located in the North Atlantic and Arctic Oceans.



- It lies between North America and Europe, with Canada to the west and Iceland to the east.
- Greenland's **80% area** is covered by the Ice Sheet, the second-largest ice mass in the world after **Antarctica**.
- The capital and largest city of Greenland is Nuuk.

# Context

• The VOC Port Authority is exploring the possibility of setting up a shipbuilding facility in Thoothukudi.

#### **About**

- Location: V.O. Chidambaranar Port, formerly known as **Tuticorin Port**, is located on the southeastern coast of India in the **Gulf of Mannar**, at latitude 8° 45'N and longitude **78° 13'E**.
- **Strategic Significance:** It lies close to the East-West International sea routes, making it a crucial hub for maritime trade.
- **Natural Advantages:** It is well-sheltered from storms and cyclonic winds, ensuring minimal disruptions in port operations.

# 28. (a)

#### Context

- The Ministry of Mines has shifted minerals **Barytes, Felspar, Mica and Quartz** from the list of minor minerals to the category of **major minerals**.
- Sand is a minor mineral, as defined under section 3(e) of the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act 1957).



# GOVERNMENT SCHEMES/ INITIATIVES

- 1. With reference to the Samudrayaan Mission, consider the following statements:
  - 1. It is India's first manned ocean mission to explore the deep ocean.
  - 2. The mission aims to send three people to a depth of 6,000 meters in a submersible called the MATSYA 6000.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- 2. Which of the following is NOT a key objective of the 'Gyan Bharatam Mission'?
  - (a) Preservation and digitization of India's manuscript heritage
  - (b) Establishment of a centralized digital repository for ancient texts
  - (c) Promotion of modern printing techniques for ancient manuscripts
  - (d) Strengthening research and scholarly access to historical manuscripts
- **3.** *'GARBH-INi-DRISHTI'* recently seen in the news, is related to which of the following?
  - (a) Cybersecurity Software developed by the Ministry of Electronics and Information Technology.
  - (b) A Mission by the Ministry of Railways.
  - (c) A newly developed Nuclear Facility.
  - (d) Data repository on maternal and neonatal health.
- 4. What is the primary objective of the Ayushman Vay Vandana Scheme (AVVS)?
  - (a) Providing health insurance to senior citizens
  - (b) Offering financial security through a guaranteed pension
  - (c) Providing employment to the elderly population
  - (d) Promoting entrepreneurship among retirees
- **5.** With reference to the *National Agricultural Market (e-NAM)*, consider the following statements:
  - 1. It networks the existing Agricultural Produce Market Committee (APMC) in India.
  - 2. It is implemented by the Small Farmers Agribusiness Consortium (SFAC), under the aegis of the Ministry of Commerce and Industry.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- **6.** With reference to Prime Minister Dhan-Dhaanya Krishi Yojana (PMDKY), consider the following statements:
  - 1. It was announced by the Finance Minister while presenting the Union Budget 2025-26.
  - 2. It will cover 100 districts based on three broad parameters: low productivity, moderate crop intensity, and below-average credit parameters.



	Which of the statements given above is/are correct?											
	(a)	1 only		(b)	2 only							
	(c)	Both 1 and 2		(d)	Neither 1 nor 2							
7.	The	SAKSHAM campa	ign, recently seen in	the ne	ws, is related to wh	ich of the following?						
	(a)	Women's safety	and empowerment	(b)	Promoting digital	literacy						
	(c)	Rural sanitation	awareness	(d)	Fuel conservation	and energy efficiency						
8.	Wha	at is the primary o	objective of the NAM	IASTE	Scheme?							
	(a)	Providing urban	housing for sanitatio	n wor	kers							
	(b)	Establishing was	te-to-energy plants									
	(c)	Formalizing and	upskilling sanitation	worke	ers							
	(d)	Ensuring univers	sal access to piped wa	ater								
9.						how many of the following						
	-	_	overed under the sch	nemeî	?							
	1.	Food Crops										
	2.	Oilseeds	al ara na									
	3.	Annual Horticult										
		ct the correct opt	tion:	41.1								
	(a)	Only one		(b)	Only two							
	(c)	All three		(d)	None							
10.						n the Soil Health Card?						
	(a) (b)		osphorus (P), Potassi osphorus (P), Zinc (Zi									
	(c)		osphorus (P), Potassi									
	(d)		Potassium (K), Boron									
11.						and Records Modernization						
		gramme (DILRMP)		anib	the Digital Mala La	The Records Widderinzation						
	1.	It was launched	as a new scheme und	der th	e Digital India initiat	tive in 2016.						
	2.	It is a Central Sec	ctor Scheme with 100	0% fur	nding from the Cent	re.						
	3.	•		que La	and Parcel Identific	ation Number (ULPIN), also						
		known as Bhu-A										
			ents given above is/a									
	(a) (c)	1 and 2 only 1 and 3 only		(b) (d)	2 and 3 only 1, 2, and 3							
42		•	ush as a a Dhanat Dua di	` ,		-: (AD DN4 IAV)h:-h -f						
12.			usnman Bharat Pradi ents is/are correct?	nan ivi	iantri- Jan Arogya Yo	ojana (AB PM-JAY), which of						
	1.	_		s. 5 lak	khs per family per ye	ar for secondary and tertiary						
		care hospitalizat			. ,, ,	,						
	2.	The Scheme will	apply to all aged 70 a	nd ab	ove, irrespective of	their socio-economic status.						
	Sele	ct the correct ans	swer using the code	given	below:							
	(a)	1 only		(b)	2 only							
	(c)	Both 1 and 2		(d)	Neither 1 nor 2							



- **13.** Which of the following best describes the Bharat Tech Triumph Program recently seen in the news?
  - (a) A government initiative to promote India's IT exports.
  - (b) A program launched to boost India's semiconductor manufacturing.
  - (c) An initiative to showcase India's gaming talent globally.
  - (d) A scheme to support Indian startups in the fintech sector.

#### **EXPLANATIONS**

# 1. (c)

**Both the statements are correct:** Launched in **2021**, it is India's **first manned ocean mission** to explore the deep ocean.

- It is a project of the Ministry of Earth Sciences (MoES) under the Deep Ocean Mission.
- The technology is being developed by the National Institute of Ocean Technology (NIOT).
  - NIOT is an autonomous institute under MoES, has developed a 6000m depth-rated Remotely Operated Vehicle (ROV) 'Matsya 6000'.
- The mission aims to send **three people to a depth of 6,000 meters** in a submersible called the MATSYA 6000.
  - The submersible will have an operational endurance of 12 hours, which is extendable up to 96 hours in the event of an emergency.

# 2. (c)

In News: The Gyan Bharatam Mission was announced in the Union Budget 2025-26.

#### **About**

- It is a landmark initiative focused on the **survey, documentation, and conservation** of India's **manuscript heritage**.
- The mission aims to cover **more than one crore manuscripts**, ensuring their **preservation and accessibility** for future generations.
- With this initiative, the government is taking **significant steps to revive the National Manuscripts Mission (NMM)** and promote India's **rich literary and intellectual traditions** at a global level.
- To accommodate this initiative, the budget for the National Manuscripts Mission (NMM) has been significantly increased from ₹3.5 crore to ₹60 crore.

## Significance of the Mission

- **Preserving India's Intellectual and Cultural Heritage**: Manuscripts hold knowledge on subjects such as **philosophy, science, medicine, literature, mathematics, and astronomy**. Their preservation helps safeguard **India's historical wisdom**.
- **Reviving the National Manuscripts Mission (NMM)**: The NMM, originally launched in **2003** but largely inactive, will now receive **substantial funding and institutional backing**.
- **Digital Access for Future Generations**: Manuscripts often suffer from **physical decay**. Digitization ensures **24/7 access to these texts worldwide** while preventing deterioration.
- **Global Academic Impact**: By making manuscripts available for study, India strengthens its position as a **hub of ancient knowledge and scholarship**.

## 3. (d)

The Department of Biotechnology has launched the GARBH-INI-DRISHTI data repository.



- GARBH-INI-DRISHTI is the **Data Repository and Information Sharing Hub** at **Translational Health Science and Technology Institute (THSTI).** 
  - It provides access to clinical data, images, and biospecimens collected from over 12,000 pregnant women, newborns, and postpartum mothers.
- **Significance:** As one of South Asia's largest maternal and child health databases, GARBH-INi-DRISHTI will empower researchers worldwide to conduct transformative research aimed at improving maternal and neonatal health outcomes.
- **THSTI:** The newly inaugurated THSTI Ferret Research Facility, is a state-of-the-art establishment adhering to the highest biosafety and research standards.
  - It will serve as a crucial resource for vaccine development, therapeutic testing, and research into emerging infectious diseases.

# 4. (b)

The Ayushman Bharat Vay Vandana Yojana (ABVVY) is a government-backed pension scheme aimed at providing financial security to senior citizens (above 60 years).

#### **Features**

- Implemented by Life Insurance Corporation of India (LIC).
- Provides guaranteed pension for 10 years. Pension payout options are Monthly, Quarterly, Half-Yearly, or Annually.
- Maximum investment limit: ₹15 lakh per individual.
- If the pensioner passes away during the policy term, the purchase price is refunded to the nominee.
- After 10 years, the purchase price + final pension installment is returned to the policyholder.

# 5. (a)

**In News:** Recently, the Union Agriculture Minister has announced plans to upgrade the e-NAM platform as **'e-NAM 2.0'** to address logistical challenges in inter-state and inter-mandi trade.

#### Statement 1 is correct

National Agricultural Market (e-NAM) is a pan-India electronic trading platform which
networks the existing Agricultural Produce Market Committee (APMC) Mandis to create a
unified national market for agricultural commodities.

## Statement 2 is not correct

- It is implemented by the **Small Farmers Agribusiness Consortium (SFAC)**, under the aegis of the Ministry of Agriculture and Farmers' Welfare (MoA&FW).
- Digital services are provided to traders, farmers, Farmers Producer Organizations (FPO), Mandis through various modules of e-NAM platform.

## 6. (c)

**Both the statements are correct:** The Finance Minister while presenting the Union Budget announced the launch of the Prime Minister Dhan-Dhaanya Krishi Yojana (PMDKY).

- PMDKY will cover 100 districts based on three broad parameters: low productivity, moderate crop intensity, and below-average credit parameters.
- **Cropping intensity** is a measure of how efficiently land is used, and it is defined as the percentage of the gross cropped area to the net area sown.
- Aim:
  - Enhance agricultural productivity;



- Adopt crop diversification and sustainable agricultural practices;
- Augment post-harvest storage at panchayat and block level;
- Improve irrigation facilities;
- Facilitate availability of long- and short-term credit.
- Under this scheme, 1.7 crore farmers will receive support. The scheme will be implemented in partnership with state governments.
- Benefits: Provides quality seeds, fertilizers, and chemicals to boost crop production.

# 7. (d)

**Context**: Oil and gas Public Sector Undertakings such as Indian Oil Corporation Limited and Bharat Petroleum Corporation Limited launched a 14-day awareness campaign—SAKSHAM.

#### **About**

- The campaign aims to raise awareness about fuel conservation and the judicious use of petroleum products to ensure a safer environment and sustainable energy resources for future generations.
- The campaign includes various activities such as walkathons, quizzes, and slogan-writing competitions to engage and educate the public.

# 8. (c)

#### **About NAMASTE Scheme**

- Objectives: Eradicate manual scavenging by promoting mechanized sanitation.
- Enhance the safety and dignity of sewer & septic tank workers.
- Formalize the workforce and provide skill development opportunities.
- Implemented By: Ministry of Social Justice and Empowerment (MoSJE) & Ministry of Housing and Urban Affairs (MoHUA)
- Implementation Timeline: FY 2023-24 to 2025-26 (3 years).
- Target Group: Initially focused on sewer and septic tank workers (SSWs).
  - Wastepickers were added in 2024 to further expand coverage.

## 9. (c)

**Context:** The **Pradhan Mantri Fasal Bima Yojana (PMFBY)** recently celebrated its ninth anniversary, marking nearly a decade of empowering Indian farmers with comprehensive crop insurance.

#### **About PMFBY**

- Launch: 2016 by the Ministry of Agriculture & Farmers Welfare.
- **Coverage:** All farmers, including sharecroppers and tenant farmers, growing notified crops in designated areas.
- Crops Covered Under PMFBY
  - Food crops (Cereals, Millets and Pulses)
  - Oilseeds- Rape & Mustard
  - Annual Commercial/Annual Horticultural crops- Potato, Sugarcane and Jute

## 10. (a)

## **Context**

• The Soil Health Card Scheme, introduced on February 19, 2015, in Rajasthan, has completed a decade in operation.



#### Soil Health Cards Scheme

- **Objective:** Soil health card provides information to farmers on **nutrient status** of their soil along with **recommendations on appropriate dosage of nutrients to be applied** for improving soil health and its fertility.
  - The scheme assists State Governments to issue soil health cards to all farmers in the country.
- The Soil Health Card contains status of the soil with respect to **12 parameters** that determine soil health:
  - Macro-nutrients: Nitrogen (N), Phosphorus (P), Potassium (K), Sulfur (S).
  - Micro-nutrients: Zinc (Zn), Iron (Fe), Copper (Cu), Manganese (Mn), Boron (Bo).
  - Other Indicators: pH level (Acidity or Basicity of soil), Electrical Conductivity (Indicates the presence of salts in soil), Organic Carbon (OC).

# 11. (b)

**Statement 1 is not correct:** The DILRMP is not a new scheme under the Digital India initiative launched in 2016. It is a modified form of the earlier National Land Records Modernization Programme (NLRMP), which was launched in 2008.

**Statement 2 is correct:** DILRMP is a Central Sector Scheme, meaning it receives 100% funding from the central government.

**Statement 3 is correct:** The Unique Land Parcel Identification Number (ULPIN), also known as Bhu-Aadhar, is a crucial part of the DILRMP. It's a unique 14-digit identification number assigned to every land parcel, helping to digitize and integrate land records.

# 12. (c)

## Context

 Delhi Cabinet approved the implementation of Ayushman Bharat scheme in the National Capital.

## **Ayushman Bharat Scheme**

- It was launched in 2018 with the aim of achieving universal health coverage. It has two key components;
- Ayushman Bharat Pradhan Mantri- Jan Arogya Yojana (AB PM-JAY)
- Ayushman Arogya Mandir

# Ayushman Bharat Pradhan Mantri- Jan Arogya Yojana (AB PM-JAY)

- AB PM-JAY is the largest publicly funded health assurance scheme in the world which provides health cover of Rs. 5 lakhs per family per year for secondary and tertiary care hospitalization.
  - The Scheme will apply to all aged 70 and above, irrespective of their socio-economic status.
- Coverage: It covers up to 3 days of pre-hospitalization and 15 days of post hospitalization expenses such as diagnostics and medicines.
  - The beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.
  - There is no restriction on the family size, age or gender.
- **Eligibility:** The inclusion of households is based on the deprivation and occupational criteria of the Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas, respectively.
  - This number also includes families that were covered in the Rashtriya Swasthya Bima Yojana (RSBY) but were not present in the SECC 2011 database.



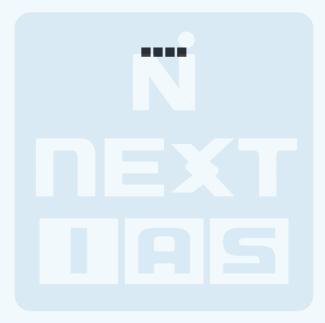
- Funding: The funding for the scheme is shared by the Centre and the state in a 60:40 ratio.
  - However, for North-Eastern states, Himalayan states (such as Uttarakhand, Himachal Pradesh), and Union Territories, the ratio is 90:10.

#### In Context

• The **Bharat Tech Triumph Program** is a significant initiative aimed at fostering India's digital and online gaming industry.

# **Key Highlights**

- Launched by: Interactive Entertainment and Innovation Council (IEIC), in partnership with the Ministry of Information and Broadcasting (MIB).
- Objective: To identify and showcase India's gaming talent on the global stage.
- **Significance:** Provides Indian innovators a global platform to highlight their expertise.
  - Expands India's presence in the international gaming industry.
  - Encourages technological advancements and innovations in the gaming sector.



# **DEFENSE/INTERNAL SECURITY**

1.	Eku	verin, is a Joint M	ilitary E	xercise	betwe	een In	dia and whic	h one	of the following countries?
	(a)	Kazakhstan	,			(b)	Kuwait		ŭ
	(c)	Nepal				(d)	Maldives		
2.		rcise Cyclone, is a he following coun	_	litary e	xercis	e betv	veen the spe	cial fo	rces of India and which one
	(a)	Israel				(b)	Egypt		
	(c)	Qatar				(d)	Bangladesh		
3.	Wit	h reference to Inc	lia's high	n-profil	e Defe	ence e	xercises, con	sider t	he following pairs:
		Name of Exercise	F	Particip	ating	counti	ries		
	1.	Ajeya Warrior	l	Jnited A	Arab E	mirate	es		
	2.	Konkan	(	Oman					
	3.	Tarang Shakti	l	Jnited I	Kingdo	om			
	Hov	v many of the abo	ve pairs	are co	rrectl	y mat	ched?		
	(a)	Only one				(b)	Only two		
	(c)	All three				(d)	None		
4.	Exe	rcise Komodo is a	biennia	l multil	ateral	naval	exercise hos	ted by	which country?
	(a)	India				(b)	Indonesia		
	(c)	Australia				(d)	United State	es	
5.	Zair	-Al-Bahr, is a joint	naval e	xercise	betw	een Ir	ndia and whic	h one	of the following countries?
	(a)	Saudi Arabia				(b)	United Arab	Emira	tes
	(c)	Qatar				(d)	Oman		
6.		ARMA GUARDIAN ntries?	is a Joir	nt Milit	ary Ex	ercise	between Inc	lia and	which one of the following
	(a)	Australia				(b)	United State	es	
	(c)	France				(d)	Japan		
					EXPLA	ANATI	ONs		
1.	(d)								
	<b>Conte</b> Maldi	ves National Defe	-		-				en the Indian Army and the nation.
	About								
		uverin means 'Frie			_	_	,		
	<ul> <li>Th</li> </ul>	e military exercise	is a bilat	teral an	ınual e	exercis	e conducted	alterna	atively in India and Maldives.

• In 2023, it was conducted at Chaubatia in Uttarakhand.



# 2. (b)

**In News:** The **third edition of** *Exercise Cyclone*, i.e. **'Cyclone 2025'** is taking place at the Mahajan Field Firing Range in Rajasthan.

#### **About**

- Exercise Cyclone is a joint military exercise between India and Egypt.
- It aims to enhance defence cooperation by sharing professional skills and improving interoperability of special forces in desert environments.

## 3. (a)

#### Context

• India and the United Kingdom have signed multiple agreements aimed at enhancing bilateral defence collaboration.

# **Defense Cooperation Between India and UK**

- Over the past decade, only about 3% of India's defence acquisitions came from the UK.
- Modern Collaborative Frameworks:
  - Defense and International Security Partnership (DISP), 2015: It aims to enhance cooperation in areas such as counter-terrorism, cyber security, and defense manufacturing.
- Joint Military Exercises and Training:
  - Exercise Ajeya Warrior;
  - Exercise Konkan;
  - Exercise Cobra Warrior;
  - Exercise Tarang Shakti.

# 4. (b)

**In News:** The Indian Navy, represented by INS Shardul and P8I Long Range Maritime Surveillance aircraft, is actively participating in Exercise Komodo 2025.

#### **About Exercise Komodo**

- First launched in 2014, it is a non-combat military exercise aimed at fostering maritime cooperation among friendly nations.
- It is a multilateral naval exercise hosted by the Indonesian Navy in Bali, Indonesia.
- This aligns with India's SAGAR (Security and Growth for All in the Region) vision, strengthening maritime partnerships in the Indo-Pacific.
- Enhanced interoperability with ASEAN Navies and QUAD partners.

#### 5. (c)

## **Context**

 India and Qatar have signed an agreement to elevate their ties to the level of a strategic partnership.

# **Brief on India-Qatar Relations**

- **Defence: Zair-Al-Bahr** is a joint naval exercise between the Indian Navy and the Qatar Emiri Naval Force (QENF).
- Economic and Trade Relations: Qatar is the largest provider of liquefied natural gas (LNG) and liquefied petroleum gas (LPG) to India, supplying 10.91 million metric tonnes of LNG and 4.92 million metric tonnes of LPG in FY 2023-24.
  - The current annual trade is worth \$14.08 billion.
- Labor and Diaspora: India has a large expatriate community in Qatar, numbering over 700,000.



6. (d)

**Context:** The 6th edition of India- Japan Joint Military Exercise DHARMA GUARDIAN has commenced in the East Fuji Manoeuvre Training area of Japan.

#### **About**

- Initiated in **2018**, Exercise DHARMA GUARDIAN is an **annual event** conducted alternatively in India and Japan.
- The last edition of the same exercise was conducted in Rajasthan (India) in 2024.
- The aim of the exercise is to enhance interoperability between the two forces while undertaking joint urban warfare and counter-terrorism operations under **UN mandate**.





# INTERNATIONAL RELATIONS

1.	Cons	ider the following sta	ement with ref	erenc	e to the Internatio	nal Criminal Court (ICC).					
	1.	It is the world's first p	ermanent interr	ation	al criminal court.						
	2.	It is not part of the Ur	nited Nations sys	stem.							
	3.	It operates with 18 ju	dges and they se	erve 9	-year terms.						
	How	many of the above sta	itements are co	rrect?							
	(a)	Only one		(b)	Only two						
	(c)	All three		(d)	None						
2.		sider the following stelopment (USAID):	atements rega	rding	the United State	s Agency for International					
	1.	It was established in 1	.961 during the	Cold \	War era.						
	2.	USAID primarily focuses on military assistance to U.S. allies.									
	Whi	ch of the statements g	ven above is/are	e corr	ect?						
	(a)	1 only		(b)	2 only						
	(c)	Both 1 and 2		(d)	Neither 1 nor 2						
3.	Recently India signed agreements like 'Defence Partnership—India (DP-I)' and 'STARStreak' which of the following countries?										
	(a)	United States		(b)	France						
	(c)	United Kingdom		(d)	Russia						
4.	Whic	ch among the following	g countries are a	part	of the European Fro	ee Trade Association (EFTA)?					
	1.	France		2.	Switzerland						
	3.	Norway		4.	Germany						
	Seled	ct the correct answer	using the code g	given	below:						
	(a)	1 and 2 only		(b)	2 and 3 only						
	(c)	1. 2 and 3 only		(d)	1, 2, 3 and 4						
5.		ch of the following are Economic Cooperatior		of Bay	of Bengal Initiative	for Multi-Sectoral Technical					
	1.	Energy		2.	Tourism						
	3.	Fisheries		4.	Poverty alleviation	า					
	5.	Counter-terrorism		6.	Environment						
	Sele	ct the correct answer	using the code g	given	below:						
	(a)	1, 2, 4 and 5 only		(b)	2, 3, 4, 5 and 6 or	nly					
	(c)	1, 3, 4, and 6 only		(d)	1, 2, 3, 4, 5 and 6						



6.	Whi	ch of the followin	g statements	is NOT corre	ect about the NB-8	countries?					
	(a)	All NB-8 countrie	es are membe	rs of the Eur	opean Union (EU).						
	(b)	The Nordic coun	tries in NB-8 ii	nclude Denm	nark, Finland, Icelan	d, Norway, and Sweden.					
	(c)	The Baltic states	in NB-8 includ	de Estonia, La	atvia, and Lithuania						
	(d)	NB-8 countries c	ooperate clos	ely on cyber	security and defens	se policies.					
7.	rece	•	the news.	These initia	tives indicate that	s) and HORIZON 2047 have India is strengthening its					
	(a)	France		(b)	United States						
	(c)	Russia		(d)	United Kingdom						
8.		ecently, India announced the 'TRUST Initiative', as a bilateral agreement with which of the ollowing countries?									
	(a)	France		(b)	United States						
	(c)	Sri Lanka		(d)	Bangladesh						
9.	With	n reference to US	India 123 Civi	il Nuclear Ag	reement, consider	the following statements:					
	1.	It allows the U.S		ndia with nu	clear fuel, technolo	ogy, and reactors for civilian					
	2.	Under the Agree	ment India is	restricted fro	om weapons develo	pment.					
	Whi	ch of the stateme	nts given abov	ve is/are cori	rect?						
	(a)	1 only		(b)	2 only						
	(c)	Both 1 and 2		(d)	Neither 1 nor 2						
10.	Con	sider the followin	g statements	regarding th	e International Fin	ance Corporation (IFC):					
	1.	It is a member o	f the World Ba	nk Group.							
	2.	It was establishe	d in 1965 to s	upport priva	te sector investmer	its in developing economies.					
	3.	India is a membe	er of the IFC.								
	Whi	ch of the stateme	nts given abov	ve are correc	t?						
	(a)	1 and 2 only		(b)	2 and 3 only						
	(c)	1 and 3 only		(d)	1, 2, and 3 only						
11.		n reference to th	e Vienna Coi	nvention on	Diplomatic Relation	ons, consider the following					
	1.	It provides a fradiplomats.	mework for th	ne functionir	ng of diplomatic mi	ssions and the protection of					
	2.	Family members receive the same	•			ot citizens of the host don't					
	Whi	ch of the stateme	nts given abo	ve is/are co	rect?						
	(a)	1 only		(b)	2 only						
	(c)	Both 1 and 2		(d)	Neither 1 nor 2						
12.		ch among the fo ernmental Organi			part of the Bay o	f Bengal Programme Inter-					
	1.	Bangladesh		2.	Maldives						
	3.	Myanmar		4.	Sri Lanka						



Select the correct answer using the code given below:

(a) 1 and 2 only

(b) 1, 2 and 3 only

(c) 1, 2 and 4 only

- (d) 1, 2, 3 and 4
- **13.** With reference to AARDO, consider the following statements:
  - 1. AARDO was officially established in 1962, with its constitution adopted in Cairo, Egypt.
  - 2. The organization was formed after the 1961 Afro-Asian Conference on Rural Reconstruction in New Delhi.
  - 3. Its headquarters is located in Addis Ababa, Ethiopia.

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
- **14.** Consider the following statements regarding the Hague Service Convention:
  - 1. It was adopted in 1965 to streamline the process of serving legal documents across international borders.
  - 2. India is not a signatory to the convention.
  - 3. The convention prohibits the service of judicial documents through diplomatic or consular channels, except when the recipient is a national of the requesting country.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2, and 3

#### **EXPLANATIONS**

## 1. (c)

**In News**: U.S. President Donald Trump imposed sanctions on the International Criminal Court (ICC) for investigating U.S. and Israeli actions, including an arrest warrant for Israeli Prime Minister Netanyahu.

**Statements 1,2 and 3 are correct:** The International Criminal Court (ICC) established by the Rome Statute .

- It became functional in 2002, its founding treaty was adopted by the UN General Assembly in 1998 in Rome, Italy, thereby making it the Rome Statute.
- It is the world's first permanent international criminal court.
- Located in The Hague, Netherlands, it operates independently of the United Nations.
- **Composition**: The **ICC's 18 judges** are elected by the Assembly of States Parties for their qualifications, impartiality and integrity, and **serve 9-year**, **non-renewable terms**.

# 2. (a)

**Context:** The Donald Trump administration is set to reduce the **US Agency for International Development (USAID)** workforce as part of a government reorganisation effort.

**About: USAID** 

- **History:** Established in **1961** by U.S. President John F. Kennedy at the height of the United States' **Cold War struggle** with the Soviet Union.
- **Significance:** USAID is a crucial arm of U.S. foreign policy, used to strengthen alliances, exert diplomatic influence, and support global development by assisting countries recovering from **disasters**, **fighting poverty**, **and promoting democratic reforms**.



- Aid Recipients (2023): The agency provided assistance to over 130 countries, with Ukraine, Ethiopia, Jordan, Somalia, and Afghanistan being the top beneficiaries.
- Workforce: It employs over 10,000 people worldwide, two-thirds of whom work outside the U.S. However, Trump's overhaul aims to slash staff from 10,000 to just 300.

**In News:** Recently, **India and the United Kingdom** have signed multiple agreements aimed at enhancing bilateral defence collaboration that were formalized during the Aero India 2025 event.

- **Defence Partnership—India (DP-I):** It includes the establishment of **a dedicated programme office within the U.K.'s Ministry of Defence,** which will serve as a one-stop hub for strengthening bilateral defence collaboration.
  - It aims to facilitate deeper cooperation and support economic growth in both countries.
- Laser Beam Riding MANPADs (LBRM): Both countries signed a contract to deliver Laser Beam Riding Man Portable Air Defence Systems (MANPADS), with an initial supply of High Velocity Missiles (STARStreak) and launchers set for delivery this year.

## 4. (b)

European Free Trade Association (EFTA) is the intergovernmental organisation of **Iceland**, **Liechtenstein**, **Norway and Switzerland**.

• It was set up in **1960** by its then seven Member States for the promotion of free trade and economic integration between its members.

# 5. (d)

In News: India hosted the 1st BIMSTEC Youth Summit in Gandhinagar, Gujarat.

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organization that was established on 06 June 1997 with the signing of the Bangkok Declaration. Initially known as BIST-EC (Bangladesh-India-Sri Lanka-Thailand Economic Cooperation), the organisation is now known as BIMSTEC and comprises seven Member States with the admission of Myanmar on 22 December 1997, and Bhutan and Nepal in February 2004. Being a sector-driven grouping, cooperation within BIMSTEC had initially focused on six sectors in 1997 (trade, technology, energy, transport, tourism, and fisheries) and expanded in 2008 to incorporate agriculture, public health, poverty alleviation, counter-terrorism, environment, culture, people-to-people contact, and climate change.

## 6. (b)

The NB-8 (Nordic-Baltic Eight) is a regional cooperation format involving Denmark, Finland, Iceland, Norway, Sweden, Estonia, Latvia, and Lithuania. It focuses on collaboration between the Nordic and Baltic countries. However, **not all NB-8 members are in the EU.** While Denmark, Finland, Sweden, Estonia, Latvia, and Lithuania are EU members, **Iceland and Norway are not.** Therefore, while the NB-8 fosters broader Nordic-Baltic cooperation, discussions within the NB-8 often center on EU-related matters, excluding Iceland and Norway from those specific discussions. So, the statement including all Nordic countries as part of the EU within the NB-8 context is **not correct.** 

# 7. (a)

**In News:** India and France's robust strategic partnership is marked by mutual respect, shared values, and a commitment to global challenges, reaffirmed during PM Modi's visit to France.

- Digital health, anti-microbial resistance and exchange of health professionals have been identified as the main priorities for bilateral cooperation in 2025.
  - Both agreed for C-CAMP (Centre for Molecular Platforms), and the creation of the Indo-French Life Sciences Sister Innovation Hub.



- Defense Cooperation:
  - France-India Defence Startup Excellence (FRIND-X) in line with the vision enshrined in HORIZON 2047 and the India-France Defence Industrial Roadmap.
  - Both countries announced a 'defense industrial roadmap' aimed at co-designing and codeveloping military hardware, further solidifying their defense ties.

# 8. (b)

In News: The India-US Transforming Relationship Utilizing Strategic Technology (TRUST) initiative, was announced during India's Prime Minister visit to Washington.

- The *TRUST Initiative* is a bilateral agreement aimed to strengthen cooperation in critical minerals, pharmaceuticals, and advanced materials.
- It builds on India's participation in the **US-led Minerals Security Finance Network and the Minerals Security Partnership (MSP).**
- It seeks to diversify supply chains, reduce dependence on China, and facilitate technology transfer.

# 9. (a)

**Statement 1 is correct: 123 Agreement of 2007 is** also known as the U.S.-India Civil Nuclear Agreement aims to facilitate civilian nuclear cooperation between the two countries.

• **Nuclear Trade:** It allows the U.S. to supply India with nuclear fuel, technology, and reactors for civilian energy purposes.

**Statement 2 is not correct: Non-Proliferation Commitment:** India, in exchange, agrees to separate its civilian and military nuclear programs and place its civilian reactors under International Atomic Energy Agency (IAEA) safeguards.

No Restrictions on Military Programs: Unlike the Nuclear Non-Proliferation Treaty (NPT), the
agreement does not require India to forgo nuclear weapons development, as India is not a
signatory to the NPT.

## 10. (c)

**Statement 1 is correct:** The International Finance Corporation (IFC) is a member of the World Bank Group. It is the private sector arm of the World Bank Group.

**Statement 2 is not correct:** The IFC was established in 1956, not 1965. It is the largest global development institution focused on the private sector in emerging markets.

Statement 3 is correct: India is a founding member of the IFC.

# 11. (a)

**Statement 1 is correct:** The Vienna Convention on Diplomatic Relations is a key international treaty that **governs the conduct of diplomacy between independent states.** 

- It was adopted in 1961, and came into force in 1964.
- It provides a framework for the functioning of diplomatic missions, the protection of diplomats, and the maintenance of peaceful relations between states.

**Statement 2 is not correct: Privileges and Immunities:** Diplomats cannot be arrested or detained and are exempt from the jurisdiction of the host country's courts in most cases.

- Family members of a diplomat who live with them and are not citizens of the host country receive the same immunity as the diplomat.
- The immunity can only be waived by the sending country.



Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO) was established in **2003** to support sustainable coastal fisheries development in the Bay of Bengal.

• Purpose: Provides technical and management advice to member countries (Bangladesh, India, Maldives, Sri Lanka) on fisheries management.

## • Area of Competence:

- Exclusive Economic Zones (EEZs) of member states.
- Contiguous areas beyond national jurisdiction.

#### Mandate:

- Enhance cooperation among member states, third countries, and organizations.
- Focus on small-scale and artisanal fisheries.

# 13. (a)

The African-Asian Rural Development Organization (AARDO) is an intergovernmental organization dedicated to promoting rural development cooperation between Asia and Africa. It serves as a platform for knowledge sharing, policy formulation, and technical collaboration in areas related to agriculture, rural infrastructure, and poverty alleviation.

## **History & Evolution**

**Origin:** The idea of AARDO was first discussed at the 1955 East Asian Rural Reconstruction Conference in Tokyo.

**Formation:** Officially established on March 31, 1962, with the adoption of its Constitution in Cairo, Egypt.

**Expansion:** The 1961 Afro-Asian Conference on Rural Reconstruction in New Delhi played a crucial role in shaping the organization's objectives.

Permanent Headquarters: Established in New Delhi, India, in 1966.

## 14. (c)

The Hague Service Convention (1965), formally known as the Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters, is an international treaty aimed at simplifying and standardizing the process of serving legal documents across international borders.

## **About**

- Genesis: Adopted in 1965 under the Hague Conference on Private International Law (HCCH).
- **Nature:** It provides a framework to ensure that legal documents are served efficiently and with legal certainty in cross-border litigation.
- Signatories: 84 countries.
- India's Status: India acceded to the convention in 2006 with certain reservations.
- **Prohibition:** It restricts the service of judicial documents through diplomatic or consular channels, except when the recipient is a national of the requesting country.
- **Central Authority:** In India, the Ministry of Law and Justice acts as the central authority responsible for processing service requests under the convention.

# **SCIENCE & TECHNOLOGY**

1.	Suze	etrigine, recently	appr	roved by	the	US FDA	, i	s significant b	ecaus	e:	
	(a)	It is a first-in-clas	s no	n-opioid	dru	g for re	du	cing acute pai	n witl	h less addiction risks.	
	(b)	It is a synthetic o	pioi	d with a	high	er pote	nc	y than morph	ine fo	r pain reduction.	
	(c)	It is an antibiotic	use	d in the t	treat	tment c	f c	lrug-resistant	bacte	rial infections.	
	(d)	It is a new antivi	ral d	rug deve	lope	ed to co	ml	oat emerging	viral d	liseases.	
2.	Con	sider the followin	g sta	atements	s reg	garding	Or	chocerciasis	(River	· Blindness):	
	1.	The disease is cla	assif	ied as a N	Vegl	ected T	rop	oical Disease (	NTD).		
	2.	It is transmitted	ted through the bite of infected black flies.								
	3.	Ivermectin is an	an effective treatment for Onchocerciasis.								
	Whi	ch of the statements given above is/are correct?									
	(a)	1 and 2 only				(b	)	2 and 3 only			
	(c)	1 and 3 only				(d	)	1, 2, and 3			
3.	Con	sider the followin	ng statements regarding Brucellosis:								
	1.	Brucellosis is a v	riral disease primarily affecting livestock.								
	2.	Human-to-huma	n tr	ansmissio	on o	f Brucel	los	sis is a commo	n mo	de of spread.	
	Whi	ch of the above st	tater	ments is/	are	correct	?				
	(a)	1 only				(b	)	2 only			
	(c)	Both 1 and 2				(d	)	Neither 1 no	r 2		
4.	Con	sider the followin	g ch	allenges	asso	ociated	Wi	th Facial Reco	ognitio	on Systems (FRS):	
	1.	Privacy concerns	and	d data sed	curit	y risks.					
	2.	Potential for bias	s and	d inaccur	acie	s in rec	ogı	nition.			
	3.	Legal and ethica	l cor	ncerns re	gard	ling mas	SS S	surveillance.			
	Whi	ch of the above a	re cł	nallenges	of F	RS?					
	(a)	1 and 2 only				(b		2 and 3 only			
	(c)	1 and 3 only				(d	)	1, 2, and 3			
5.	Con	sider the followin	wing statements regarding Rare Diseases:								
	1.		eve a universally accepted definition across all countries.								
	2.	,						•		d degenerative diseases.	
	3.	_							f 1 or	fewer per 1000 people.	
		ch of the stateme	nts {	given abo	ove i						
	(a)	1 and 2 only				(b		2 and 3 only			
	(c)	1 and 3 only				(d	)	1, 2, and 3			



6.		. ,	unction of the SR\	Ü	the human boo	dy?			
	(a)		e color of the skin.						
	(b)	It controls heigh	•						
	(c)		evelopment of mal	e charac	cteristics.				
	(d)	It regulates bloo	d circulation.						
7.	Lum	npy Skin Disease (	LSD) is caused by v	which ty	pe of pathogen	?			
	(a)	Bacteria		(b)	Virus				
	(c)	Fungus		(d)	Protozoa				
8.	Gas	troparesis occurs	due to dysfunction	n in the	vagus nerve, lea	ding to which of the following?			
	(a)	Rapid digestion	of food	(b)	Slow emptying	g of the stomach			
	(c)	Increased appet	ite	(d)	Uncontrolled a	icid secretion			
9.	Witl	h reference to the	Lymphatic Filaria	sis, cons	sider the followi	ng statements:			
	1.	It is a viral diseas	se transmitted thro	ough the	bite of a Culex i	mosquito.			
	2.	It is a priority dis	sease that is target	ed for el	imination by Inc	dia in 2027.			
	Whi	Which of the statements given above is/are correct?							
	(a)	1 only		(b)	2 only				
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	2			
10.	Con	sider the followin	g statements rega	rding th	e Bombay Blood	d Group:			
	1.		vered in India in 19	_	•				
	2.		tigen, which is a pr			lood groups.			
	3.		blood group can d						
		•	tatements is/are co			8 4.			
	(a)	1 and 2 only	<i>'</i>	(b)	2 and 3 only				
	(c)	1 and 3 only		(d)	1, 2, and 3				
11.		·	g statements rega						
11.	1.			_	·	n a hexagonal lattice.			
	2.	•	uctor of electricity		_				
	3.	_	yet strongest mate	•		i ficut.			
			tatements is/are co		wir to selence.				
	(a)	1 and 2 only		(b)	1 and 3 only				
	(c)	2 and 3 only		(d)	1, 2, and 3				
12.	. ,	•	ase (FMD) is cause			nogen?			
	(a)	Bacteria	350 (11111) 13 00030	(b)	Virus	iogen.			
	(c)	Fungus		(d)	Protozoa				
12		· ·	Avian Influenza			tatamanta			
13.			e Avian Influenza, (		•				
	1.	-				t primarily affects birds.			
	2.	•	pe prevented throu	_		2.			
			ents given above is,						
	(a)	1 only		(b)	2 only				
	(c)	Both 1 and 2		(d)	Neither 1 nor 2	<u></u>			



14.	With	With reference to Einstein Ring, which of the following statements is/are correct?									
	1.	It is a phenomeno	•	_	•						
	2.	It can be used by		•		distant	t galaxies.				
		ct the correct ansv	er using the	code given							
	(a)	1 only		(b)	2 only						
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2					
<b>15.</b>	Augi	nented Reality (AR) differs from Virtual Reality (VR) in which of the following ways?									
	(a)	AR replaces the redigital elements of		•	nersive digital (	enviror	nment, whereas VR overlays				
	(b)	AR enhances the r digital space.	eal world by a	ndding digita	l content, whil	e VR in	nmerses users in a simulated				
	(c) AR and VR are interchangeable terms describing the same technology.										
	(d)	AR does not requi	re any hardw	are, wherea	as VR requires	heads	ets.				
16.	Cons	onsider the following statements regarding Indirect Prompt Injection (IPI):									
	1.	It is a technique used to manipulate AI models by embedding hidden prompts within									
		external data sources.									
	<ol> <li>IPI can be used to bypass security filters and cause unintended outputs from AI models.</li> <li>Unlike Direct Prompt Injection, IPI requires the attacker to have direct access to the A prompt input.</li> </ol>										
	Whi	ch of the statemer	ts given abo	ve is/are co	rrect?						
	(a)	1 and 2 only		(b)	2 and 3 only						
	(c)	1 and 3 only		(d)	1, 2, and 3						
<b>17.</b>	Cons	sider the following	statements:								
	1.	Neutrinos are tiny	elementary	particles wi	th very little m	nass an	nd negative charge.				
	2.	Neutrinos can tra	vel through n	natter, inclu	ding the Earth	, unim	peded.				
	Whi	ch of the statemen	ts given abov	e is/are cor	rect?						
	(a)	1 only		(b)	2 only						
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2					
18.	Whi	ch of the following	techniques	does PARAS	-2 use for exo	planet	detection?				
	(a)	Gravitational Mici	olensing	(b)	Radial Veloc	ity Me	thod				
	(c)	Direct Imaging		(d)	Transit Phot	ometr	У				
19.	With	reference to the	Гурhoid, con	sider the fo	llowing staten	nents:					
	1.	It is a viral infection	n caused by	Salmonella	Typhi.						
	2.	It does not spread	I through cor	ntaminated f	food or contac	t with	infected individuals.				
	Whi	ch of the statemen	ts given abov	ve is/are not	correct?						
	(a)	1 only		(b)	2 only						
	(c)	Both 1 and 2		(d)	Neither 1 no	or 2					
20.	With	reference to the	Nuclear Fusio	on, consider	the following	state	ments:				
	1.	Fusion reactions t			_						
	2.		•		•		res and pressures.				
		ch of the statemen		•							



	(a)	1 only				(b)	2 only					
	(c)	Both 1 and 2				(d)	Neither 1 nor 2					
21.	Whi	ch of the followin	g sta	tements a	about B	acte	rial Cellulose is cor	rect?				
	(a)	It is a synthetic p	It is a synthetic polymer produced through chemical processes.									
	(b)	(b) It is widely used in human medicine, often for wound healing.										
	(c)	It has a two-dim	ensio	nal struct	ure with	h low	v water-holding cap	acity.				
	(d)	All of the above.										
22.	Faec	cal Coliform, rece	ntly s	seen in the	e news,	is:						
	(a)	A bacteria indica	ting	sewage co	ntamin	atior	n in water					
	(b)	A virus affecting										
	(c)	A type of microc			urifies v	wate	r					
	(d)	A pesticide used	in ag	griculture								
23.	With	reference to Co	ronal	Holes, wl	hich of	the f	ollowing statemen	ts is/are correct?				
	1.	-		_	regions	in th	ne solar corona in e	xtreme ultraviolet (EUV) and				
	2	soft x-ray solar in	Ŭ		والمساد	مرم مایا		450 to 000 live /oo o				
	2.	•						450 to 800 km/sec.				
		ct the correct ans	wer	using the								
	(a)	1 only				(b)	2 only					
	(c)	Both 1 and 2				(d)	Neither 1 nor 2					
24.					_		on-Communicable	· · ·				
	1.						ad from person to p	person.				
	2.	It accounts for m		•								
	(a)	ch of the stateme 1 only	nts g	iveri abov		(b)	2 only					
	(a) (c)	Both 1 and 2				(d)	Neither 1 nor 2					
25			~ a + C	مار				io/ouo oouuo et?				
25.	1.			ŕ			ollowing statement	he 6th closest planet to the				
	1.	sun.	COHO	-iaigest pi	ianet in	tile	Solar System and t	the our closest planet to the				
	2.	Enceladus is the	large	est moon o	of Satur	n.						
	Sele	ct the correct ans	wer ı	using the o	code giv	en b	elow:					
	(a)	1 only				(b)	2 only					
	(c)	Both 1 and 2				(d)	Neither 1 nor 2					
26.	Wha	at was the primar	y obj	ective of t	the Cass	sini-l	Huygens mission?					
	(a)	To study Jupiter'	s atm	nosphere a	and mag	gneti	c field.					
	(b)	To explore the as	steroi	id belt bet	ween N	/lars	and Jupiter.					
	(c)	To study Saturn,	its riı	ngs, and it	s moon	ıs.						
	(d)	To search for exc	plan	ets in the	Milky W	Vay.						
27.	With	n reference to the	Qua	intum me	chanics	, cor	nsider the following	statements:				
	1.	It describes the	electr	romagneti	c, stron	g nu	clear, and weak nu	clear forces.				

2.

It studies particle behavior at the quantum level, where classical physics no longer applies.



Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- **28.** With reference to the SPHEREx mission, consider the following statements:
  - 1. It is a collaboration between Indian Space Research Organization (ISRO) and the National Aeronautics and Space Administration (NASA).
  - 2. It will make 3D global observations of the inner heliosphere to understand how the Sun's corona becomes the solar wind.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- **29.** Which of the following best describes the Digital Sequence Information (DSI) that the Cali Fund supports?
  - (a) Genetically modified crops developed through biotechnology.
  - (b) Data derived from DNA or RNA that can be stored digitally.
  - (c) Patented genetic materials used in the pharmaceutical industry.
  - (d) A new form of artificial intelligence in biodiversity mapping.

#### **EXPLANATIONs**

# 1. (a)

**In News:** The approval of Suzetrigine as a **non-opioid painkiller** by the US FDA marks a significant breakthrough in pain management, especially amid the **ongoing opioid crisis in the United States.** 

# What is Suzetrigine?

- A non-opioid painkiller developed by Vertex Pharmaceuticals and sold under the brand name Journavx.
- Unlike opioids, which act on the brain's opioid receptors, Suzetrigine blocks pain signals before they reach the brain, reducing the risk of addiction.

# 2. (d)

#### In News:

- The World Health Organization (WHO) declared **Niger the first African nation** to eliminate **onchocerciasis (river blindness)** as a public health threat.
- As of now, WHO has verified **five countries as onchocerciasis-free**: Colombia (2013), Ecuador (2014), Mexico (2015), Guatemala (2016), and Niger (2025)—the first in Africa.

## About

- Onchocerciasis, commonly known as river blindness, is a neglected tropical disease (NTD) caused by the parasitic worm Onchocerca volvulus.
- It is transmitted through the bite of infected black flies (Simulium species).
- **Symptoms are** severe itching, rashes, and skin discoloration.
- In 1987, the introduction of **Ivermectin (Mectizan)**, donated by Merck & Co., is a game-changing treatment.



## 3. (d)

**Statement 1 is not correct:** Brucellosis is a bacterial zoonotic disease affecting livestock and can infect humans. Worldwide, Brucella melitensis is the most prevalent species causing human brucellosis.

**Statement 2 is not correct:** Human-to-human transmission is extremely rare; the disease is mainly transmitted through contaminated animal products, direct contact, or inhalation of airborne agents.

## 4. (d)

#### Context

• The Maharashtra government has introduced Facial Recognition System technology for entry into Mantralaya, to improve security and efficiency in government operations.

# What is Facial Recognition System?

• A facial recognition system is a technology potentially capable of matching a human face from a digital image or a video frame against a database of faces.

#### **Concerns of FRS**

- Privacy Violations: Unauthorized surveillance and data collection infringe on individuals' privacy without consent.
- Data Security Risks: Facial recognition databases are vulnerable to hacking, leading to identity theft and data misuse.
- **Bias and Inaccuracy:** Studies have shown that facial recognition systems have higher error rates for people of color, women, and non-binary individuals, leading to wrongful arrests and misidentifications.
- **Misuse for Profiling:** Governments and corporations exploit the technology for racial profiling and intrusive advertising.
- **Deepfake:** Al-generated deepfakes can manipulate identities, undermining biometric security.

# 5. (b)

In News: The government has announced financial assistance of up to ₹50 lakh for the treatment of patients with rare diseases identified under the National Policy for Rare Diseases, covering 63 categories of rare diseases.

## **About Rare Disease**

- A rare disease is a health condition with low prevalence, affecting a small number of people compared to more common diseases in the general population.
- Rare diseases have **no universally accepted definition**, however, they are typically characterized by their low prevalence, severity, and often the lack of alternative treatments.
  - They include genetic diseases, rare cancers, infectious tropical diseases, and degenerative diseases.
- WHO defines rare disease as often debilitating lifelong disease or disorder condition with a prevalence of 1 or less per 1000 population.

#### 6. (c)

## Context

 Recent studies have uncovered exceptional cases where individuals with the SRY gene have developed as females, highlighting the complexities of genetic influence on gender determination.



# The SRY Gene (Sex-determining Region Y)

- The SRY gene on the Y chromosome determines if a baby will be male or female.
  - If the SRY gene is present, the baby will develop male characteristics and if the SRY gene is absent or mutated, the baby will develop female characteristics.
- The SRY gene produces a protein that attaches to DNA and controls the activity of other genes.
- The SRY protein starts processes that cause the fetus to develop male gonads (testes) and prevents the development of female reproductive structures.

# 7. (b)

#### Context

- Biovet, a Bharat Biotech group company, has received Central Drug Standards Control Organization (CDSCO) licensing for its Lumpy Skin Disease (LSD) vaccine, **Biolumpivaxin**.
  - It is the world's only marker vaccine for LSD.

# **Lumpy Skin Disease (LSD)**

- Lumpy Skin Disease (LSD) is a viral disease that primarily affects cattle and water buffaloes.
  - It is caused by the Lumpy Skin Disease Virus (LSDV), which belongs to the family Poxviridae.
- **Symptoms:** Fever, Nodules on the skin, mucous membranes, and internal organs, Enlarged lymph nodes, Skin edema and Emaciation.
- Transmission: LSD is primarily spread through;
  - Biting insects such as mosquitoes, flies, and ticks,
  - Direct contact between infected and healthy animals,
  - Contaminated feed, water, and transport vehicles,
  - Reproductive material from infected animals.

## 8. (b)

## Context

• Gastroparesis affects the quality of life and has growing health implications, with increasing cases linked to diabetes and post-viral syndromes.

#### **About**

- Gastroparesis is a medical disorder of ineffective neuromuscular contractions (peristalsis) of the stomach, resulting in food and liquid remaining in the stomach for a prolonged period of time.
  - It's also called delayed gastric emptying or gastric stasis.
- Cause: It occurs due to dysfunction in the vagus nerve, which controls stomach muscle contractions.
  - When the nerve is damaged or impaired, food remains in the stomach for an extended period, leading to several complications.
- **Symptoms:** Nausea, vomiting, and bloating, Pain in the upper abdomen, Early feeling of fullness, Weight loss, Abdominal distention and Hypoglycemia (in people with diabetes).

# 9. (b)

**Statement 1 is not correct:** It is commonly known as **elephantiasis** (Haatipaon), is a serious debilitating disease caused by **parasitic worms** known as **filarial worms**.

• It is transmitted through the **bite of a Culex mosquito** that breeds in dirty/polluted water.

Statement 2 is correct: It is a priority disease that is targeted for elimination by 2027.



# About 'Bombay' Blood Group

- It is one of the rarest blood groups in the world and was first discovered in **Mumbai (formerly Bombay)**, India, in 1952 by **Dr. Y.M. Bhende.**
- In the **Bombay blood group (hh phenotype)**, individuals lack the H antigen completely. This means they cannot receive blood from any ABO group, including O.
  - Most blood groups (A, B, AB, and O) depend on the presence of the H antigen, which forms the basis of the ABO system.
- It is more commonly found in **India**, **Sri Lanka**, **Bangladesh**, **and some Middle Eastern regions** due to genetic inheritance patterns.

## **Blood Transfusion**

• People with this blood group can donate blood to any ABO group, but they can only receive blood from another Bombay blood group individual.

# 11. (b)

**Statement 1 is correct:** Graphene's structure consists of a single layer of carbon atoms tightly packed into a repeating honeycomb (hexagonal) lattice. This arrangement gives it exceptional strength and flexibility.

**Statement 2 is not correct:** Graphene is a good conductor of both electricity and heat. Its high conductivity stems from the way its carbon atoms are bonded together, allowing electrons to move freely.

**Statement 3 is correct:** Graphene is considered the thinnest material ever discovered, as it's essentially a two-dimensional sheet of atoms. Despite its thinness, it's incredibly strong due to the robust carbon-carbon bonds in its structure.

# 12. (b)

## **Context**

• Foot and mouth disease (FMD) is a highly contagious viral disease of livestock with a significant economic impact.

#### **About**

- FMD is a highly transmissible disease caused by infection with an **Aphthovirus**, a member of the family **Picornaviridae**.
- The disease affects cattle, swine, sheep, goats and other cloven-hoofed ruminants.
- **Symptoms:** Fever, Blisters on the tongue, lips, mouth, hooves, and mammary glands, Erosions, Excess saliva, Loss of appetite, Lameness and Abortions.

# 13. (a)

Statement 1 is correct: Depending on the origin host, influenza A viruses can be classified as avian influenza (bird flu, subtypes A H5N1 and A H9N2), swine influenza (swine flu, subtypes A H1N1 and AH3N2).

- Avian influenza, commonly known as bird flu, is a viral infection that primarily affects birds.
  - It is a zoonotic disease, meaning it can spread from animals to humans.
  - The **H5N1** subtype has been responsible for numerous human infections and fatalities in the past.

**Statement 2 is not correct: Prevention:** Avoiding contact with sick or dead birds; ensuring poultry products are thoroughly cooked; and implementing robust surveillance systems to detect and respond to new cases promptly.

• There is no vaccination available for the Avian Influenza.



# 14. (c)

#### Context

• The European Space Agency's (ESA) Euclid space telescope has discovered an Einstein ring, around a galaxy nearly 590 million light-years away from Earth.

# What is an Einstein Ring?

- An Einstein ring is a circular formation of light caused by gravitational lensing, where a massive celestial object bends and magnifies light from a more distant object behind it.
  - **Gravitational lensing** is an example of Einstein's theory of general relativity.
- **Lensing Effect:** If the alignment between the observer, the foreground lens, and the background source is nearly perfect, the light from the background galaxy can be smeared into a ring.
  - In the recently observed Einstein ring, the galaxy **NGC 6505** acted as the gravitational lens.

# **Significance of Einstein Rings**

- **Probing Dark Matter:** Dark matter, which makes up 85% of the universe's total matter, does not emit or absorb light, making it difficult to observe directly.
  - Einstein rings provide indirect evidence of dark matter's gravitational influence.
- **Understanding Distant Galaxies:** These rings help scientists study galaxies that would otherwise be too faint or distant to observe.
- **Insights into Cosmic Expansion:** The bending of light provides crucial data about the expansion of the universe, as the space between celestial bodies is continuously stretching.

# 15. (b)

Augmented Reality (AR) is a technology that overlays digital content—such as images, sounds, and 3D objects—onto the real-world environment using a device like a smartphone, tablet, or AR headset. Unlike Virtual Reality (VR), which creates an entirely digital experience, **AR (Augmented Reality)** enhances the real world by adding digital content. Think of Pokemon Go, where digital creatures appear in your real-world surroundings through your phone's camera.

## 16. (a)

**In News:** The rise of indirect prompt injection as a major security threat to AI chatbots is a wake-up call for both developers and users.

## What is Indirect Prompt Injection?

• Unlike direct attacks, indirect prompt injection embeds harmful instructions within benign-looking text (e.g., documents, emails, or web content). When processed by an AI LLM, these hidden prompts can lead to unauthorized actions, data breaches, and misinformation.

## Why Does This Matter?

- Al models are trained to interpret and execute instructions—making them susceptible to hidden manipulations.
- Recent research demonstrated how Google's Gemini chatbot could be tricked into storing false information permanently.
- Attackers can bypass security safeguards, making traditional defenses ineffective.

## 17. (b)

## In News

 Scientists detected a record-breaking ultra-high energy neutrino using an observatory under construction in the Mediterranean Sea near Sicily, part of the KM3NeT (Cubic Kilometre Neutrino Telescope) Collaboration



#### **About Neutrinos**

- They are tiny elementary particles with very little mass, no charge, and a spin of half.
- They interact weakly with other matter particles and pass through our bodies unnoticed.
- **Sources of Neutrinos:** Neutrinos come from the Sun (solar neutrinos), other stars, cosmic rays from beyond the solar system, and the Big Bang.
  - They can also be produced in labs.
- **Significance:** Neutrinos are electrically neutral and rarely interact with matter, making them ideal "cosmic messengers" to study the universe.
- They can travel **through matter**, including the Earth, unimpeded.
- The study of neutrinos aims to understand the universe better, offering insights into astrophysical processes and the cosmos.

# 18. (b)

PARAS-2 is a high-resolution spectrograph designed and built by the Physical Research Laboratory (PRL) in Ahmedabad, India. It is installed on the 2.5-meter telescope at PRL's Mount Abu Observatory.

PARAS-2 uses the **radial velocity method to detect exoplanets**. This method relies on detecting tiny wobbles in a star's movement caused by the **gravitational pull of an orbiting planet**. When a planet orbits a star, it causes the star to move slightly towards and away from us. This movement creates subtle shifts in the wavelengths of light coming from the star. PARAS-2 can measure these tiny shifts with incredible precision, allowing scientists to determine the presence of an exoplanet, its mass, and its orbital period.

# 19. (d)

**In News** The Indian Council of Medical Research (ICMR) is seeking expressions of interest (EoI) for the joint development and commercialization of a Typhoid and Paratyphoid vaccine.

#### **Typhoid**

- Typhoid is a **bacterial infection** caused by **Salmonella Typhi**, spread through contaminated food, water, or contact with infected individuals.
- It can be life-threatening without treatment, and antibiotics like chloramphenicol, ampicillin, or ciprofloxacin are used for treatment.
- **Typhoid Burden:** Typhoid fever is a significant public health issue in India, with approximately 4.5 million cases annually, especially in urban areas, making it a major health concern.
- Vaccines in India: Typhoid vaccines available in India include Typbar-TCV, Ty21a, Typhim Vi, and Typherix. Typhoid conjugate vaccines (TCVs) are for children over 6 months, while Vi vaccines are for children over 2 years. TCVs are currently available only in the private sector.

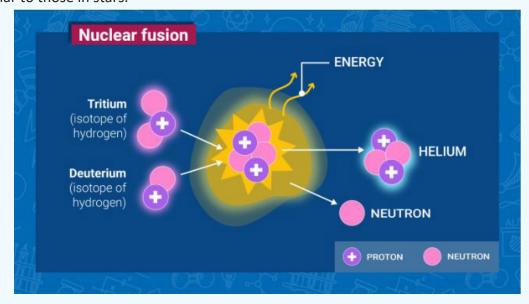
## 20. (c)

**Both the statements are correct:** Nuclear fusion is the process by which **two light atomic nuclei** combine to form a **single heavier one** while releasing **massive amounts of energy.** 

- Fusion reactions take place in a state of matter called plasma a hot, charged gas made of
  positive ions and free-moving electrons with unique properties distinct from solids, liquids or
  gases.
- The sun, along with all other stars, is powered by this reaction.
- Process: The Deuterium (H-2) and Tritium (H-3) atoms are combined to form Helium (He-4). A free and fast neutron is also released as a result.
  - The neutron is powered by the kinetic energy converted from the 'extra' mass left over after the combination of lighter nuclei of deuterium and tritium occurs.



• **Challenges:** Achieving controlled fusion requires extremely high temperatures and pressures, similar to those in stars.



# 21. (b)

**In News:** According to a recent study, Bacterial cellulose can be used as a bandage to improve healing and regeneration in plants.

## **Bacterial cellulose**

- It is a **natural** and renewable nanomaterial produced by certain bacteria.
- It is characterized by a unique **three-dimensional structure** that endows it with excellent mechanical properties and high water-holding capability.
- It is a very pure, crystalline and biocompatible polymer.
- It has been widely used in human medicine, often for wound healing.

## 22. (a)

**Context:** Faecal bacteria levels at multiple locations in Prayagraj, Uttar Pradesh, exceeded permissible limits during Maha Kumbh, according to a CPCB report.

• According to the CPCB, faecal coliform—a key indicator of sewage contamination—should not exceed the permissible limit of 2,500 units per 100 ml.

## What is faecal coliform?

- Faecal coliform bacteria are a group of microorganisms found in the intestines of humans and animals.
- Their presence in water indicates contamination from sewage or animal waste.
- While not all coliform bacteria are harmful, their detection raises concerns about the potential presence of dangerous pathogens like viruses, Salmonella, and E. coli.

#### 23. (b)

#### Context

• A recent study by the Indian Institute of Astrophysics has accurately estimated the physical parameters of thermal and magnetic field structures of solar coronal holes.

### **Coronal Holes**

- Coronal holes were first discovered in the **1970s** by X-ray satellites.
- They appear as dark patches in the solar corona in extreme ultraviolet (EUV) and soft x-ray solar images due to their lower density and temperature compared to surrounding regions.



- These solar activity phenomena are intense sources of fast **(450-800 km/sec) solar wind** streams of charged particles that escape from the sun, more easily into space.
- Coronal holes shape space weather and cause geomagnetic disturbances on Earth.

# 24. (c)

#### In News

 The Government of India has intensified its efforts to combat Non-Communicable Diseases (NCDs) through the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD).

# **About Non-Communicable Diseases (NCDs)**

- NCDs are chronic diseases that do not spread from person to person but pose significant health and economic burdens. According to the WHO (2018), NCDs account for 63% of all deaths in India, with key contributors being:
  - Cardiovascular Diseases (27%)
  - Chronic Respiratory Diseases (11%)
  - Cancers (9%)
  - Diabetes (3%)
- The increasing prevalence of NCDs is driven by multiple factors, including lifestyle changes, environmental conditions, and genetic predisposition.
  - Lifestyle Choices: Tobacco use, alcohol consumption, unhealthy diet, lack of exercise, and air pollution.
  - Health Risks: Obesity, high blood pressure, high cholesterol, and high blood sugar.
  - Other Factors: Stress and hereditary predisposition.

# 25. (a)

## **About Saturn**

- Saturn, is the second-largest planet in the Solar System and the 6th closest planet to the sun.
- Saturn's rings are composed mainly of water ice, with a minor component of rocky material.
- Moons of Saturn: As of February 2025, Saturn has 146 moons, more than any other planet.
  - **Titan:** The **largest moon** of Saturn, larger than Mercury and Pluto.
  - Enceladus: Has a global ocean under an icy shell.
  - Mimas: Has a large crater that's a quarter of the moon's diameter.

# 26. (c)

# **Space Missions in Saturn's Study**

- Pioneer 11 provided the first close-up images of Saturn and its rings in 1979.
- **Voyager 1 & 2** provided detailed observations of the ring system and discovered several new moons during 1980-1981.
- Cassini-Huygens was a joint mission by NASA, the European Space Agency (ESA), and the Italian Space Agency (ASI) to study Saturn and its moons.
  - The mission included a spacecraft called Cassini and a probe called Huygens.
  - In **2004** the Cassini spacecraft reached Saturn and the Huygens probe landed on Titan. They studied the planet, its moons, and rings until **2017**.
- James Webb Space Telescope (JWST): The Webb telescope continues to capture high-resolution images of Saturn's rings, aiding in further understanding of their structure and evolution.



# 27. (c)

**Both the statements are correct: General relativity** explains gravity, while **quantum mechanics** describes the **electromagnetic, strong nuclear, and weak nuclear forces.** 

- Scientists are **exploring how gravity fits into quantum mechanics**, with experiments proposed to test gravity's quantum nature.
- Quantum mechanics studies particle behavior at the quantum level, where classical physics no longer applies.
  - Quantum technology utilizes quantum properties like superposition and entanglement to perform tasks previously thought impossible.

# 28. (d)

**Both the statements are not correct: NASA** is tentatively scheduled to launch its new megaphone-shaped space telescope called **Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer (SPHEREX).** 

- **Duration:** Two years.
- **Mission Objectives:** SPHEREx will collect data on over 450 million galaxies and 100 million stars in the Milky Way.
  - It will explore the origins of the universe, focusing on the period after the Big Bang.
  - It will create a 3D map of the cosmos in 102 different wavelengths of light (colours).
- PUNCH Mission: SPHEREx will launch alongside NASA's PUNCH mission, which studies the Sun's solar wind.
  - PUNCH consists of four small satellites in low Earth orbit.
  - It will make 3D global observations of the inner heliosphere to understand how the Sun's corona becomes the solar wind.
  - The satellites will map the transition zone where the Sun's corona turns into solar wind.

## 29. (b)

Digital Sequence Information (DSI) refers to the genetic information of organisms that is stored in digital form. This includes DNA and RNA sequences.

The Cali Fund and discussions surrounding DSI revolve around access to and benefit-sharing of this digital genetic information, especially in the context of biodiversity and its use in research and development. Cali Fund was launched at the COP16 to the United Nations Convention on Biological Diversity (CBD).

# **ENVIRONMENT & ECOLOGY**

1.	Con	Consider the following statements:					
	1.	India has the largest tiger population in the world.					
	<ol><li>Karnataka has the largest population of Tigers in India.</li><li>Which of the statements given above is/are correct?</li></ol>						
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		
2.	Con	sider the followin	g statements regard	ling Ra	amsar sites:		
	1.	India has the hig	hest number of Ram	sar sit	tes in Asia and ranks	third globally.	
	2.	Uttar Pradesh ha	as the highest number	er of R	amsar sites in India	, followed by Tamil Nadu.	
	Wh	ich of the stateme	nts given above is/a	re cor	rect?		
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		
3.			newly designated Ra	amsar	sites in India, which	of the following statements	
	is correct?						
	(a)		rd Sanctuary is home		•		
	(b)	•				from floating on its surface.	
	<ul><li>(c) Udhwa Lake in Jharkhand is a Ramsar site known for its dense mangrove forest ecosystem.</li><li>(d) Therthangal Bird Sanctuary is located in Sikkim and is a major Buddhist pilgrimage site.</li></ul>						
	(d)						
4.	Which of the following countries have officially ratified and become members of th International Big Cat Alliance (IBCA) recently?						
	1.	Nicaragua		2.	India		
	3.	Egypt		4.	Somalia		
	5.	Liberia		6.	Russia		
	7.	France					
	Sele	ect the correct ans	swer using the code	given	below:		
	(a)	1, 2, 4 and 5 only	У	(b)	2, 3, 5, 6 and 7 on	ly	
	(c)	1, 3, 4, 6 and 7 o	only	(d)	1, 2, 3, 4, 5, 6 and	7	
5.	Con	sider the followin	g statements:				
	1.	1. Iran is the only country having the Asiatic cheetah.					
	2.	African cheetahs	s are smaller in size a	maller in size as compared to Asiatic cheetahs.			
	Wh	ich of the stateme	ents given above is/a	re co	rrect?		
	(a)	1 only		(b)	2 only		
	(c)	Both 1 and 2		(d)	Neither 1 nor 2		



6.	With reference to the Western Ghats, which of the following statements is/are correct?								
	1. It is a long mountain chain which covers an area under the Six states of India.						states of India.		
2. Anamudi is the highest mountain peak of Western Ghat.									
	Sele	ct the correct ans	swer using th	ne code (	given	below:			
	(a)	1 only			(b)	2 only			
	(c)	Both 1 and 2			(d)	Neither 1 nor 2			
7.	Shatavari (Asparagus racemosus) is primarily known for its:								
	(a)	Antibacterial and	d antifungal p	propertie	es				
	(b)	Adaptogenic and	d rejuvenating	g proper	ties				
	(c)	Sedative and and	esthetic prop	erties					
	(d)	Toxic effects on t	the human bo	ody					
8.	Con	sider the followin	g statements	s regard	ing m	arsupials:			
	1.	Marsupials are found exclusively in Australia.							
	2.	They provide cru	ucial evidence	e suppor	ting tl	he Continental Drift	Theory.		
	3.	All marsupials po	ossess a pouc	ch for nu	rturin	g their young.			
	Whi	ch of the above st	tatements is/	are corr	ect?				
	(a)	1 and 2 only			(b)	2 only			
	(c)	1 and 3 only			(d)	1, 2, and 3			
9.	With	n reference to the	e Mithuns (Bo	os fronta	alis), c	onsider the followi	ng statements:		
	1.	It is the State an	imal of Aruna	achal Pra	adesh	and Nagaland.			
	2. It is listed as critically endangered on the IUCN Red List of Threatened Species.					atened Species.			
	Whi	ch of the stateme	ents given abo	ove is/ar	e corr	ect?			
	(a)	1 only			(b)	2 only			
	(c)	Both 1 and 2			(d)	Neither 1 nor 2			
10.	With reference to the Asian Elephants, consider the following statements:				ements:				
	1.	Three subspecies currently recognised are the Sri Lankan, the Indian, and the Sumatran elephant.							
2. It is listed as Critically Endanger					ered under the IUCN Red List of Threatened Species.				
	Whi	Which of the statements given above is/are correct?							
	(a)	1 only			(b)	2 only			
	(c)	Both 1 and 2			(d)	Neither 1 nor 2			
11.		n reference to the ements:	· Community	Forest F	Resou	rce (CFR) Rights in I	ndia, consider the following		
	1.	<ol> <li>These are a special category under the Indian Forest Act of 1927.</li> </ol>							
	2.	Gram Sabhas (vi	llage councils	s) have t	he leg	al rights over their t	traditional forests.		
	Whi	ch of the stateme	ents given abo	ove is/ar	e corr	ect?			
	(a)	1 only			(b)	2 only			
	(c)	Both 1 and 2			(d)	Neither 1 nor 2			
12.	India	a's first 'bio bank'	in a zoo is b	eing est	ablish	ed in which of the	following states?		
	(a)	West Bengal			(b)	Assam			
	(c)	Tamil Nadu			(d)	Madhva Pradesh			



13.	'Ara	vali Safari Park pi	<i>'oject'</i> is being	develo	ped i	n which of t	he follo	owing states?
	(a)	Haryana			(b)	Delhi		
	(c)	Rajasthan			(d)	Gujarat		
14.		Hicklin Test and Community Standards Test, recently seen in the news, are related to which of the following?						
	(a)	Right to Equality	'		(b)	Obscenity a	and Free	edom of Speech
	(c)	Consumer Prote	ction Laws		(d)	Environme	ntal Lav	vs
<b>15.</b>	With	reference to pe	atlands, which	of the	follo	wing statem	ents is/	are correct?
	1.	Peatlands cover	approximately	8% of t	he E	arth's terrest	rial sur	face.
	2.	The Democratic	Republic of the	e Congo	con	tains 70 perc	ent of g	global peatlands.
	Select the correct answer using the code given below:							
	(a)	1 only			(b)	2 only		
	(c)	Both 1 and 2			(d)	Neither 1 n	or 2	
16.	With	n reference to sea	ice and its de	cline, c	onsid	der the follo	wing sta	atements:
	1.	Sea ice is differe	nt from iceber	gs, glac	iers, a	and ice shelv	es, whi	ch form on land.
	2.		eedback effect	accele	rates	sea ice loss	by incr	reasing ocean absorption of
		solar radiation.						
		ch of the stateme	ents given abov	ve is/ar				
	(a)	1 only			(b)	2 only		
	(c)	Both 1 and 2			(d)	Neither 1 n	or 2	
17.	Myr	mecia pyriformis	and Myrmecia	midas	, rece		the ne	ws, are species of?
	(a)	Ants			(b)	Butterflies		
	(c)	Frogs			(d)	Medicinal F	Plants	
18.	Cons	sider the followin	ig statements:					
	1.	Vultures are larg	•			•		
	2.	There are 23 sp India.	ecies of vultur	es four	id in	the world o	ut of w	hich 9 species are found in
	Whi	nich of the statements given above is/are correct?						
	(a)	1 only			(b)	2 only		
	(c)	Both 1 and 2			(d)	Neither 1 n	or 2	
19.	With	n reference to the	e Gharial (Gavi	alis gan	getic	cus), conside	r the fo	llowing statements:
	1.	1. It is the smallest among all living crocodilians and is also known as the fish-eating crocodile.						
	2.	2. It is listed as Critically Endangered on the IUCN Red List of Threatened Species.						
	Whi	ch of the stateme	ents given abov	e is/are	corr	ect?		
	(a)	1 only			(b)	2 only		
	(c)	Both 1 and 2			(d)	Neither 1 n	or 2	
20.		n reference to the re correct?	: Animal Welfar	re Boar	d of I	ndia (AWBI),	, which	of the following statements
	1.	It is a statutory a	advisory body, e	establis	hed i	n 1962.		

2. AWBI was started under the stewardship of Rukmini Devi Arundale.



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
- **21.** With reference to the Algal Bloom, consider the following statements:
  - 1. The major cause of algal bloom is excess nutrients, especially phosphorus and nitrogen.
  - 2. It depletes oxygen, suffocates aquatic life, and can release toxins into the water.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- **22.** With reference to the Blue-Cheeked Bee-Eater (Merops persicus), consider the following statements:
  - 1. It is a migratory bird found across Northern Africa, the Middle East, Central Asia, and India.
  - 2. It is listed as Vulnerable on the IUCN Red List of Threatened Species.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- **23.** What does the term "Biodiversity Leak" refer to?
  - (a) The displacement of environmental damage to other regions due to conservation policies
  - (b) The depletion of marine biodiversity due to overfishing
  - (c) The leakage of invasive species into protected ecosystems
  - (d) The loss of genetic diversity due to habitat destruction

## **EXPLANATIONs**

# 1. (a)

**Statement 1 is correct**: India hosts the world's largest tiger population, despite having the highest human density and just 18% of global tiger habitat.

• In just over a decade, India has doubled its tiger population to more than 3,600, accounting for 75% of the world's tigers.

**Statement 2 is not correct: State-wise:** The largest tiger population of **785 is in Madhya Pradesh,** followed by Karnataka (563) & Uttarakhand (560), and Maharashtra (444).

• Population in reserves: The tiger abundance within the Tiger Reserve is highest in Corbett (260), followed by Bandipur (150), Nagarhole (141), Bandhavgarh (135), Dudhwa (135), Mudumalai (114), Kanha (105), Kaziranga (104), Sundarbans (100), Tadoba (97), Sathyamangalam (85), and Pench-MP (77).

# 2. (a)

Context: The Centre has added four new Ramsar sites in India, bringing the total to 89.

#### About

- The new sites are in Tamil Nadu (Sakkarakottai and Therthangal Bird Sanctuaries), Sikkim (Khecheopalri Wetland), and Jharkhand (Udhwa Lake).
- India remains the top country in Asia with the most Ramsar sites and ranks third globally.
- Tamil Nadu leads with 20 Ramsar sites, while Sikkim and Jharkhand have added their first.



**Option (b) is correct:** Khecheopalri Wetland is unique because birds prevent leaves from floating on its surface. This phenomenon is attributed to the unique behavior observed at the Khecheopalri Lake where birds are believed to pick up leaves from the surface, keeping the water pristine and clear. This has led to the lake being considered sacred and is often referred to as a "wish-fulfilling lake" by the local communities.

Sakkarakottai Bird Sanctuary hosts species like the Lion-tailed Macaque and Giant Squirrel, but not Brahminy kites or house swifts, hence, **Option (a) is not correct.** 

Udhwa Lake is known for its bird sanctuary, not mangroves. Option (c) is not correct.

Therthangal Bird Sanctuary is in Tamil Nadu, not Sikkim, and is not a Buddhist pilgrimage site. **Option (d) is not correct.** 

# 4. (a)

**In News:** The Framework Agreement on the establishment of the International Big Cat Alliance (IBCA) recently came into force, making it a full-fledged, treaty-based inter-governmental international organization.

- The IBCA was launched by Prime Minister Shri Narendra Modi in 2023, during the "Commemorating 50 years of Project Tiger" event.
  - headquarters located in India.
- 27 countries have consented to join the Alliance.
  - Five countries (Nicaragua, Eswatini, India, Somalia, and Liberia) have officially ratified and become members of the IBCA.
- It aims to conserve seven big cat species: **Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar,** and Puma.

# 5. (a)

**Context:** Madhya Pradesh Chief Minister released five cheetahs into the wild from their enclosures at Kuno National Park in Sheopur district.

# **About Cheetahs**

- They are one of the oldest of the big cat species. Altogether, 5 subspecies of cheetah have been described:
  - Northwest African cheetah
  - East African cheetah
  - South African cheetah
  - Northeast African cheetah
  - Asiatic cheetah.
- **Population and Distribution:** Cheetahs are mainly present in southern African countries such as Algeria, Botswana, Central African Republic, Ethiopia, Kenya, South Africa, and Zimbabwe, among others.
- Iran is the only country having the Asiatic cheetah.
- African cheetahs are bigger in size as compared to Asiatic cheetahs.
- **IUCN Status:** All cheetah subspecies are listed as vulnerable by the IUCN, except the Northwest African and Asiatic cheetah which are critically endangered at present.

## 6. (c)

The Western Ghats are a **1,600-km long mountain chain** along the west coast of India running from the river Tapi in the north to Kanyakumari in the south.



- It covers six states Gujarat, Maharashtra, Goa, Tamil Nadu, Karnataka and Kerala. About 60 percent of the mountain range is in Karnataka.
- Western Ghats were accorded the World Heritage Status by UNESCO in 2012.
- Anamudi is the highest mountain peak of Western Ghat.

## Context

• The Ministry of Ayush has launched a campaign titled "Shatavari – For Better Health" to promote the medicinal and health benefits of Asparagus racemosus.

#### About

- **Shatavari (Asparagus racemosus)** is a **medicinal plant** widely used in **Ayurveda**, the traditional system of Indian medicine.
- Characteristics: Shatavari is a climbing plant with stems that can grow up to 4 meters long.
  - It has an adventitious root system with both **fibrous and tuberous roots**, which can reach about one meter in length and taper at both ends.
- **Distribution:** It extends from **Africa through southern Asia**, including the Indian subcontinent, to northern Australia.
- **Use:** The plant is known for its **adaptogenic** (help to regulate the body's systems and improve resistance to stress) and **rejuvenating properties**, especially in women's health and overall immunity.

# 8. (b)

**Statement 1 is not correct:** Marsupials are a unique group of mammals that give birth to underdeveloped young, which continue their growth in a pouch or protected area on the mother's body. Marsupials are found not only in Australia but also in South America and North America (Virginia opossum).

**Statement 2 is correct:** They provide evidence for the Continental Drift Theory, as fossils indicate their past distribution across multiple continents.

**Statement 3 is not correct:** Not all marsupials have pouches; some have a simple skin fold.

#### 9. (a)

**In News:** In Arunachal Pradesh, mithuns will wear fluorescent collars to improve visibility on highways and prevent fatal accidents.



- About Mithuns (Bos frontalis) Mithun is often called 'cattle of the mountains'.
- It is a rare cattle species reared in the subtropical rain forests of Northeastern hilly regions of India.
- It is the State animal of Arunachal Pradesh and Nagaland.
  - It is also found in the hills of Manipur and Mizoram.
- IUCN Status: Vulnerable



- Importance: Mithuns are prized for their meat, milk, and draught power.
  - They play a crucial role in the socio-economic and cultural lives of many tribal communities in the northeast.
  - Its possession is considered as a sign of prosperity.

# 10. (a)

**Statement 1 is correct:** The Asian elephant **(Elephas maximus),** is distributed throughout the Indian subcontinent and Southeast Asia.

• It is the largest living land animal in Asia. Three subspecies are currently recognised: the Sri Lankan, the Indian, and the Sumatran elephant.

# Statement 2 is not correct: IUCN Status: Endangered

- Threats:
  - Habitat loss
  - Human-animal conflict
  - Illegal Wildlife trade

# 11. (b)

In News: An analysis reveals that only three states — Maharashtra, Chhattisgarh, and Odisha — have made notable progress in recognising Community Forest Resource (CFR) rights under the Forest Rights Act (2006), while the majority of forest-dwelling communities across India continue to face significant hurdles.

#### Statement 1 is not correct

- The Community Forest Resource (CFR) Rights in India are a special category under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (aka Forest Rights Act, 2006).
- These rights ensure that communities can manage and use forest resources while maintaining ecological balance.

## Statement 2 is correct

• The Forest Rights Act (2006) grants Gram Sabhas (village councils) legal rights over their traditional forests (Section 3(1) (i) of the FRA, 2006).

#### 12. (a)

As part of a national programme, **India's first 'bio bank'** is to be established in **Padmaja Naidu Himalayan Zoological Park in West Bengal.** 

- It is in collaboration with the Centre for Cellular and Molecular Biology (CCMB), under the Ministry of Science and Technology.
- The facility collects and preserves cell and tissue samples from endangered animals, as well as reproductive cells from deceased animals.
  - These can be used for future research and potentially even bring back critically endangered species that have gone extinct or are on the verge of extinction.

## 13. (a)

The Haryana government's 3,858 hectare Aravali safari park project spread across Gurugram and Nuh is envisaged to be the world's largest safari park.

- It seeks to conserve endangered species and boost tourism in the region.
- Project Announcement: In 2022.
- **Phase 1 Development:** Covering 2,500 acres and is focusing on creating large enclosures for big cats and other wildlife.



• **Conservation Efforts:** The project includes a specialized unit dedicated to conserving and breeding endangered species such as blackbucks, vultures, and soft-shelled turtles.

# 14. (b)

#### Context

• The recent debate over "India's Got Latent" show has brought attention to the evolving interpretation of obscenity laws in the digital era.

# What is Obscenity?

- Obscenity refers to content or acts that are offensive to public morality and decency.
- Legally, it includes material that is vulgar, or repugnant to accepted social norms.

# Judiciary's View on what constitutes as obscene

- **Hicklin Test:** The test was most famously used by the Supreme Court to ban DH Lawrence's Lady Chatterley's Lover in the case of **Ranjit D Udeshi vs State Of Maharashtra (1964).** 
  - The test was established in English Law after the case of Regina vs Hicklin (1868).
- Community Standards Test: The Indian Supreme Court referred to the "community standards" test in Aveek Sarkar v. State of West Bengal (2014).
  - The courts now apply the contemporary community standards test to judge obscenity, moving away from the rigid Hicklin test.

# 15. (d)

#### **Context**

• A recent study has cautioned that peatlands are severely underprotected, and their ongoing destruction could jeopardise climate change goals.

#### What are Peatlands?

- Peatlands are unique wetland ecosystems composed of **partially decayed organic matter** accumulated over thousands of years.
- In cool climates, peatland vegetation is mostly made up of Sphagnum mosses, sedges and shrubs and are the primary builder of peat, whereas in warmer climates graminoids and woody vegetation provide most of the organic matter.

## **Distribution of Peatlands**

- Peatlands occur in every climatic zone and continent and cover 4.23 million km2, which corresponds to **2.84%** of the Earth's terrestrial surface.
- Countries with the most peatlands include Canada, Russia, Indonesia, the United States, Brazil, the Democratic Republic of the Congo, China, Peru, Finland and the Republic of the Congo.
  - The first five contain **70 percent** of global peatlands.

## 16. (c)

#### What is Sea ice?

- Sea ice refers to the **free-floating ice in the polar regions.** While it generally expands during the winter and melts in the summers, some sea ice remains year-round.
- Sea ice is different from icebergs, glaciers, ice sheets, and ice shelves, which form on land.
- Sea ice plays a crucial role in cooling the planet by trapping existing heat in the ocean, and thus precluding it from warming the air above.

## Reasons for the Decline in Global Sea Ice Cover

• **Rising Global Temperatures:** The Arctic and Antarctic regions are warming at an accelerated pace, with the Arctic experiencing warming four times faster than the global average.



- **Ongoing ocean warming** is setting the backdrop for sea ice decline, as warmer waters delay freezing and accelerate melting.
  - The ice-albedo feedback effect worsens the situation—as ice melts, darker ocean water absorbs more solar radiation, leading to further warming and ice loss.

# 17. (a)

#### Context

- Scientists have found that two **nocturnal bull ant species (Myrmecia pyriformis and Myrmecia midas)** make their way at night with the help of polarised moonlight.
  - This makes them only the second known instance of an animal using this mechanism for orientation, following the dung beetle.

# **Polarised Moonlight for Navigation**

- Polarised light is light waves that oscillate in a single plane.
- While many animals use the sun's polarised light for orientation, the ability to use polarised moonlight is extremely rare.

# **Nocturnal Bull Ant Species**

- Myrmecia pyriformis and Myrmecia midas are both species of bull ants that are native to Australia.
  - They are nocturnal and use celestial cues to navigate.

# 18. (b)

#### In News

• Madhya Pradesh now has the highest number of vultures in India, with a population of 12,981 vultures, as per the recent state-level census.

#### **About Vultures**

- Vultures are large, social raptors that live on every continent except Antarctica and Australia.
- They live predominantly in the tropics and subtropics.
- There are 23 species of vultures found in the world out of which 9 species are found in India.
- Nine species and their IUCN Status:





**Context:** Madhya Pradesh CM Mohan Yadav released 10 gharials into the Chambal River to boost their population.

# **Gharial (Gavialis gangeticus)**

- It is also known as the gavial or the fish-eating crocodile.
- The name 'gharial' comes from the Hindi word ghara, meaning pot or vessel, referring to the bulbous snout tip of adult males, which resembles an inverted pot.
- It is the **longest** among all living crocodilians.
- Conservation Status:
  - IUCN Red List: Critically Endangered
  - Wildlife Protection Act, 1972: Schedule I:
  - CITES: Appendix I

# 20. (c)

# **Animal Welfare Board of India (AWBI)**

- The Animal Welfare Board of India is a **statutory advisory body** promoting animal welfare in the country.
- Establishment: It was established in 1962 under the Prevention of Cruelty to Animals Act, 1960.
  - AWBI was started under the stewardship of **Rukmini Devi Arundale**, well known humanitarian.
- Responsibilities: Ensures that animal welfare laws in India are diligently followed.
  - Provides grants to Animal Welfare Organizations.
  - Advises the Government of India on animal welfare issues.
- Governance: The Board consists of 28 Members.
- The term of office of Members is for a period of 3 years.

# 21. (c)

## Both the statements are correct: Algal Bloom

- It is the rapid growth of algae in water bodies.
- Cause: Excess nutrients, especially phosphorus and nitrogen, often from agricultural runoff and wastewater.
- **Types:** Can be made up of diatoms (spring blooms) or cyanobacteria (summer blooms).
- Impact: Depletes oxygen, suffocates aquatic life, and can release toxins.
  - Affects water quality, aquatic ecosystems, and human activities (e.g., fishing, swimming).
- Control: Managing nutrient pollution is key to reducing blooms.

# 22. (a)

**Context:** The first breeding site of the Blue-Cheeked Bee-eater in peninsular India has been discovered in the **saltpans of Aandivilai** near the **Manakudy Mangroves** in Kanniyakumari district.

#### **About**

- **Physical Characteristics:** The Blue-Cheeked Bee-Eater is a **slender bird** with a predominantly **green plumage.**
- o Its face has blue sides, a **black eye stripe**, and a **yellow and brown** throat.
- The bird possesses a **black beak**, which is adapted for catching insects.
- It can grow up to 31 cm in length, with its two central tail feathers extending an additional 7 cm.



- Habitat: The Blue-Cheeked Bee-Eater is a migratory bird found across Northern Africa, the Middle East, Central Asia, and India.
- **Diet:** The species primarily feeds on insects, including bees, wasps, and hornets.
- IUCN Status: Least Concern.

# 23. (a)

# Context

• A recent study published in the Science journal highlights how conservation efforts in some countries can lead to biodiversity loss in other regions.

# What is Biodiversity Leak?

- Biodiversity leak refers to the **unintended consequences of conservation policies** where restrictions on agriculture in one region increase the demand for imports from other biodiversity-rich areas.
- This displacement can lead to **deforestation**, **habitat destruction**, **and biodiversity loss** in the exporting regions.



# **MISCELLANEOUS**

Consider the following statements regarding the White-winged Duck:

Which of the statements given above is/are correct?

It is primarily found in the high-altitude wetlands of the Himalayas. It is classified as "Critically Endangered" under the IUCN Red List.

1.

	(a)	1 only	(b)	2 only
	(c)	Both 1 and 2	(d)	Neither 1 nor 2
2.	Tern	ns like Oran, Umanglai, and Sarna, re	ecently	seen in the news, are related to:
	(a)	Traditional medicinal practices		
	(b)	Sacred groves and indigenous conse	ervation	practices
	(c)	Tribal festivals in Northeast India		
	(d)	Ancient irrigation systems		
3.	Tern	m 'Majorana 1' sometimes appeared	in the	news, primarily is in the context of:
	(a)	Drug Delivery	(b)	Quantum Computing
	(c)	Space Docking	(d)	Cryptocurrency
4.	Trau	umatic asphyxia is most commonly as	sociate	ed with which of the following events?
	(a)	Viral infections		
	(b)	Stampedes and building collapses		
	(c)	Genetic disorders affecting lung fun	ction	
	(d)	Exposure to toxic gases		
5.	'Jag	mohan Singh vs. State of U.P. 1972 cc	<i>ase'</i> is r	elated to which of the following?
	(a)	Constitutionality of the Death Penal	ty.	
	(b)	Amendability of Fundamental Rights	s.	
	(c)	Misuse of Article 356.		
	(d)	Allowing passive euthanasia.		
6.		Ocean Coordination Mechanism (C	OCM) w	ras launched to address marine challenges in
	(a)	Indian Ocean and Bay of Bengal	(b)	Caribbean Sea and North Brazil Shelf
	(c)	Arctic Ocean and North Atlantic	(d)	Mediterranean Sea and Red Sea
7.		h reference to International Mother correct?	Langua	age Day, which of the following statements is/
	1.	The idea to celebrate International I	Mother	Language Day was the initiative of Bangladesh.
	2.	It was approved at the UNESCO Gen	eral Co	nference in 1999.



	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			
8.	Wit	h reference to the Corruption Percepti	ons I	ndex (CPI), consider the following statements:			
	1. It is released by the United Nations and ranks countries based on perceived public sector corruption.						
	2.	It uses a scale of zero to 100, where 'z	ero'	is highly corrupt and '100' is very clean.			
	Wh	ich of the statements given above is/are	e cori	rect?			
	(a)	1 only	(b)	2 only			
	(c)	Both 1 and 2	(d)	Neither 1 nor 2			
9.	Und	der which ministry does the National A	rchiv	es of India (NAI) function?			
	(a)	Ministry of Home Affairs	(b)	Ministry of Culture			
	(c)	Ministry of Education	(d)	Ministry of Information and Broadcasting			
10.	The concept of Beggar-thy-neighbour policies is in the news due to involvement of majeconomies.						
	In t	he context of the above statement, wha	at do	es the term"Beggar-thy-neighbour" refer to?			
	(a)	Policies to control and minimize pollu	tion o	of the Oceans.			
	(b)	Policies aimed at benefiting one coun	try at	the expense of others.			
	(c)	Policies avoiding wars and conflicts be	etwee	en nations.			
	(d)	Policies focus on increasing foreign in	vestn	nents in a country.			
11.	Viat	tina-19, recently seen in the news, is re	elated	to which of the following?			
	(a)	A new variety of wheat	(b)	A space exploration mission			
	(c)	A medicinal plant species	(d)	A breed of cattle			
12.	The	e term 'Dunki' or 'Donkey Route' is rela	ted to	o which of the following?			
	(a)	A traditional trade route for exchanging	ng go	ods between India and Bangladesh.			
	(b)	A safe and legal pathway used by refu	gees	seeking asylum in developed countries.			
	(c)	A popular travel route used by tourist	s bet	ween India and Nepal.			
	(d)	An illegal and risky immigration route or UK.	usec	by many Indians to reach countries like the US			
13.	Con	nsider the following statements about t	he W	/orld Gold Council (WGC):			
	1.	It is an intergovernmental organizatio	n est	ablished under the United Nations.			
	2.	It aims to stimulate and sustain the de	eman	d for gold worldwide.			
	3.	Its headquarters is located in London.					
	Wh	Which of the statements given above is/are correct?					
	(a)	1 only	(b)	2 and 3 only			
	(c)	1 and 3 only	(d)	1, 2, and 3			
14.	The	T.N. Godavarman v. Union of India cas	e is r	elated to which of the following?			
	(a)	Definition and Conservation of Forest	Land				
	(b)	River Water Dispute Resolution					
	(c)	Regulation of Mining Activities					
	(d)	Protection of Wildlife Sanctuaries					



15.	The case of Shamsher Singh v. State of Punjab (1974) is related to which of the following aspects of the Indian Constitution?				
	(a) Separation of powers (b) Judicial review				
	(c) Governor's discretionary powers (d) Fundamental Rights				
16.	What is the primary objective of Project Waterworth?				
	(a) Enhancing deep-sea exploration for marine biodiversity				
	(b) Strengthening undersea defense infrastructure for maritime security				
	(c) Expanding global digital connectivity through high-speed subsea cable network				
	(d) Establishing a network of underwater power transmission cables				
17.	Which among the following characteristics define a Bioregion?				
	(a) A region defined by political boundaries				
	(b) A geographical area based on ecological systems				
	(c) A region classified solely based on climate				
	(d) An administrative division within a country				
18.	With reference to the TrailGuard AI system, consider the following statements:				
	1. It is a surveillance system designed to detect poachers in wildlife reserves and was developed				
	by the Wildlife Institute of India.				
	2. Similipal Tiger Reserve is the only wildlife reserve in India using this technology.				
	Which of the statements given above is/are correct?				
	(a) 1 only (b) 2 only				
	(c) Both 1 and 2 (d) Neither 1 nor 2				
19.	With reference to the National Disaster Response Fund (NDRF), consider the following statements:				
	1. The Union Ministry of Home Affairs administers the NDRF.				
	2. The funds can be used for disaster preparedness, reconstruction, and mitigation.				
	Which of the statements given above is/are correct?				
	(a) 1 only (b) 2 only				
	(c) Both 1 and 2 (d) Neither 1 nor 2				
20.	The Raghavan Committee (2007), recently seen in the news, is related to?				
20.	(a) Banking sector reforms				
	(b) Prevention of ragging in educational institutions				
	(c) Judicial appointments in India				
	(d) Environmental conservation policies				
21.	'Anuradha Bhasin v. Union of India Case' is related to which of the following?				
	(a) Right to Privacy				
	(b) Second marriage of a Hindu man				
	(c) Sexual harassment at the workplace				
	(d) Internet shutdowns by the State				
22.	With reference to the Tea Horse Road, consider the following statements:				
_ <b></b>	<ol> <li>It was an ancient trade route connecting China, Tibet, and India.</li> </ol>				
	<ol> <li>It had two main pathways passing through cities like Dali and Lijiang in Yunnan province.</li> </ol>				



Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Neither 1 nor 2
- 23. What is Project FarmVibes?
  - (a) An Al-driven agricultural initiative by Microsoft Research to enhance farming efficiency using satellite data.
  - (b) A government-led project in India aimed at increasing crop production through genetic modification.
  - (c) A UN-backed initiative for global food security, focusing on organic farming methods.
  - (d) A private-sector investment program for large-scale mechanization in agriculture.
- **24.** Terms like 'SUVAS and SUPACE', sometimes appeared in the news, are primarily in the context of:
  - (a) Semiconductor chips
- (b) Cryptocurrencies
- (c) Al-driven legal research tools
- (d) Cloud computing
- **25.** Agreements like *Locarno*, *Nice*, and *Vienna* are primarily are in the context of:
  - (a) Intellectual Property
- (b) India-EU Trade

(c) Maritime Dispute

- (d) Commercialisation of Space
- **26.** The United States recently announced the "Gold Card" visa program. What is its primary objective?
  - (a) To provide temporary work visas for foreign students
  - (b) To attract foreign investors seeking permanent residency and eventual citizenship
  - (c) To offer special employment opportunities for healthcare workers
  - (d) To promote cultural exchange programs between the U.S. and other countries
- 27. With reference to Sir C.V. Raman, which of the following statements is/are correct?
  - 1. He was awarded the Nobel Prize in 1930 for the discovery of the Raman Effect.
  - 2. He became the first Indian Director of the Indian Institute of Science (IISc).

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

## **EXPLANATIONs**

# 1. (b)

The White-winged Duck (Asarcornis scutulata) is a rare and elusive species, primarily inhabiting lowland evergreen forests and wetlands of the Indo-Malayan biogeographical realm.

**Legal Protection:** Listed under Schedule I of the Wildlife (Protection) Act, 1972, offering it the highest level of legal protection in India.

**IUCN Status:** Critically Endangered (CR) due to habitat loss, disturbance, and declining population.

**Conservation Initiatives:** The White-winged Duck Conservation Strategy and Action Plan (2022), formulated by the Assam government and Wildlife Trust of India (WTI), aims to safeguard its dwindling population and protect its habitat.



#### In News

• The Supreme Court of India directed that there is a need for a nationwide survey of sacred groves under the guidance of the **Ministry of Environment**, **Forest and Climate Change (MoEF&CC)**.

#### What are Sacred Groves?

- Sacred groves are patches of trees or forest areas that are **traditionally protected by local communities** for their religious, cultural, and ecological significance.
- They are known by diverse names: Devarakadu in Karnataka, Kavu in Kerala, Sarna in Madhya Pradesh, Oran in Rajasthan, Devrai in Maharashtra, Umanglai in Manipur, Law Kyntang/Law Lyngdoh in Meghalaya, Devan/Deobhumi in Uttarakhand etc.
- **Sacred groves preserve** biodiversity, regulate climate, conserve water, support livelihoods, protect cultural heritage, and promote environmental awareness.

# 3. (b)

**In News: Microsoft** has recently unveiled its groundbreaking quantum computing chip, **Majorana** 1, marking a significant leap in the **field of quantum technology.** 

- Majorana 1 uses a new class of materials called topoconductors, which enable the creation of topological qubits (Topological Core Architecture).
  - These qubits are more stable and less prone to errors compared to traditional qubits.
- The chip is built using a combination of *Indium Arsenide (a semiconductor) and Aluminum (a superconductor)*, creating a pristine environment for Majorana particles.

# 4. (b)

#### Context

• Recently Five of the 18 victims of the stampede at the New Delhi Railway Station died due to traumatic asphyxia.

#### About

- Traumatic asphyxia is a rare and serious condition that occurs when the upper chest or abdomen is subjected to severe compressive force, restricting respiratory function and blood flow.
- Causes: Commonly seen in stampedes, vehicular accidents, building collapses, and industrial accidents.
- Symptoms: It is characterized by symptoms such as cyanosis (bluish discoloration of the skin), edema (swelling), and hemorrhages in the face, neck, upper extremities, and upper parts of the thorax.

#### 5. (a)

**1972 - Jagmohan Singh vs. State of U.P.:** The Supreme Court upheld the constitutionality of the death penalty.

- 1980 Bachan Singh vs. State of Punjab: The Court introduced the 'rarest of rare' doctrine, stating the death penalty should be imposed only in exceptional cases.
  - The definition of 'rarest of rare' was not clearly defined, leading to confusion.
- 1983 Machhi Singh vs. State of Punjab: The Supreme Court clarified the 'rarest of rare' doctrine and identified five categories of crimes where the death penalty may be justified:
  - Manner of committing the murder: Extremely brutal and dastardly murders.
  - Motive of the murder: Committed for a motive showing total depravity.
  - Socially abhorrent nature of the crime: When a murder targets a minority community and raises social wrath.



- Magnitude of the crime.
- **Personality of the offender:** When the victim is particularly vulnerable, such as a child, woman, or elderly person.

In News: The Ocean Coordination Mechanism (OCM) is a new initiative for ocean conservation.

## **About**

- Announced by Intergovernmental Oceanographic Commission (IOC) of UNESCO on January 14, 2025.
- Focuses on the **Caribbean and North Brazil shelf**, which are rich in biodiversity, coral reefs, and fisheries.
- **Objectives:** Establishes a collaborative framework for ocean conservation.
  - Builds on lessons from past initiatives like Pacific Islands Regional Ocean Policy (PIROP).
  - Addresses financial sustainability with an initial \$15 million investment from Global Environment Facility (GEF), plus \$126.02 million in co-financing.
  - Promotes Blue Carbon Projects to enhance carbon storage and ecosystem resilience.
  - Integrates traditional knowledge with scientific research for community-driven conservation efforts.

# 7. (c)

#### Context

• International Mother Language Day, observed on **February 21**, reminds us of the need to preserve linguistic diversity and protect fading languages.

## **Background**

- The idea to celebrate **International Mother Language Day** was the initiative of Bangladesh to commemorate the **1952 Bengali Language Movement.**
- It was approved at the **1999 UNESCO General Conference** and has been observed throughout the world since **2000.**

## 8. (b)

**Context:** India ranked 96 out of 180 countries in the Corruption Perceptions Index (CPI) for 2024.

#### About

- The Corruption Perceptions Index (CPI) 2024 highlights how corruption is hindering global efforts to combat climate change.
- The index ranks 180 countries and territories by their perceived levels of public sector corruption.
- It uses a scale of zero to 100, where "zero" is highly corrupt and "100" is very clean.
- The report has been compiled by Transparency International.
- Corruption is an evolving global threat that does far more than undermine development it is a key cause of **declining democracy, instability and human rights violations.**

## 9. (b)

#### Context

- The two-day Executive Body Meeting of the Heads of Archives of the South and West Asian Regional Branch of the International Council on Archives (SWARBICA) was inaugurated in New Delhi.
  - The event was hosted by the National Archives of India.



# **National Archives of India (NAI)**

- NAI was established in **1891**, at Calcutta as the Imperial Record Department in British India. Later it was shifted to Delhi.
- Governance: It is under the administrative control of the Ministry of Culture.
- **Significance:** NAI is the biggest archival repository in South Asia. It has a vast corpus of records viz., public records, private papers, oriental records, cartographic records and microfilms etc.

# 10. (b)

The concept of beggar-thy-neighbour policies is in the news primarily due to the rise of protectionist measures by major economies.

Beggar-thy-neighbour policies refers to protectionist measures aimed at benefiting a country's economy at the expense of others.

• **Common examples** include trade wars (imposing tariffs and quotas) and currency wars (depreciating a country's currency to boost exports and discourage imports).

# 11. (d)

## In News

• Viatina-19, a cow of the Ongole breed, has made history in Brazil by being auctioned for a staggering ₹41 crore.

# **About Ongole Breed**

- The Ongole breed, also known as the **Nellore breed**, originates from Prakasam district in Andhra Pradesh, India.
- Characteristics of the Ongole Breed: Broad forehead, elliptical-shaped eyes, highly adaptable to extreme climatic conditions.

# 12. (d)

**Context:** Recently, the US has deported the undocumented 104 illegal Indian immigrants on a US C-17 military aircraft, with their hands and feet cuffed.

# What is the 'Donkey Route'?

- Dunki,' a regional pronunciation of donkey, comes from a Punjabi idiom meaning "hopping from one place to another."
- It refers to an illegal and risky immigration route taken by many Indians, who endure days without food while crossing forests, rivers, and seas to reach countries like the US, UK, or Europe.

## 13. (b)

**Statement 1 is not correct:** The World Gold Council (WGC) is not an intergovernmental organization established under the United Nations. It is a market development organization formed by leading gold mining companies to promote the demand for gold.

**Statement 2 is correct:** The WGC aims to stimulate and sustain the demand for gold worldwide, supporting its role in investment, jewelry, and technology.

**Statement 3 is correct:** The headquarters of the WGC is in London, United Kingdom.

# 14. (a)

The Supreme Court, through the T.N. Godavarman Thirumulpad v. The Union of India case and other judgments, emphasized the role of communities in protecting forest ecosystems.

• In this case, the Supreme Court interpreted Section 2 of the Forest (Conservation) Act, 1980.



- The court ruled that 'forest land' includes:
  - Areas considered as 'forest' in the dictionary sense.
  - Any area recorded as forest in government records, irrespective of ownership.

# 15. (c)

The Supreme Court's judgment in **Shamsher Singh v. State of Punjab (1974)** is a landmark ruling that reaffirmed the principle that the Governor, as the constitutional head of the state, **is bound to act on the aid and advice of the Council of Ministers**, except in situations where the Constitution explicitly provides for the exercise of discretion.

# 16. (c)

In News: Meta has announced an ambitious undersea cable initiative called **Project Waterworth** to **enhance global digital connectivity.** 

# **About Project Waterworth**

- It is an **AI-powered subsea cable system**, spanning 50,000 km across five continents and is the longest and highest-capacity **subsea cable system**, linking the **U.S.**, **India**, **Brazil**, **South Africa**, and other key regions.
- The cables will be laid at depths of up to 7,000 meters in deep waters and advanced burial techniques in high-risk shallow waters will protect the cables from ship anchors and environmental hazards.
- The initiative will introduce **three new oceanic corridors**, improving the scale and reliability of internet networks.

# 17. (b)

# Context

• A database on the biodiversity of the Puducherry-Villupuram-Auroville- Cuddalore (PVAC) region is being developed, with significant contributions from citizens.

## What is a Bioregion?

- A bioregion is a geographical area **defined by ecological systems** rather than political boundaries.
- It represents a distinct environmental zone with unique biodiversity and natural resources.

# 18. (d)

**Context:** The Similipal Tiger Reserve is using 100-150 Al-enabled cameras as part of the TrailGuard Al system to detect poachers.

## TrailGuard AI system

- TrailGuard AI was conceived and made by **Nightjar Technologies**, a social impact enterprise in Gurgaon that develops remote surveillance devices for conservation settings.
- **Features:** Its cameras are compact and have long-lasting batteries (6 months to 1 year).
- It aids proactive law enforcement with real-time updates, intelligence gathering, and raids.
- The system identifies humans, animals, and vehicles, and transmits alerts when poachers are detected.
- Importance: TrailGuard AI is being used in other reserves, including Kanha Tiger Reserve and Dudhwa National Park.
  - The system has potential to be a game-changer in wildlife monitoring and anti-poaching efforts across India.



# 19. (a)

**Context:** The High-Level Committee, headed by the Union Home Minister approved ₹1,554.99 crore under the National Disaster Response Fund (NDRF) for five states affected by natural disasters in 2024.

# National Disaster Response Fund (NDRF)

- The National Disaster Response Fund (NDRF) is a **dedicated fund managed by the Government of India** for immediate relief and response during natural calamities.
- It is meant for situations that require financial assistance beyond the resources of individual states.

# **Key Features of NDRF**

- Legal Framework: Established under Section 46 of the Disaster Management Act, 2005.
- **Funding Source:** Funded through the levy of cess on certain items under the GST Compensation Cess.
  - Additional allocations can be made from the Union Budget when required.
  - Any unused funds in the financial year do not lapse and are carried forward.
- **Usage:** Provides immediate relief for disasters such as **cyclones**, **earthquakes**, **floods**, **landslides**, and droughts.
  - Used only for relief measures (not for disaster preparedness, reconstruction, or mitigation).
- Administration: Managed by the Central Government under the Ministry of Home Affairs (MHA).

# 20. (b)

#### **Context**

 Ragging remains a deeply entrenched issue in India's higher education institutions, despite Supreme Court guidelines and University Grants Commission (UGC) regulations aiming to curb it.

# What is Ragging?

- Ragging is any **act of physical or psychological abuse** usually by senior students toward juniors under the pretext of initiation or camaraderie.
- It ranges from verbal abuse and forced tasks to extreme physical torture and sexual exploitation.

## **Government Steps to Curb Ragging**

- UGC Anti-Ragging Regulations (2009): UGC established a 24x7 anti-ragging helpline and mandated annual affidavits from students and parents against ragging.
  - It allowed UGC to withdraw funding from non-compliant institutions.
- Raghavan Committee in 2007 was constituted by the Supreme Court of India to address the menace of ragging in educational institutions.
  - The committee recommended treating ragging as a punishable criminal offense under the Indian Penal Code (IPC).

## 21. (d)

#### Anuradha Bhasin v. Union of India Case

- In 2020 the Supreme Court by ruling on Jammu and Kashmir Internet shutdown held that indefinite internet shutdowns by the State is not permissible under Indian Constitution.
- The apex Court further stated that **imposition of Section144** can not be used as a mechanism to avoid genuine protest which is permitted under the Constitution.



• Section 144 has very specific parameters, only if those parameters are satisfied then only a Magistrate can pass the orders.

# • Key Highlights of the orders:

- Usage of the Internet is the Fundamental Right under Article 19 of the Indian Constitution.
- Internet shutdowns can be of temporary period but not for indefinite period.
- Government to publish all orders imposing restrictions under Section 144.
- The Court had also said that any order with regard to Internet Shutdowns will come under Judicial Scrutiny.

# 22. (c)

**Both the statements are correct:** The Tea Horse Road was an ancient trade route connecting China, Tibet, and India. It was primarily used for trading tea from China in exchange for horses from Tibet, forming an essential commercial network in the region.

- It had two main pathways passing through cities like **Dali and Lijiang in Yunnan province**. The routes reached Lhasa in Tibet before branching into India, Nepal, and Bangladesh.
- It originated during the Tang dynasty (618-907 CE) in China.
  - Buddhist monk Yijing (635-713 CE) described goods like sugar, textiles, and rice noodles being transported from southwestern China to Tibet and India, while horses, leather, Tibetan gold, saffron, and medicinal herbs were sent to China.

# 23. (a)

Project FarmVibes is an AI-powered agricultural technology suite developed by Microsoft Research to enhance farming efficiency, sustainability, and productivity. By integrating satellite data, IoT sensors, drones, and AI algorithms, it provides actionable insights for farmers, optimizing resource use and improving yields.

## 24. (c)

**In News:** By integrating Artificial Intelligence (AI) into judicial processes, case management, legal research, and law enforcement, India is streamlining operations, reducing delays, and making justice more accessible to all.

- SUVAS (Supreme Court VidhikAnuvaad Software) for translating Judicial domain English documents in vernacular languages and vice versa has been developed.
- SUPACE (Supreme Court Portal for Assistance in Court Efficiency) assists Supreme Court judges in case research and legal analysis.

## 25. (a)

India joined the agreements like **Nice**, **Vienna**, **and Locarno** of World Intellectual Property Organization (WIPO) treaties in 2019 that help **India's Intellectual Property Office (IPO)** classify *trademarks*, *designs*, *and other intellectual property* in line with global standards.

- **Nice Agreement:** International classification of Goods and Services for the purposes of registration of marks;
- Vienna Agreement: International Classification of the figurative elements of marks;
- Locarno Agreement: International classification for industrial designs.

## 26. (b)

## Context

• The United States has announced a visa program called "Gold Card" for foreign investors seeking permanent residency in the country, and ultimately American citizenship.



#### **About**

- The program will replace the **EB-5 visa**, which currently allows foreign nationals to invest between **\$800,000** and **\$1.05 mn** in job-creating ventures for conditional residency.
  - **EB-5** is a category of temporary visa that holders could use for a **Green Card**, and ultimately American citizenship.
- The Gold Card visa raises the stakes, needing an investment of \$5 million.
- Around **12 countries** worldwide provide citizenship in return for investment, including **Malta**, **Egypt**, and **Cambodia**.

# 27. (c)

#### Context

• National Science Day is celebrated every year on 28th February to commemorate the discovery of the 'Raman Effect' made by the physicist Sir C.V. Raman.

#### **About**

- Sir C.V. Raman was awarded the **Nobel Prize in 1930** for the discovery of the Raman Effect.
- The first celebration took place on February 28, 1987, marking the beginning of a tradition that continues to inspire generations.
- **The objective** of the observation of National Science Day is to spread the message of the importance of science and its application among the people.
- Theme for 2025: Empowering Indian Youth for Global Leadership in Science & Innovation for VIKSIT BHARAT.

## **About C V Raman**

- He founded the Indian Journal of Physics in 1926.
- He became the first Indian director of the Indian Institute of Science (IISc) in 1933.

- He established the Raman Research Institute in 1948.
- In 1954, the Government of India honored him with the Bharat Ratna.