

December 2022

NEXT IRS



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	HIST	ORY & C	ULTURE			
Consi	ider the following statements:					
1.		s known to have	e been founded by social reformer and philosopher			
	Basavanna in the 12th centur					
2. 3.	The agricultural communities		_			
	The Vokkaligas occupied adm h of the statements given above	-				
(a)	1 only	(b)	1 and 2 only			
(c)	2 and 3 only	(d)	1, 2 and 3			
Consi	ider the following statements:					
1.		d the Khalsa tr	adition after his father, Guru Tegh Bahadur, was			
2.	Veer Bal Diwas is observed in	India to mark tl	he martyrdom of the sons of Guru Gobind Singh Ji.			
	h of the statements given above	e is/are correct?				
(a)	1 only	(b)	2 only			
(c)	Both 1 and 2	(d)	Neither 1 nor 2			
Consi	ider the following statements:					
1.	-	-	Ashoka that contained the name Ashoka in it instead			
2.	of 'Devanampriya' or 'Piyadas Rummindei Pillar Edicts inscri		en in Brahmi scrint			
	h of the statements given above					
(a)	1 only	(b)	2 only			
(c)	Both 1 and 2	(d)	Neither 1 nor 2			
Consi	ider the following statements:					
1.		ay of a new mo	on that marks the first day of the first month on the			
	Tibetan calendar.					
2.	Losar predates the arrival of E	Buddhism in Tib	et.			
	h of the statements given above	-				
(a)	1 only	(b)	2 only			
(c)	Both 1 and 2	(d)	Neither 1 nor 2			
Sansk becar	He was born in Allahabad and took early education under the 'pathshala' system, and was proficient in Sanskrit. He joined the Indian National Congress at its Calcutta session in 1886. He rose up the ranks, and became president four times — in 1909 (Lahore), in 1918 (Delhi), in 1930 (Delhi), and in 1932 (Calcutta). He was given the title of 'Mahamana' by Rabindranath Tagore.					
The a	bove description mentioned wh	nich of the follow				
(a)	V.D Savarkar	(b)	Madan Mohan Malviya			
(c)	Bipin Chandra Pal	(d)	Shyama Prasad Mookerjee			

1.

2.

3.

4.

5.

6.	 Consider the following statements: 1. Panini lived in the northwest Indian sub- 2. The Panini language laboratory was es Hindi amongst youth. Which of the statements given above is/are cor (a) 1 only (c) Both 1 and 2 	tablis	shed in Mauritius to promote reading and writing
7.	Consider the following statements: 1. The train robbery at Kakori was the Hind	lusta e wh	n Republican Association (HRA)'s first major action. o evaded arrest was Chandrashekhar Azad.
8. 9.	Committees of Constituent Assembly. He reco	ordeo Cham Derso (b) (d)	Jawaharlal Nehru Rajendra Prasad
5.	(a) Lachit Barphukan (c) BR Ambedkar	(b) (d)	Swami Vivekananda Raja Ram Mohan Roy
10.	 Ahananuru recently seen in the news, it is related (a) the Indian Dance Form (c) the Buddhist place of worship. 	ed to (b) (d)	the Official title for a higher official the Collection of poems
11.	 With reference to the Sahitya Akademi Awards, 1. It recognizes the launguages only under 2. Sahitya Akademi 'Yuva Puraskar' recogn Which of the statements given above is/are cor (a) 1 only (c) Both 1 and 2 	the 8 ises y	8th Schedule of the Indian Constitution. young writers under the age of 25.
12.	 With reference to the Dhokra Art, consider the 1. It is a type of metalcraft popular in Beng 2. Most Dhokra artefacts are human or and Which of the statements given above is/are condition (a) 1 only (c) Both 1 and 2 	al. mal f	figurines.

EXPLANATIONS

1. (b)

Lingayats:

- The term Lingayat denotes a person who wears a personal linga, an iconic form of god Shiva, on the body which is received during the initiation ceremony.
- The tradition of Lingayatism is known to have been founded by social reformer and philosopher Basavanna in 12th century Karnataka.
- Lingayats had been classified as a Hindu subcaste called "Veerashaiva Lingayats" and they are considered to be Shaivites.
- The emergence of the Lingayat sect can be located within the larger trend of Bhakti movements that had swept across South India from the 8th century AD onwards.

Vokkaligas:

- The agricultural communities of south Karnataka are called Vokkaligas. People belonging to the Vokkaliga community are known as Okkalia of Utkala Kingdom.
- As a community of warriors and cultivators they have historically had notable demographic, political, and economic dominance in Old Mysore (region).
- It is believed by some historians that the Rashtrakutas and Western Gangas were of Vokkaliga origin. The Vokkaligas occupied administrative positions in the Vijaynagar Empire.

2. (c)

Guru Gobind Singh Ji:

- Statement 1 is correct:
 - Guru Gobind Singh started the Khalsa tradition after his father, Guru Tegh Bahadur, was beheaded during the Islamic sharia rule of the Mughal Emperor Aurangzeb.
- Statement 2 is correct:
 - Veer Bal Diwas was recently commemorated in India on December 26th for the first time.
 - The day was observed to mark the martyrdom of Sri Guru Gobind Singh's sons Sahibzadas Baba Zorawar Singh Ji and Baba Fateh Singh Ji.

3. (b)

- **Statement 1 is not correct:** Maski Inscription (Karnataka) lies on the bank of the Maski river which is a tributary of the Tungabhadra. It was the first edict of Emperor Ashoka that contained the name Ashoka in it instead of 'Devanampriya' or 'Piyadassi'.
- Statement 2 is correct: Rummindei Pillar Edicts (Lumbini) inscriptions come under the Minor Pillar Inscriptions. These contain inscriptions recording their dedication. The inscription mentions Ashoka's visit to Lumbini (Rummindei), Rupandehi district, Nepal, the birthplace of Lord Buddha. Ashoka exempted Lumbini from paying tax, and fixed its contribution of grain at one–eighth. The inscriptions are written in Brahmi script.

4. (c)

Losar Festival

- About:
 - $\circ~$ One of the most significant celebrations in the Tibetan calendar.
 - It begins on the day of a **new moon** that marks the first day of the **first month on the Tibetan** calendar.
 - Losar is celebrated for **15 days**, with the main celebrations on the first three days.
- Meaning:
 - The term 'Losar' means New year in the Tibetan language. 'Lo' means year and 'Sar' means new.
- Ancient Roots:
 - Losar predates the arrival of Buddhism in Tibet and has its roots in a winter incense-burning custom of the Bon religion.
- Celebrated At:
 - o Tibet, Bhutan, Nepal, India
 - o In India- Ladakh, Kinnaur, Spiti, Sikkim

5. (b)

Pt. Madan Mohan Malaviya

- About:
 - He was born in Allahabad and took early education under the 'pathshala' system, and was proficient in Sanskrit.
 - In 1879, he graduated from the Muir Central College (now Allahabad University) and started working as a teacher at a local high school.
 - He joined the Indian National Congress at its Calcutta session in 1886
 - He rose up the ranks, and became president four times in 1909 (Lahore), in 1918 (Delhi), in 1930 (Delhi), and in 1932 (Calcutta).
 - Malaviya was part of the Congress for almost 50 years.
 - Malaviya was one of the early leaders of the Hindu Mahasabha and helped found it in 1906.

• Contributions:

- He was a scholar and thinker who worked towards spreading education among citizens and supported the nationalisation of railways.
- He helped establish the Hindu Mahasabha ("Great Society of Hindus") in 1906, which brought diverse local Hindu nationalist movements together.
- He is known for founding the Banaras Hindu University in 1916 and for becoming one of the torchbearers of the freedom struggle acting as a bridge between the Moderates and the Extremists in the Congress.
- In the freedom struggle, Malaviya was midway between the Liberals and the Nationalists, the Moderates and the Extremists.
- In 1930, when Mahatma Gandhi launched the Salt Satyagraha and the Civil Disobedience Movement, he participated in it and courted arrest.

- Awards awarded: In 2014, he was posthumously conferred with Bharat Ratna, the country's highest civilian award.
- In 2016, the Indian Railways started the Varanasi-New Delhi Mahamana Express in the leader's honour.

6. (b)

- In his PhD thesis published recently, an Indian student claims to have solved Sanskrit's biggest puzzle—a grammar problem found in the 'Ashtadhyayi'.
- Statement 1 is not correct: Panini was an ancient Sanskrit philologist, grammarian, and a revered scholar in ancient India during 4th century BC. He was considered as the father of linguistics and lived in the northwest Indian subcontinent during the Mahajanapada era. He is known for his text Ashtadhyayi, a sutra-style treatise on Sanskrit grammar.
- **Statement 2 is correct:** Panini language laboratory was established at Mahatma Gandhi Institute in Mauritius to promote reading and writing Hindi amongst young and its further development. It was launched by the External Affairs Minister on the sidelines of the 11th World Hindi Conference held in Mauritius.

7. (c)

Kakori Train Action incident

- The train robbery at Kakori was the HRA's first major action, in August 1925.
- The Number 8 Down Train ran between Shahjahanpur and Lucknow.
 - It carried treasury bags meant to be deposited in the British treasury in Lucknow.
 - The revolutionaries planned to rob this money, which they believed legitimately belonged to Indians anyway.
- Their objective was both to fund the HRA and garner public attention for their work and mission.
 - On August 9, 1925, as the train was passing the Kakori station, about 15 km from Lucknow, Rajendranath Lahiri, a member of the HRA who was already seated inside, pulled the chain and stopped the train.
 - Subsequently, around ten revolutionaries, including Ram Prasad Bismil and Ashfaqullah Khan, entered the train and overpowered the guard.
 - They looted the treasury bags and escaped to Lucknow.
- **Response of Britishers:** The British authorities were enraged, undertaking a violent crackdown and soon arresting many members of the HRA.
 - The only major leader of HRA at this time who evaded arrest was Chandrashekhar Azad.
 - The severity of the British response was somewhat surprising, especially the handing out of capital sentences.
- Status of HRA: In 1928, a year after the execution of the Kakori Conspiracy accused, the HRA merged with various other revolutionary groups that had emerged in Punjab, Bihar, and Bengal and became the Hindustan Socialist Republican Association (HSRA).

8. (d)

About Dr. Rajendra Prasad

- Contribution to Constitution Making: In 1946, Rajendra Prasad joined the Interim Government of India as the Minister of Food and Agriculture.
 - As a firm believer in the maximization of agricultural production, he crafted the slogan "Grow More Food."
 - He was elected as a member of the Constituent Assembly from the Bihar Province where he served as the president of the Constituent Assembly from 1946 to 1950.
 - On 24th January 1950, at the last session of the Constituent Assembly, Prasad was elected as the President of India and has the distinction of being the only President to have been re-elected for a second term.
 - Committees of Constituent Assembly under the chairmanship of Dr. Prasad includes:
- Ad hoc Committee on the National flag
- Committee on the Rules of Procedure
- Finance and Staff Committee
- Steering Committee
- Writings: He recorded his life and the decades before independence in manybooks, among the more noted of which are "Satyagraha at Champaran" (1922), "India Divided" (1946), his autobiography "Atmakatha" (1946), "Mahatma Gandhi and Bihar, Some Reminiscences" (1949), and "Bapu ke Kadmon Mein" (1954).
- Awarded Highest Civilian Award: In 1962, after 12 years as President, Dr. Prasad retired, and was subsequently awarded the Bharat Ratna, the nation's highest civilian award.

9. (c)

- In News: Recently, the Prime Minister paid homage to Dr. Babasaheb Ambedkar on Mahaparinirvan Diwas.
- December 6 is observed as the Mahaparinirvan Diwas, or the death anniversary, of Dr BR Ambedkar, the Father of the Indian Constitution.
- It is considered as liberation from Samsara, karma, and the cycle of death and birth. It is the most sacrosanct day in the Buddhist calendar.
- As per the Buddhist texts, the death of Lord Buddha is considered to be Mahaparinirvan the Sanskrit term which means 'nirvana after death.

10. (d)

- In News: As part of the Karthigai festival, devotees light Lakshadeepam (lighting of one lakh lamps) at Sri Soundararaja Perumal Temple in Tamil Nadu.
- Tamil Nadu celebrates Karthigai Deepam as the traditional festival.
- It is also celebrated in neighboring states like Kerala, Andhra Pradesh, and Karnataka.
- One can find a reference to this festival of lights in the age-old literature of Tamils known as Ahananuru, a collection of poems.

- It is one of the great books of Sangam literature that talks about the happenings between 200 BC and 300 AD.
- Avaiyyar, a renowned woman of Sangam age also mentions karthigai Deepam in her poems.

11. (d)

<u>About</u>

- Sahitya Akademi recognizes 24 Indian languages which includes Rajasthani ,English and 22 languages recognized under the 8th Schedule of the Indian constitution.
- Sahitya Akademi Award is given to the most outstanding books of literary merit published in any of the major Indian languages recognised by the Akademi. The first Awards were given in 1955.
- Sahitya Akademi 'Yuva Puraskar' was instituted in 2011, it recognises young writers under the age of 35.
- Awards for translations of major works in other languages into one of the Indian languages were instituted in 1989.
- Bhasha Samman Award was instituted in 1996, this is given to writers for significant contribution to Indian languages other than the above 24 major ones and also for contributions to classical and medieval literature.

12. (c)

• About:

- It is a metalcraft popular in Bengal.
- An Ancient Tradition: Its documented history is about 5,000 years old.
- In its original form, no painting or polishing is done.
- Most Dhokra artefacts are human or animal figurines.
- Complex Process:
- Making dhokra art is a difficult process.
- Each figurine takes about a month to make.
- There are many processes involved, for which seven to eight varieties of clay is required, apart from other raw materials.
- Image Courtesy: TH
- Famous Places for for dhokra work in West Bengal:
- Bikna in Bankura and Dariyapur in Bardhaman.



EC		

- **1.** Consider the following statements:
 - 1. Depreciation of Indian rupee increases the foreign inward remittances to the country.
 - 2. Remittances to India account for over 20 percent of the total foreign exchange reserves in the country.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
- 2. With reference to the Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme, consider the following statements:
 - 1. It replaced the Niryat Rin Vikas Yojana.
 - 2. It is meant to provide a 'zero rating' of exports or ensure that no domestic taxes are added to goods meant for export.

3. Its scope has been extended to include pharmaceuticals, chemicals, and the iron & steel sector. Which of the statements given above is/are correct?

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

- (b) 2 and 3 only
- (d) 1, 2 and 3
- **3.** With reference to Geographical Indication Tag, consider the following statements:
 - 1. It is a part of the intellectual property rights that comes under the Paris Convention.
 - 2. Once a product gets this tag, any person or company cannot sell a similar item under that name. 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

4. Consider the following statements regarding the Indian rupee trade settlement mechanism:

- 1. It is a means of using the Indian rupee in all international transactions instead of other currencies.
- 2. Special vostro rupee accounts have been opened by the Indian banks with the banks of other countries for availing this mechanism.

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
- 5. Consider the following statements regarding Education loans in India:
 - 1. According to the model loan scheme, education loans of any amount do not require any collateral to be provided by the borrower.
 - 2. The sanction, as well as rejections of loans, should be reported by the bank concerned on the Vidya Lakshmi Portal.

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. Consider the following statements:
 - 1. The Cabinet Committee on Economic Affairs is chaired by the Finance minister.
 - The approval of the Minimum Support Price (MSP) by the Cabinet Committee on Economic Affairs is done on the recommendations of the Commission for Agricultural Costs and Prices.
 Which of the statements given above is/are correct?
 - which of the statements given above is/are con
 - (a) 1 only

(b) 2 only

(c) Both 1 and 2

- (d) Nisithau
- (d) Neither 1 nor 2

EXPLANATIONS

1. (c)

In a recent forecast, the World Bank (WB) stated that remittance to India is set to cross the \$100-billion mark in 2022.

Statement 1 is correct: As Rupee depreciates, India's cost of imports goes up, which in turn increases the external deficit as well as the fiscal deficit. A weaker Rupee raises the cost of all imports, thereby increasing the price of goods and putting upward pressure on domestic inflation.

Statement 2 is correct: Remittances to India are also one of the important contributors to foreign exchange reserves and account for over 20 percent of the total foreign exchange reserves in the country. There was an increase of 50 to 80 per cent in remittance flows from several countries including the USA, Canada, UK and Gulf countries.

2. (b)

In News: The commerce ministry extended the scope of its flagship export promotion scheme, RoDTEP or Remission of Duties and Taxes on Exported Products, to the chemicals and pharmaceuticals sectors and exports of articles of iron and steel.

Statement 1 is not correct: RoDTEP was introduced in January 2021 to replace an earlier merchandise export incentive scheme

Statements 2 and 3 are correct: RoDTEP is meant to provide a 'zero rating' of exports or ensure that no domestic taxes are added to goods meant for export.

- the government decided to extend the Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme to the pharmaceuticals, chemicals, and iron & steel sectors with effect from December 15.
- The move is aimed at boosting exports at a time they have been impacted due to the global economic slowdown and demand slowdown in major markets such as China and the European Union.

3.

(c)

GI or Geographical Indication Tag is used for products which have specific geographical origin or have qualities that can be attributed specifically to the region.

• A GI is primarily an agricultural, natural or a manufactured product (handicrafts and industrial goods) originating from a definite geographical territory.

Paris Convention:

• It is a part of the intellectual property rights that comes under the Paris Convention for the Protection of Industrial Property.

Act in India:

 In India, Geographical Indications registration is administered by the Geographical Indications of Goods (Registration and Protection) Act of 1999.

Protection:

- Once a product gets this tag, any person or company cannot sell a similar item under that name. Validity:
- This tag is valid for a period of 10 years following which it can be renewed.

Benefits of GI Tag:

- It confers legal protection to Geographical Indications in India
- Prevents unauthorised use of a Registered Geographical Indication by others
- It provides legal protection to Indian Geographical Indications which in turn boost exports.
- It promotes the economic prosperity of producers of goods produced in a geographical territory.

4. (c)

Indian rupee trade settlement mechanism

About:

- The RBI has announced the setting up of this mechanism to carry out international trade in Indian rupees.
- The Indian rupee trade settlement mechanism is a means of using the Indian rupee in all international transactions instead of dollars and other big currencies. Hence statement 1 is correct.
- Special vostro rupee accounts, or SVRA, have been opened by the Indian banks with the banks of Mauritius, Russia, Sri Lanka. Hence statement 2 is correct.

Indian Banks' Association leading awareness:

• The Finance Ministry of India has also asked the Indian Banks' Association (IBA) and the Federation of Indian Export Organisations (FIEO) to initiate an awareness campaign to sensitise stakeholders about the rupee trade.

5. (b)

The education loans

- Model loan scheme:
 - According to the model loan scheme, education loans of up to Rs 4 lakh don't require any collateral to be provided by the borrower.
 - Education loans of up to Rs 7.5 lakh can be obtained with collateral in the form of suitable thirdparty guarantee.

• Education loans above Rs 7.5 lakh require tangible collateral. Hence statement 1 is incorrect. In all these cases, co-obligation of parents is necessary.

• Vidya Lakshmi Portal (VLP):

- The government has also launched an online portal, the Vidya Lakshmi Portal (VLP) to ensure hassle-free education loans through a single window system to students.
- Sanction/rejection of Education Loans:
 - Normally, sanction/rejection will be communicated within 15 days of receipt of a duly completed application with supporting documents in the bank.
 - Rejection of loan application, if any, shall be done with the concurrence of the next higher authority and conveyed to the student stating the reason for rejection.

Further, the sanction, as well as rejection (with reasons), should also be reported by the bank concerned on the VLP portal. Hence statement 2 is correct.

6. (b)

The Prime Minister heads the **Cabinet Committee on Economic Affairs.** Minimum Support Price (MSP) is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices. The minimum support prices are announced by the Government of India at the beginning of the sowing season for certain crops on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP).

INDIAN POLITY & CONSTITUTION

Consider the following statements regarding the Remote Electronic Voting Machine (RVM):

1.

	1.	It can handle a single constituency from multiple remote polling booths.					
	2.	RVMs are stand-alone, non-networked systems.					
	3.	It is developed with the assistance of the defence network operations centre.					
	Whic	ich of the statements given above is/are correct?					
	(a)	1 and 2 only	(b)	2 only			
	(c)	3 only	(d)	1 and 3 only			
2.	Whic	h of the following statements is <i>no</i>	<i>t correct</i> reg	arding Lokpal and Lokayuktas?			
	(a)	-	-	d for the establishment of Lokpal for the Union and			
		Lokayukta for States.					
	(b)	Once appointed, Lokayukta canr	ot be dismis	sed nor transferred by the government.			
	(c)	Lokayuktas can only be removed	l by passing a	an impeachment motion by the state assembly			
	(d)	None of the above					
3.	With	reference to Inter-State Council, co	onsider the f	following statements:			
0.	1.	The Inter-State Council was esta		-			
	2.			ouncil of Ministers are nominated as its members by			
	۷.	the President of India.		suren or winisters are normated as its members by			
	Whic	h of the statements given above is	/are correct?				
	(a)	1 only	(b)	2 only			
	(c)	Both 1 and 2	(d)	Neither 1 nor 2			
4.				, consider the following statements:			
	1.		-	visions of the Government of India Act of 1919.			
	2.	The PAC does not have power to					
		h of the statements given above is,	/are correct?				
	(a)	1 only	(b)	2 only			
	(c)	Both 1 and 2	(d)	Neither 1 nor 2			
5.	With	reference to Indian Citizenship, co	nsider the fo	Ilowing statements:			
	1.	The term "citizen" is defined in t	he Indian Co	nstitution.			
	2.	Persons of Indian Origin are not	allowed citiz	enship of two countries.			
	3.	An Indian citizen's citizenship ca	n be revoke	d if he voluntarily adopts the citizenship of another			
		country.					
	Whic	h of the statements given above ar	e correct?				
	(a)	1 and 2 only	(b)	2 and 3 only			
	(c)	1 and 3 only	(d)	1, 2 and 3			

c	Which of the following statements regarding the Delimitation Commission is <i>not correct</i> ?					
6.						
	concerned.					
			on a date to be	specified by the President of India.		
		one of the above				
7			r of Citizone (I	(IBC) consider the following statements:		
7.		C is prepared under directive		NRC), consider the following statements:		
		rrently, Assam is the only Sta		-		
		e rejected person has to app	-			
				on enumerated during the Census of 1951.		
		the following statements are				
		2 and 3 only	(b)	3 and 4 only		
		3 and 4 only		1, 2, 3 and 4		
8.	With rofo	ranca to the Zanal Council or	oncidor tho fol	lowing statements:		
0.		rence to the Zonal Council, co e Prime minister is the Chair				
				each zone act as Vice-Chairman of the Zonal Council		
		r that zone by rotation.				
		the above given statements i	is/are correct?			
		only	(b)	2 only		
		th 1 and 2	(d)	Neither 1 nor 2		
9.		rence to Appropriation Bill, c	oncidor tho fo	llowing statements:		
9.				onsolidated Fund without the enactment of the		
		propriation Bill by Parliamen		onsolidated rund without the enactment of the		
		jya Sabha has no power to re		amendments to this Bill.		
		the statements given above i				
		only	(b)	2 only		
	(c) Bo	th 1 and 2	(d)	Neither 1 nor 2		
10	Consider	ika fallou ing statamanta.				
10.		the following statements:	ot un only hy	the Control Covernment in consultation with the		
		ncerned State High Courts.	et up only by	the Central Government in consultation with the		
		0	stitute Snecial	Courts for specific cases by a notification.		
		the statements given above i	•			
		only	(b)	2 only		
		th 1 and 2	(d)	Neither 1 nor 2		
			(-)			
11.		the following statements:	colon into an	advastignal institution maintained by the Chatran		
			ssion into any	educational institution maintained by the State on		
	gro	ounds of the residence.				

	2.	In granting aid to educational instituti institution on the ground that it is unde		he state can discriminate against any educational management of a minority.		
	Which	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		
12.		NG app that was recently in news is relate	d to y	which of the following?		
12.	(a)	Online safety of women	u 10 1	which of the following:		
	(a) (b)	Providing government services to citize	nc thr	rough mobile		
	(D) (C)	Online registration of vaccine doses		ougniniobile		
	(c) (d)	Constructing digital highways & their ru	ral hr	ranches		
_						
13.				ns of Parliament in India is/are <i>not correct</i> ?		
	1.		of Pa	arliament rests with the Cabinet Committee on		
	h	Parliamentary Affairs.		and the partice act 20 days on which they decide		
	2.	the agenda for discussion.	α of	oposition parties get 20 days on which they decide		
	Select	the correct answer using the code given	helov	N .		
	(a)	1 only	(b)	2 only		
	(c)	Both 1 and 2	(d)	Neither 1 nor 2		
14.		der the following statements regarding N				
	1. 2			ashtra's claim over Belagavi (then Belgaum).		
	2.		-	which is currently a part of Maharashtra.		
		of the statements given above is/are co				
	(a) (c)	1 only Both 1 and 2	(b) (d)	2 only Neither 1 nor 2		
	(c)		• •			
15.	Which	n of the following statements is/are with i				
	1.		Sabha	member to suspend the pre-decided agenda of the		
		House.				
	2.	This rule has been used only for specific		-		
		of the statements given above is/are co				
	(a)	1 only	(b)	2 only		
		Dath 1 and 2	1 -1 \			
	(c)	Both 1 and 2	(d)	Neither 1 nor 2		
16.	(c)	Both 1 and 2 ologically arrange the following from the	• •			
16.	(c)		• •			
16.	(c) Chron 1. 3.	ologically arrange the following from the Assam Nagaland	time 2. 4.	of their formation as a State. Mizoram Meghalaya		
16.	(c) Chron 1. 3. Select	ologically arrange the following from the Assam Nagaland the correct answer using the codes giver	time 2. 4. n belo	of their formation as a State. Mizoram Meghalaya w.		
16.	(c) Chron 1. 3. Select (a)	ologically arrange the following from the Assam Nagaland the correct answer using the codes giver 2-3-4-1	time 2. 4. belo (b)	of their formation as a State. Mizoram Meghalaya w. 1-3-4-2		
16.	(c) Chron 1. 3. Select	ologically arrange the following from the Assam Nagaland the correct answer using the codes giver	time 2. 4. n belo	of their formation as a State. Mizoram Meghalaya w.		

17.	With 1.	reference to the Uniform Civil C It is defined in Article 44 of th	• •	-
	2.	Goa and Arunachal Pradesh a	re the only stat	es to have it.
	Whic	ch of the statements given above	is/are correct	
	(a)	1 only	(b)	2 only
	(c)	Both 1 and 2	(d)	Neither 1 nor 2
18.		ider the following statement endment) Bill, 2022:	s regarding t	he New Delhi International Arbitration Centre
	1.	The bill renames the New I Arbitration Centre.	Delhi Internatio	onal Arbitration Centre as the India International
	2.	It provides for the establishm	ent and incorpo	pration of the Arbitration Council of India (ACI).
	Whic	ch 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 Public Account	s Committee (F	PAC), consider the following statements:
	1.	It is the oldest parliamentar	y committee	naving the largest number of members in Indian
		legislative affairs.		
	2.	A member of the Committee	e belonging to	the main opposition party/group in the House is
		appointed as the Chairperson	of the Commit	tee.
	Whic	ch of the statements given ab <mark>ov</mark> e	is/are correct	2
	(a)	1 only	(b)	2 only
	(c)	Both 1 and 2	(d)	Neither 1 nor 2
20.	With	reference to the 6th Schedule o	f the Constitut	on, consider the following statements:
	1.	It provides for the administra	ti <mark>on of tribal a</mark>	reas in Assam, Meghalaya, Tripura and Mizoram to
		safeguard the rights of the tri	bal population	in these states.
	2.	The President is vested wi	th powers reg	garding the Autonomous District Councils (ADC)
		established under the sixth sc	hedule.	
	Whic	ch of the statements given above	is/are correct	
	(a)	1 only	(b)	2 only
	(c)	Both 1 and 2	(d)	Neither 1 nor 2
21.	With	reference to the Alternate Disp	ute Resolution	Mechanisms, consider the following statements:
	1.	The Constitution of India	did not expli	citly mention the Alternate Dispute Resolution
		Mechanisms.		
	2.	Lok Adalat is one of the alter	native dispute	redressal mechanisms established under the Legal
		Services Authority Act, of 198	7.	
	Whic	ch of the given above statements	s is/are correct	2
	(a)	1 only	(b)	2 only
	(c)	Both 1 and 2	(d)	Neither 1 nor 2
				17 P a g e

22.	"When there is a conflict of interest, a judge can withdraw from hearing a case to prevent creating a					
	perception that she carried a bias while deciding the case." What is this procedure called?					
	(a) Remission (b) Pardon					
	(c)	Habeas Corpus	(d)	Recusal		

- 23. Which of the following is/are the Criteria for Political parties to gain recognition as a National Party?
 - 1. It has won at least 2% of the total seats in the Lok Sabha from not less than three states.
 - 2. It is 'recognised' atleast in ten or more states.
 - 3. It has a 6% vote share in the last Lok Sabha elections.

Select the correct answer using the code given below:

- (a) 1 only (b) 2 only
- (c) 1 and 3 only (d) 3 only
- 24. Which of the following recommendations have been given by the Delimitation Commission for Jammu & Kashmir?
 - 1. Drawing a clear regional division between Jammu & Kashmir regions instead of treating them as one.
 - 2. Provision of at least two members from the community of Kashmiri Migrants in the Legislative Assembly.
 - 3. Reserving Assembly seats for Scheduled Tribes.

Select the correct answer using the code given below:

- (a) 1 and 2 only
 - (b) 2 and 3 only
- (c) 1 and 3 only (d) 1, 2 and 3
- **25.** With reference to Ad-hoc Judges, consider the following statements:
 - 1. They can be appointed under Article 224A of the Constitution for a limited period.
 - 2. The Chief Justice of a High Court can make a such an appointment only with the prior approval of the Chief Justice of India (CJI).

Which of the statements given above is/are not correct?

- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
- 26. In which of the following conditions a political party would be considered as a national party?
 - (a) If it is 'recognised' in four or more states
 - (b) If its candidates polled at least 6% of total valid votes in any four or more states in the last Lok Sabha
 - (c) If it has won at least 2% of the total seats in the Lok Sabha from not less than three states
 - (d) All of the above

EXPLANATIONS

1. (b)

- Remote Electronic Voting Machine (RVM):
 - EC has developed a prototype for a Multi-Constituency Remote Electronic Voting Machine (RVM) that can handle multiple constituencies from a single remote polling booth. Hence statement 1 is incorrect.

- It is based on the currently used EVM system.
- \circ The VVPAT system is expected to work along the same lines with the new technology.

• Developed by:

• The RVM is developed with the assistance of Bharat Electronics Limited (BEL) and the Electronics Corporation of India Limited (ECIL). Hence statement 3 is incorrect.

• Characteristics & functioning:

• The RVMs are **stand alone**, **non-networked systems**, which will effectively be providing the voter the same experience as currently used EVMs.

• Set up:

• They will be **set up in remote locations outside the state** under similar conditions as current polling booths.

• Single Remote Ballot Unit for multiple constituencies:

 The unique feature of RVMs is that a single Remote Ballot Unit (RBU) will be able to cater to multiple constituencies (as many as 72) by using a "dynamic ballot display board" instead of the usual printed paper ballot sheet on EVMs.

• Ballot Unit Overlay Display:

- The Ballot Unit Overlay Display (BUOD) will show the requisite candidates based on the constituency number read on the voter's Constituency card.
- A barcode scanning system will be used to read these cards.
- The voting process will be as follows:
 - After verifying a voter's identity, their constituency card will be read with a public display showing the constituency details and candidates.
 - This will also be displayed privately, on the BUOD in the RVM's RBU.

The voter will then vote and each vote will be stored constituency-wise in the control unit of the voting machine.

2. (d)

Lokpal and Lokayukta Act, 2013:

- The Lokpal and Lokayukta Act, 2013 provided for the establishment of Lokpal for the Union and Lokayukta for States.
- The Act states that not less than 50% of the members of the Lokpal should be from among persons belonging to the SCs, the STs, OBCs, minorities and women.
- Selection, Appointment and Removal of Lokayukta:
 - The Lokayukta is usually a former High Court Chief Justice or former Supreme Court judge and has a fixed tenure.
 - \circ The Chief Minister selects a person as the Lokayukta after consultation with
- The High Court Chief Justice, the Speaker of the Legislative Assembly,
- The Chairman of the Legislative Council,

- Leader of Opposition in the Legislative Assembly and the
- Leader of Opposition in the Legislative Council.
 - The appointment is then made by the Governor.
 - Once appointed, Lokayukta cannot be dismissed nor transferred by the government, and can only be removed by passing an impeachment motion by the state assembly.

3. (a)

The **border dispute between Maharashtra and Karnataka** is intensifying, with both states hardening their stance.

Statement 1 is correct: The Inter-State Council was established under Article 263 of the Constitution of India through a Presidential Order dated 28th May 1990. Article 263 of the Constitution states that the President may constitute such a body if a need is felt for it. The Council is basically meant to serve as a forum for discussions among various governments.

Statement 2 is not correct: The Council consists of:-

- Prime Minister Chairman
- Chief Ministers of all States Members
- Chief Ministers of Union Territories having a Legislative Assembly and Administrators of UTs not having a Legislative Assembly Members

Six Ministers of Cabinet rank in the Union Council of Ministers to be nominated by **the Prime Minister** – Members

4. (c)

Statement 1 is correct: The Public Accounts Committee (PAC) was set up first in 1921 under the provisions of the Government of India Act of 1919. The Committee consists of 22 Members, 15 Members are elected by the Lok Sabha and 7 Members of the Rajya Sabha are associated with it. The PAC examines the appropriation accounts and the finance accounts of the Union government and any other accounts laid before the Lok Sabha. The function of the committee is to examine the annual audit reports of the Comptroller and Auditor General of India (CAG), which are laid before the Parliament by the President.

Statement 2 is correct: The Public Accounts Committee is not vested with the power of disallowance of expenditures by the departments. It is not concerned with the questions of policy in a broader sense. It conducts a post-mortem examination of accounts (showing the expenditure already incurred). Its recommendations are advisory and not binding on the ministries.

5. (b)

A recent Comptroller and Auditor-General of India (CAG) report on the update exercise of the National Register of Citizens (NRC) in Assam has **flagged serious irregularities.**

Statement 1 is not correct: Citizenship is listed in the Constitution's Union List and hence falls within Parliament's sole control. The term "citizen" is not defined in the Constitution; however, Part 2 describes

the numerous types of people who are eligible for citizenship (Articles 5 to 11). Indian citizenship can be obtained in the following ways:

- Citizenship conferred by birth
- Citizenship through descent
- Citizenship through registration
- Naturalization leads to citizenship.
- Territorial incorporation (by the Government of India)

Statement 2 is correct: Under the Indian Citizenship Act, 1955, Persons of Indian Origin are not allowed citizenship of two countries. If a person has ever held an Indian Passport and then obtains the passport of some other country, they will be required to surrender their Indian Passport immediately after they gain nationality of the other country.

Statement 3 is correct: Any Indian citizen who is also a national of another country who renounces his Indian citizenship in the prescribed manner through a declaration ceases to be an Indian citizen. An Indian citizen's citizenship can be revoked if he or she knowingly or voluntarily adopts the citizenship of another country.

6. (d)

Delimitation Commission:

- About:
 - The Delimitation Commission in India is a high-power body whose orders have the force of law.
 - Its orders cannot be called in question before any court. Hence statement (a) is correct.
 - These orders come into force on a date to be specified by the President of India on this behalf.
 Hence statement (c) is correct.
 - The copies of its orders are laid before the House of the People and the State Legislative Assembly concerned, but no modifications are permissible therein by them. Hence statement (b) is correct.
- Constitutional Provisions:
 - Article 82: This provides the Parliament with the authority to enact a Delimitation Act after every Census.
 - Article 170: This provides for the States to get divided into territorial constituencies as per the Delimitation Act after every Census.

• Functions:

- To determine the number and boundaries of constituencies in a way that the population of all seats, so far as practicable, is the same.
- Identifying seats reserved for Scheduled Castes and Scheduled Tribes wherever their population is relatively large.

In case of difference of opinion among members of the Commission, the will of majority prevails.

7. (d)

Statement 1 is correct: NRC is prepared under directives from the Ministry of Home Affairs.

Statement 2 is correct: Assam is the only state where an NRC has been compiled.

Statement 3 is correct: Each rejected person can approach the Foreigners Tribunals (FT) within 120 days of receiving the rejection slips.

Statement 4 is correct: These registers covered each and every person enumerated during the Census of 1951 and were kept in the offices of Deputy Commissioners and Sub Divisional Officers according to instructions issued by the Government of India in 1951. Later these registers were transferred to the Police in the early 1960s.

8. (b)

Organisational Structure of Zonal Councils

- Chairman The union Home minister is the Chairman of each of these Councils.
- Vice Chairman The Chief Ministers of the States included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of one year at a time.
- **Members** Chief Minister and two other Ministers as nominated by the Governor from each of the States and two members from Union Territories included in the zone.
- Advisers- One person nominated by the NITI Aayog for each of the Zonal Councils, Chief Secretaries and another officer/Development Commissioner nominated by each of the States included in the Zone.
- Union Ministers are also invited to participate in the meetings of Zonal Councils depending upon necessity.

Objectives

- Bringing out national integration.
- Arresting the growth of acute State consciousness, regionalism, linguism and particularistic tendencies.
- Enabling the Centre and the States to co-operate and exchange ideas and experiences.
- Establishing a climate of co-operation amongst the States for successful and speedy execution of development projects.

9. (a)

Statement 1 is correct: Appropriation Bill is a money bill that allows the government to withdraw funds from the Consolidated Fund of India to meet its expenses during a financial year. As per Article 114(3) of the Constitution, no amount can be withdrawn from the Consolidated Fund without the enactment of such a law by Parliament.

Statement 2 is not correct: The Appropriation Bill is first passed by Lok Sabha and then sent to Rajya Sabha. Rajya Sabha has the power to recommend any amendments to this Bill. However, it is the prerogative of the Lok Sabha to either accept or reject these recommendations. An Appropriation Bill is passed by the Parliament/state legislature and then it is presented to the President/Governor. After the assent by the President/Governor to the bill, it becomes an Act.

10. (b)

Recently, the Karnataka government tabled a Bill in the Legislative Assembly to **increase reservations for Scheduled Castes and Scheduled Tribes** in the state.

Statement 1 is not correct: Fast Track Courts (FTCs) are set up by the State Governments in consultation with the concerned High Courts. The 11th Finance Commission had recommended a scheme for the creation of 1734 FTCs in the country for disposal of long pending cases. The scheme that was started as per recommendation of the 11th Finance Commission remained operative till 2011. The Supreme Court later directed the States that they need to decide either to bring the FTCs scheme to an end or to continue the same as a permanent feature in the State.

Statement 2 is correct: The State Government may, for the purposes of providing speedy trial of offences, by notification in the Official Gazette, constitute as many Special Courts as may be necessary. Many states have established such special courts. A Special Court shall consist of a single Judge who shall be appointed by the State Government with the concurrence of the High Court.

11. (d)

Recently, the **Governor of Uttarakhand gave consent** to the State's Freedom of Religion (Amendment) Act.

Statement 1 is not correct: Article 29 of the Indian Constitution states that any section of the citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same. No citizen shall be denied admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of **religion, race, caste, language** or any of them.

Statement 2 is not correct: Article 30 of the Indian Constitution states that all minorities, whether based on religion or language, shall have the right to establish and administer educational institutions of their choice. The state **shall not**, in granting aid to educational institutions, discriminate against any educational institution on the ground that it is under the management of a minority, whether based on religion or language.

12. (b)

Unified Mobile Application for New-age Governance (UMANG):

- It is a Digital India initiative of the Ministry of Electronics and Information Technology, by the Government of India.
- It is created for providing government services to citizens through mobile.
- The app supports 13 Indian languages and is available for Android, iOS and Windows.
- More than 1668 e-Services and over 20,197 bill payment services are made available at UMANG.

13. (b)

Sessions of Parliament in India

• Convening a session of Parliament:

- The power to convene a session of Parliament rests with the government.
- The decision is taken by the **Cabinet Committee on Parliamentary Affairs**.
- The committee currently comprises ministers, including those for **Defence**, **Home and Law. Hence** statement 1 is correct.
 - The decision of the Committee is formalised by the President, in whose name MPs are summoned to meet for a session.
- Three sessions of Parliament:
 - India does not have a fixed parliamentary calendar. By convention, Parliament meets for three sessions in a year.
 - Budget Session:
 - The longest, the Budget Session, starts towards the end of January, and concludes by the end of April or first week of May.
 - The session has a recess so that Parliamentary Committees can discuss the budgetary proposals.
- Monsoon Session:
- The second session is the three-week Monsoon Session, which usually begins in July and finishes in August.
 - Winter Session:
- The parliamentary year ends with a three-week-long Winter Session, which is held from November to December.

UK Model of Parliament Working

- In the UK, Parliament meets over 100 days a year & opposition parties get 20 days on which they decide the agenda for discussion. Hence statement 2 is incorrect.
- The main opposition party gets 17 days and the remaining three days are given to the second-largest opposition party.
- In the UK, the PM is bound by a constitutional convention to respond to questions directly posed to him by MPs.

Canada also has a similar concept of opposition days.

14. (a)

Maharashtra-Karnataka border dispute

- Beginning in reorganisation of states:
 - The Maharashtra and Karnataka boundary dispute has its origins in the **reorganisation of states** along **linguistic lines** via the **State Reorganisation Act, 1956.**
- Maharashtra's demand:
 - Since its creation on May 1, 1960, Maharashtra has claimed that 865 villages, including Belagavi (then Belgaum), Carvar and Nipani, should be merged into Maharashtra. Hence statement 2 is incorrect.

- Significance of the demand:
- The claim of the pro-Marathi groups is that Belagavi is a largely Marathi-speaking region with many parts being exclusively Marathi speaking.
- It claims that the region should be a part of Maharashtra instead of Karnataka which is a Kannadaspeaking state.

• Mahajan Commission:

- In October 1966, the Centre constituted the Mahajan Commission headed by the then Supreme Court Chief Justice Meher Chand Mahajan, at the insistence of Maharashtra.
- Recommendations of the commission:
 - While rejecting Maharashtra's claim over Belagavi (then Belgaum), the commission recommended 247 villages/places, including Jatt, Akkalkote and Solapur, to be made part of Karnataka. Hence statement 1 is correct.
 - It also declared 264 villages /places, including Nippani, Khanapur and Nandagad, to be made part of Maharashtra.

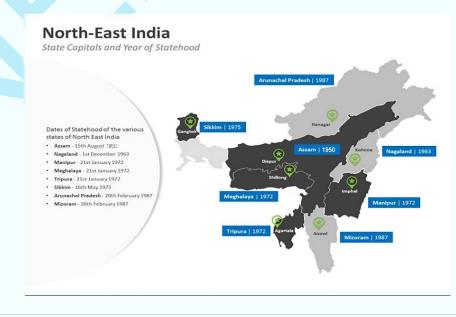
15. (a)

Statement 1 is correct: Rule 267 of the Rajya Sabha rulebook, which allows for suspension of day's business to debate the issue suggested by a Member.

Statement 2 is not correct: As per the statistics, the rule has been invoked 11 times since 1990 for various issues, including "Gulf War" in 1991, to debate "corruption", and it was used four times to debate the "role of CBI in coalgate scam", "attack on the secular fabric of the country", "agrarian crisis" and "demonetisation of currency.

16. (b)

Recently, in the **North East Council (NEC) meeting**, the PM of India has said that red cards have been shown to challenges in the Northeast region, including **corruption**, **political nepotism and unrest**.



17. (a)

The Uniform Civil Code (UCC) calls for the formulation of one law for India, which would be applicable to all religious communities in matters such as marriage, divorce, inheritance, adoption.

• Article 44 of the Constitution

- The code comes under Article 44 of the Constitution, which states that the state shall endeavour to secure a Uniform Civil Code for the citizens throughout the territory of India.
- The objective of Article 44 of the Directive Principles in the Indian Constitution was to address the discrimination against vulnerable groups and harmonise diverse cultural groups across the country.
- Part IV (Articles 36-51) covers a wide range of principles, apart from the UCC:
- The securing of equal justice and free legal aid to citizens (Art 39A)
- Participation of workers in the management of industries (Art 43A)
- Organisation of agriculture and animal husbandry (Art 48)
- Protection and improvement of the environment and safeguarding of forests and wildlife (Art 48A)
- Promotion of international peace and security (Art 51)

Statement 2 is not correct: Goa is the only state in India which has a uniform civil code.

18. (a)

The New Delhi International Arbitration Centre (Amendment) Bill, 2022.

- Renaming Arbitration Centre:
 - The bill renames the New Delhi International Arbitration Centre as the India International Arbitration Centre. **Hence statement 1 is correct.**
- International and domestic arbitration:
 - The Act requires the Arbitration Centre to strive to facilitate the conduct of international and domestic arbitration and conciliation and the new legislation expands this to include the conduct of other forms of alternative dispute resolution.
 - The bill will help India emerge as an attractive destination for arbitration at the global level.

• Other highlights:

- The manner of conduct of arbitration and other forms of alternative dispute resolution will be specified by the Central government through regulations.
- The Bill also allows the government to provide for removing any difficulties in implementing the Act up to five years from the date of commencement of the Act.
- Other ADRs:
- Bill also includes the conduct of other forms of alternative dispute resolution (ADRs) besides arbitration. Hence statement 2 is not correct.

19. (b)

About Public Accounts Committee (PAC)

• About:

• The PAC is the oldest parliamentary committee in Indian legislative affairs and has been crucial in upholding the principle of accountability as it exercises oversight of public expenditure.

• Members:

- The Public Accounts Committee consists of 22 members elected according to the principle of proportional representation by means of single transferable vote:
- Fifteen members elected by Lok Sabha every year from amongst its members.
- $\circ~$ Seven members of Rajya Sabha elected by that House in like manner are associated with the Committee.

• Process of Election:

 In April, each year, a motion is moved in Lok Sabha by the Minister of Parliamentary Affairs or Chairperson of the Committee, if in office, calling upon members of the House to elect from amongst themselves 15 members to the Public Accounts Committee.

• Appointment of Chairperson:

- The Chairperson of the Committee is appointed by the Speaker from amongst the members of Lok Sabha elected to the Committee.
- As a convention, starting from the Public Accounts Committee of 1967-68, a member of the Committee belonging to the main opposition party/group in the House is appointed as the Chairperson of the Committee

• Role & Functions:

- Check on the government, especially with respect to its expenditure bill.
- Examines the audit report of C&AG after it is laid in the Parliament.
- PAC promotes the basic principle that parliament embodies the will of the people by exercising check over the executive.
- Keeps a check on the money spent on any service during a financial year.
- It examines the accounts of State corporations, Trading concerns and Manufacturing projects.

20. (a)

6th Schedule of the Constitution

- It provides for the administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram to safeguard the rights of the tribal population in these states.
 - This special provision is provided under Article 244(2) and Article 275(1) of the Constitution.
- It seeks to safeguard the rights of the tribal population through the formation of Autonomous District Councils (ADC).
 - ADCs are bodies representing a district to which the Constitution has given varying degrees of autonomy within the state legislature.
- Features:
 - Provisions have been made for the creation of the District Councils and regional councils for

the exercise of certain legislative and judicial powers. However, their jurisdiction is subject to the jurisdiction of the concerned High Court.

- They have powers to form courts to hear cases where both parties are members of Scheduled Tribes, and the maximum sentence is less than 5 years in prison.
- They also have powers to levy taxes, fees and tolls on buildings, land, animals, vehicles, boats, entry of goods into the area, roads, ferries, bridges, employment and income and general taxes for the maintenance of schools and roads.
- The Acts of Parliament or the State Legislature do not apply to autonomous districts and autonomous regions or apply with specified modifications and exceptions.
- The Governor is vested with powers regarding the councils. He/she, by public notification, may:
 - Include or exclude any new area.
 - Create a new autonomous district.
 - Define the boundaries of any autonomous district.
 - Increase or decrease the area of an existing autonomous district.
 - Alter the name of any autonomous district.

21. (c)

Statement 1 is correct: After the enforcement of the constitution of India, the 1950 Alternative Dispute resolution in India was founded on the constitutional basis of Article 14 and 21; i.e.: Equality before law and right to life and personal liberty. It was an important attempt made by the legislators and judiciary alike to achieve the "constitutional goal of achieving complete justice". There is a constitutional directive to settle the dispute through the ADR indirectly under Article 39A of the constitution of India stating that the state shall make a principle of state policy relating to equal justice and free legal aid. Article 40 of the constitution of India gives a directive to the state to take steps to organize village panchayats and endow them with such power and authority as may be necessary to enable them to function as units of self-government. Part IX has been inserted by the constitution (73rd Amendment) act, 1992 enumerated the provision of the Constitution of Panchayats. Hence, the Constitution of India did not explicitly mention the Alternate Dispute Resolution Mechanisms.

Statement 2 is correct: Lok Adalat is an important Alternative Disputes Resolution Mechanism available to common people. It is a forum where the disputes/ cases pending in the court of law or at the prelitigation stage are settled/ compromised amicably. Under the Legal Services Authorities (LSA) Act, 1987, an award made by a Lok Adalat is deemed to be a decree of a civil court and is final and binding on all parties and no appeal lies against thereto before any court.

22. (d)

Recently, the Supreme Court judge Bela M. Trivedi recused herself from hearing a writ petition filed by Bilkis Bano against a Gujarat government decision to prematurely release 11 men sentenced to life imprisonment for gang-raping her during the 2002 riots.

About Judge Recusal:

- When there is a conflict of interest, a judge can withdraw from hearing a case to prevent creating a perception that she carried a bias while deciding the case.
- For example, if the case pertains to a company in which the judge holds stakes, the apprehension would seem reasonable.
- Similarly, if the judge has, in the past, appeared for one of the parties involved in a case, the call for recusal may seem right.

Another instance of recusal is when an appeal is filed in the Supreme Court against a judgement of a High Court that may have been delivered by the Supreme Court judge when she was in the High Court.

23. (a)

Criteria for recognition as a National Party:

• Authority & fulfillment:

- The ECI has laid down the technical criterion for a party to be recognised as a national party.
- A party may gain or lose national party status from time to time, depending on the fulfillment of these laid-down conditions.
- A political party would be considered as a national party if:
 - It is 'recognised' in four or more states; or
 - If its candidates polled at least 6% of total valid votes in any four or more states in the last Lok Sabha or Assembly elections and has at least four MPs in the last Lok Sabha polls; or
 - o If it has won at least 2% of the total seats in the Lok Sabha from not less than three states.

To be recognised as a state party, a party needs:

- At least 6% vote-share in the last Assembly election and have at least 2 MLAs; or
- have 6% vote-share in the last Lok Sabha elections from that state and at least one MP from that state; or
- At least 3% of the total number of seats or three seats, whichever is more, in the last Assembly elections; or
- At least one MP for every 25 members or any fraction allotted to the state in the Lok Sabha; or
- Have at least 8% of the total valid votes in the last Assembly election or Lok Sabha election from the state.

24. (b)

Recommendation of Delimitation Commission for J&K:

• Constituencies redrawal:

- Delimitation Commission has recommended seven additional constituencies:
 - 6 for Jammu
 - 1 for Kashmir
 - Jammu Division will now have 43 seats compared to 37 earlier
 - While Kashmir Valley will have 47 seats compared to 46 earlier.

• Major Recommendations:

- Reorganisation of the Parliamentary constituencies so that 5 Lok Sabha seats constitute 18 Assembly constituencies each, taking the total number of assembly constituencies to 90.
- Reserving 9 Assembly seats for Scheduled Tribes, 6 in Jammu while 3 in Kashmir. Hence statement 3 is correct.
- Doing away with regional distinction between Jammu and Kashmir and treating it as one. Hence statement 1 is incorrect.
- The Anantnag region in Kashmir has been combined with Rajouri and Poonch in Jammu to carve out Anantnag-Rajouri as one Parliamentary constituency.

• Kashmiri Migrants:

• The Commission has recommended provision of at least two members from the community of Kashmiri Migrants (Kashmiri Hindus) in the Legislative Assembly. **Hence statement 2 is correct.**

It has also recommended that the Centre should consider giving representation in the J&K Legislative Assembly to the displaced persons from Pakistan-occupied Kashmir, who migrated to Jammu after Partition.

25. (b)

Recently, the Supreme Court (SC) stated that the process to appoint ad hoc judges must be less cumbersome.

Statement 1 is correct: Ad-hoc Judges can be appointed under Article 224A of the Constitution for a limited period.

Statement 2 is not correct: Article 224A enables a Chief Justice of a High Court, with the previous consent of the **President**, to request a former High Court judge to "sit and act as a judge" of the High Court to hear cases.

26. (d)

Recently, the Aam Aadmi Party (AAP) is on track to be recognised as a national party by the Election Commission of India (ECI).

- The name suggests that a national party would be the one that has a presence 'nationally', as opposed to a regional party whose presence is restricted to only a particular state or region.
 - The ECI has laid down the technical criterion for a party to be recognised as a national party.
 - A party may gain or lose national party status from time to time, depending on the fulfillment of these laid-down conditions.
 - National party
- It is 'recognised' in four or more states; or
- If its candidates polled at least 6% of total valid votes in any four or more states in the last Lok Sabha or Assembly elections and has at least four MPs in the last Lok Sabha polls; or
- If it has won at least 2% of the total seats in the Lok Sabha from not less than three states.

GEOGRAPHY

- **1.** Which of the following correctly describes a "Bomb Cyclone"?
 - 1. Rapid drop in the low-pressure mass by at least 24 millibars in 24 hours.
 - 2. When viewed from above, the direction is clockwise in the Northern Hemisphere.
 - 3. Interaction between tropical cyclones formed around the same time in the same ocean region forming a bigger cyclone.

Select the correct answer using the code given below:

- (a) 1 only (b) 1 and 2 only
- (c) 2 only (d) 3 only
- 2. Recently seen in the news, 'Erra Matti Dibbalu' is related to which of the following?
 - (a) A protest to save Soil and bring back its fertility.
 - (b) Coastal Red Sand Dunes.
 - (c) Plant recently found in forest areas of Tamil Nadu and is rich in nutrients.
 - (d) An exotic species found in the Western Ghats of India.
- **3.** With reference to Black soil, consider the following statements:
 - 1. It covers most of the Deccan Plateau which only includes parts of Maharashtra, Madhya Pradesh, and Gujarat.
 - 2. It is generally clayey, deep and impermeable.
 - 3. It is rich in lime, iron, magnesia and phosphorus.

Which of the statements given above is/are correct?

- (a) 1 and 2 only (b) 2 only
- (c) 1 and 2 (d) 3 only
- **4.** With reference to Fog Formation, consider the following statements:
 - 1. The presence of moisture and a fall in the temperature are key factors for the formation of fog.
 - 2. Areas near water bodies, for instance, may see denser fog because of the lower humidity.
 - Which of the statements given above is/are correct?
 - (a) 1 only
 - (c) Both 1 and 2

- (b) 2 only
- (d) Neither 1 nor 2
- 5. Often heard in the news, the Caucasus range lies between:
 - (a) North Sea and Baltic Sea
- (b) Baltic Sea and Black Sea
- (c) Black Sea and Caspian Sea
- (d) Mediterranean Sea and Adriatic Sea
- **EXPLANATIONS**

1. (a)

Bomb Cyclone

- Formation:
 - Storms can form when a mass of low-pressure air meets a high-pressure mass. The air flows from high pressure to low, creating winds.

- What makes it a bomb cyclone? Or Bombogenesis.
 - What defines a bomb cyclone is how rapidly the pressure drops in the low-pressure mass by at least 24 millibars in 24 hours. Hence option 1 is correct.
 - This quickly increases the pressure difference, or gradient, between the two air masses, making the winds stronger.
 - This process of rapid intensification has a name: **bombogenesis**.
- Direction & continuation of the current cyclone:
 - As the winds blow, the rotation of the Earth creates a cyclonic effect.
 - The direction is counterclockwise in the Northern Hemisphere (when viewed from above).
 Hence option 2 is incorrect.
 - As the area where the two air masses meet **moves northward and eastward,** conditions for bombogenesis should continue moving as well.

2. (b)

Recently, Scientists urged the Andhra Pradesh government to **protect glacial-period coastal red sand dunes** of Visakhapatnam.

Option b is correct: The city of **Visakhapatnam** is blessed with a number of sites that have geological importance. One among them is the coastal red sand dunes, popularly known as **'Erra Matti Dibbalu'**.

- The site is located along the coast and is about 20 km north-east of Visakhapatnam city and about 4 km south-west of Bheemunipatnam.
- The Erra Matti Dibbalu are spread across an area of about 20 sq km and the entire area has been notified as a Geo Heritage Site.
- This site was declared as a geo-heritage site by the **Geological Survey of India (GSI)** in 2014 and the Andhra Pradesh government has listed it under the category of **'protected sites'** in 2016.

3. (b)

In News: Recently, the Food Agricultural Organisation (FAO) released the Global status of black soils Report on the occasion of World Soil Day.

Statement 1 is not correct: Black soil covers most of the Deccan Plateau which include parts of Maharashtra, Madhya Pradesh, Gujarat, Andhra Pradesh and some parts of Tamil Nadu. In the upper reaches of the Godavari and the Krishna, and the northwestern part of the Deccan Plateau, the black soil is very deep.

Statement 2 is correct: These soils are also known as the 'Regur Soil' or the 'Black Cotton Soil'.

- The black soils are generally clayey, deep and impermeable.
- They swell and become sticky when wet and shrink when dried. So, during the dry season, these soil develop wide cracks.

Statement 3 is not correct: Chemically, the black soils are rich in lime, iron, magnesia and alumina. They also contain potash. But they **lack in phosphorous**, nitrogen and organic matter. The colour of the soil ranges from deep black to grey.

4. (a)

Recently, **dense fog** has enveloped northwestern India, including Delhi, Punjab, Haryana, parts of Uttar Pradesh, and parts of Rajasthan.

Statement 1 is correct: Fog forms like clouds do — when water vapour condenses. The presence of moisture and a fall in the temperature are key factors for the formation of fog. With the land surface cooling down at night, the air close to the surface also cools down. Since cooler air cannot hold as much moisture as warm air, the water vapour in the air condenses to form fog.

Statement 2 is not correct: Fog begins to form in the early hours of the morning, when the temperature is at its lowest. Fog can have "high spatial variability", and its intensity can depend on factors like humidity, wind, and temperature. Areas near water bodies, for instance, may see denser fog because of the **higher** humidity.

5. (c)

Armenia and India celebrated **30 years of bilateral diplomatic relations** in the year 2022.

Option c is correct

- Caucasus is a Mountain range between Europe and Asia, between the **Black Sea and the Caspian Sea**.
- The range consists of two smaller ranges:
 - The Greater-Caucasus includes Elbrus, the highest mountain of Europe. This range is the dividing line between Russia and the countries of Georgia and Azerbaijan.
 - Lesser-Caucasus, which lies to the south. It extends from the south part of Georgia, through Armenia, to the southwestern section of Azerbaijan. This smaller range is adjacent to Turkey and Iran as well.



Image Courtesy: freeworldmaps

GOVERNMENT SCHEMES/ INITIATIVES

- **1.** Consider the following statements:
 - 1. The National Tobacco Control Programme (NTCP) was launched by the Ministry of Commerce & Industry.
 - 2. Tobacco products fall in the GST slab of 18% as it attracts a heavy cess.

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. With reference to the Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD) Project, consider the following statements:
 - 1. It was launched during the tenure of the 11th Five-Year Plan.
 - 2. Under the programme, the Union government has covered 100% of the costs for the development of pilgrimage sites.

Which of the statements given above is/are correct?

- (a) 1 only
- (c) Both 1 and 2

(b) 2 only

2 only

- (d) Neither 1 nor 2
- **3.** With reference to Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY), consider the following statements:
 - 1. Under the scheme, all National Food Security Act (NFSA) beneficiaries are entitled to 10 kgs of free food grain every month.
 - 2. No new ration card or registration is required to avail this scheme.

Which of the statements given above is/are correct?

- (a) 1 only (b)
- (c) Both 1 and 2 (d) Neither 1 nor 2
- 4. Consider the following statements regarding National Pension Scheme (NPS):
 - 1. It is a contributory pension scheme under which employees contribute 10 percent of their salary.
 - 2. The Government contributes 50 per cent towards the employees' NPS accounts.
 - 3. Under this, residents as well as non-resident Indians can invest.

Which of the statements given above is/are correct?

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

5. Which of the following facilities are planned under the Amrit Bharat Station Scheme?

- 1.Roof Plazas2.Free WiFi & 5G connectivity
- 3.High level platforms4.Free of cost station tickets

Select the correct answer using the code given below:

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

6.	Consider	the following statements:			
	 The National Mobile Monitoring Software (NMMS) App was launched by the Ministry of and Urban Affairs. 				
		he App permits to see the re	al time progres	s of Smart Cities Mission.	
		f the given above statements			
	(a) 1	only	(b)	2 only	
	(c) B	oth 1 and 2	(d)	Neither 1 nor 2	
7.	(a) A	f the following schemes will I yushman Bharat am Aadmi Bima Yojana	be launching a d (b) (d)	loorstep distribution drive 'Meri Policy Mere Hath'? Pradhan Mantri Fasal Bima Yojana Employees' State Insurance Scheme	
8.	With ref statemer		Learning Interr	nship Programme (TULIP)', Consider the following	
		: was launched by the Minist ducation.	ry of Housing &	Urban Affairs in collaboration with the Ministry of	
		Inder this, the graduates of b vith internships in Urban Loc		ens and citizens of the friendly nations are provided) and Smart Cities missions.	
	Which of	f the statements given above	e is/are correct?	,	
		only	(b)	2 only	
	(c) B	oth 1 and 2	(d)	Neither 1 nor 2	
9.		the following statements:			
		becember 25 is observed as ormer Prime Minister Atal Bi		nce day to commemorate the birth anniversary of	
		he Good Governance Index i		he NITI Avog.	
		f the statements given above			
	(a) 1	only	(b)	2 only	
	(c) B	oth 1 and 2	(d)	Neither 1 nor 2	
10.	Consider	the following statements:			
	1. T	he Nikshay Poshan Scheme	e was launcheo	in 2018 as part of the National TB Elimination	
	Programme (NTEP).				
		t is a central sector scheme u			
		f the statements given above only	(b)	2 only	
		oth 1 and 2	(d)	Neither 1 nor 2	
11.	()			, consider the following statements:	
11.				lopment and Entrepreneurship.	
			-	m of innovation and entrepreneurship across the	
		ountry mainly in university le	-		

	Which	n of the statements given above is/are co	orrect		
	(a)	1 only	(b)	2 only	
	(c)	Both 1 and 2	(d)	Neither 1 nor 2	
12.	With	reference to Members of Parliament I	ocal A	rea Development Scheme (MPLADS), Consider the	
		ving statements:			
	1.	•	eased	in the form of grants-in-aid directly to the district	
		authorities.		,	
	2.	The funds released under the scheme	are lap	osable if not spent in a particular year.	
	Which	n of the statements given above is/are co	orrect		
	(a)	1 only	(b)	2 only	
	(c)	Both 1 and 2	(d)	Neither 1 nor 2	
13.	Consid	der the following Statements:			
	1. The World Economic Forum (WEF) declared 2023 as the International Year of Millets.				
	2.	-	es and	are the traditional food for around 60 crore people	
		in Asia & Africa.			
		of the statements given above is /are c			
	(a)	1 Only	(b)	2 Only	
	(c)	Both 1 and 2	(d)	Neither 1 nor 2	
14.	Which	n of the following areas are covered und	er the	Nai Roshni scheme?	
	1.	Legal rights of women	2.	Financial Literacy	
	3.	Digital Literacy	4.	Swachch Bharat	
		the correct answer using the code give			
	(a)	1 and 2 only	(b)	2 and 3 only	
	(c)	1, 3 and 4 only	(d)	1, 2, 3 and 4	
15.	With ı	reference to PM SVANidhi Scheme, cons	ider th	ne following statements:	
	1.			et vendors to access affordable working capital loan	
	2.		to 1 La	akh in addition to 1st & 2nd loans of ₹10,000 and	
		₹20,000 has been introduced.			
		n of the statements given above is/are co			
	(a)	1 only	(b)	2 only	
	(c)	Both 1 and 2	(d)	Neither 1 nor 2	

EXPLANATIONS

1. (d)

Recently, the **Parliamentary Standing Committee on Health and Family Welfare** has recommended a ban on the sale of single sticks of cigarettes.

Statement 1 is not correct: National Tobacco Control Programme (NTCP) was launched by the **Ministry of Health and Family Welfare**. Currently, the Programme is being implemented in all States/Union Territories covering over 600 districts across the country. The objectives are:

- To bring about greater awareness about the harmful effects of tobacco use and Tobacco Control Laws.
- To facilitate effective implementation of the Tobacco Control Laws.

Statement 2 is not correct: Tobacco products fall in the **highest GST slab of 28%** as it attracts a heavy cess. The total tax burden as a percentage of the final tax-inclusive retail price is about 52.7% for cigarettes, 22% for bidis and 63.8% for smokeless tobacco. Recently, the government set up a panel to prepare a comprehensive tax policy proposal covering all tobacco products from a public health perspective.

2. (b)

About PRASAD scheme

- The full form of the PRASAD scheme is 'Pilgrimage Rejuvenation And Spiritual Augmentation Drive'.
- The scheme was launched in the year 2014-2015 (12th Five-Year Plan (2012-2017)).
- It comes under the Ministry of Tourism.

• Aim:

- This scheme focuses on **developing and identifying pilgrimage sites** across India for enriching the religious tourism experience.
- It aims to integrate pilgrimage destinations in a prioritised, planned and sustainable manner to provide a complete religious tourism experience.
- Funding:
 - The Ministry of Tourism provides Central Financial Assistance (CFA) to state governments under the Prasad scheme to promote tourism at pilgrim sites.
 - The Central Government will cover 100% of the costs under this program.
 - For improved sustainability, it also includes a **Public-Private Partnership (PPP) and Corporate Social Responsibility (CSR)**.

3. (b)

- Statement 1 is not correct: Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) is a pro-poor scheme intended to reduce the challenges encountered by the poor as a result of disruptions due to the COVID-19 pandemic. The immediate goal was to ensure that no poor or vulnerable person or household went hungry. Under the scheme, all National Food Security Act (NFSA) beneficiaries are entitled to 5 kgs of free food grain every month. This is over and above the highly subsidised food grains available to NFSA beneficiaries. The estimated financial outlay is about Rs. 3.4 Lakh Crore.
- Statement 2 is correct: All NFSA beneficiaries (Antyodaya Anna Yojana (AAY) and Priority Householders (PHH) identified by State/UT governments i.e. around 80 Crore beneficiaries are covered under PM-GKAY. They are automatically covered and can avail the free food grains from Fair Price Shops using their existing NFSA ration cards. No new ration card or registration is required. A toll-free helpline number '1967' has been set up to redress beneficiaries' complaints and grievances related to the Public Distribution System.

4. (c)

The National Pension Scheme (NPS):

- About:
 - NPS is an easily accessible, low-cost, tax-efficient, flexible and portable retirement savings account.
 - Contributions:
 - Under the NPS, the individual contributes to his retirement account and his employer can also co-contribute to the social security/welfare of the individual.
- Defined contribution basis:
 - NPS is designed on a Defined contribution basis wherein the subscriber contributes to his account, there is no defined benefit that would be available at the time of exit from the system.
 - The accumulated wealth depends on the contributions made and the income generated from investment of such wealth.

• Beneficiaries:

- Residents, as well as non-resident Indians in the age group of 18-60 years (as on the date of submission of NPS application), can invest. **Hence statement 3 is correct.**
- Old Pension Scheme (OPS) Vs National Pension Scheme (NPS) : Basic Difference:
 - **Under the OPS**, retired employees received 50 per cent of their last drawn salary as monthly pensions.
 - NPS is a contributory pension scheme under which employees contribute 10 percent of their salary (Basic + Dearness Allowance).
 - The Government contributes 14 per cent towards the employees' NPS accounts. Hence statement 1 is correct but 2 is incorrect.

5. (b)

Amrit Bharat Station scheme

- The Amrit Bharat Station scheme envisages development of stations on a continuous basis with a long term vision.
- Facilities Planned under Amrit Bharat Station Scheme:
 - Provision for Roof Plaza to be created in future.
 - Free Wi-Fi, space for 5G mobile towers.
 - Smooth access by widening of roads, removal of unwanted structures, properly designed signages, dedicated pedestrian pathways, well planned parking areas, improved lighting etc.
 - High level platforms (760-840 mm) at all stations with a length of 600 metres.
 - Special amenities for the disabled.

6. (d)

National Mobile Monitoring System (NMMS)

- About:
 - The National Mobile Monitoring Software (NMMS) App was launched by the Ministry of Rural Development in 2021.
 - It aimed at bringing more transparency and ensuring proper monitoring of the schemes.
- Significance:
 - The NMMS App permits **taking real time attendance of workers** at Mahatma Gandhi NREGA worksites along with **geo-tagged photographs**.
 - The app helps in **increasing citizen oversight** of the programme.
- 7. (b)

'Meri Policy Mere Hath'

- Pradhan Mantri Fasal Bima Yojana scheme will be launching a doorstep distribution drive to deliver crop insurance policies to the farmers 'Meri Policy Mere Hath in all implementing States.
- It is aimed at motivating all farmers in the country to insure their crops.
 - Under this program, every farmer who has taken insurance under the Pradhan Mantri Fasal Bima Yojana (PMFBY) will get the policy documents at their doorstep.

8. (a)

The Ministry of Housing & Urban Affairs (MoHUA) in collaboration with the Ministry of Education (MoE) and All India Council of Technical Education (AICTE) has developed TULIP.

- Aim:
 - It is a platform to provide internships to students and graduates in ULBs, Smart Cities, and Parastatals of States/UTs.
- Eligibility:
 - The internships under TULIP are open to **Indian Citizens** who graduate from an undergraduate program and can apply within 18 months from graduating.
 - It is **open to courses and streams** as prescribed by ULBs/smart cities in their requirements and both AICTE-affiliated and non-AICTE college graduates can apply.
- Goals of TULIP:
 - To provide a platform to connect fresh graduates with urban governments.
 - To provide the government and industry with a pool of well-trained professionals.
 - To make fresh graduates more market ready.
 - To expose young graduates to real-life learning in urban environments.
- Duration of program:
 - The duration of the internship will be a **minimum of 8 weeks up to 1 year.**

9. (a)

Statement 1 is correct: Every year **December 25** is celebrated as Good Governance Day as it marks the **birth anniversary** of former Prime Minister **Atal Bihari Vajpayee**.

Good Governance Day

- In 2014, the government announced that December 25 would be celebrated as Good Governance Day.
- Purpose:
 - To increase public access to various government programmes and services via good governance.
 - The day is celebrated to make sure that the country's residents are treated fairly by the government, and they receive the advantages of various government services.

Statement 2 is not correct: In 2019, the government launched the **Good Governance Index** on this occasion. The GGI is a scientifically prepared tool based on various parameters of good governance which assess the level of any state at a given point of time and help in shaping future development. The Department of Administration Reforms and Public Grievances (DARPG) launched the Good Governance Index (GGI).

10. (a)

Statement 1 is correct: The Nikshay Poshan Yojana is a government scheme that was announced in April 2018 with the aim of helping tuberculosis patients. The scheme is working towards the betterment of patients with tuberculosis (TB) by providing them with 500 rupees per month for them to buy food.

Statement 2 is not correct: The scheme is a centrally sponsored scheme under National Health Mission (NHM). Centrally Sponsored Schemes (CSS) are those schemes which are implemented by the state government but sponsored by the central government with a defined shareholding. All notified TB patients are beneficiaries of the scheme.

Note: Central sector schemes are implemented by the central government and the budget or financing needed for the scheme is entirely sourced by the central government.

11. (d)

About Atal Innovation Mission (AIM)

- Agency
 - It was launched by NITI aayog.
- Aim
 - To create and promote an **ecosystem of innovation and entrepreneurship** across the country via interventions at school, university, research institutions, MSME and industry levels.
 - To provide platform and collaboration opportunities for different stakeholders.
- Initiatives:
 - Atal Tinkering Labs: Creating a problem-solving mindset across schools in India.
 - Atal Incubation Centres: Fostering world-class startups and adding a new dimension to the incubator model.
 - Atal New India Challenges: Fostering product innovations and aligning them to the needs of various sectors/ministries.
 - **Mentor India Campaign**: A national mentor network in collaboration with the public sector, corporates and institutions.

- Atal Community Innovation Centre: To stimulate community-centric innovation and ideas in the unserved /underserved regions including Tier 2 and Tier 3 cities.
- Atal Research and Innovation for Small Enterprises (ARISE): To stimulate innovation and research in the MSME industry.
- It has also launched **AIM Prime, AIM iCREST** to boost industrial exposure of students and innovators.

12. (a)

Statement 1 is correct: MPLADS is a central-sector scheme fully funded by the government of India. Under this scheme, the funds are released in the form of grants in aid directly to the district authorities. Under the scheme, each MP has the choice to suggest to the District Collector for works to the tune of Rs.5 Crores per annum to be taken up in his/her constituency.

Statement 2 is not correct: The funds released under the scheme are non-lapsable. This means that if the funds for a particular are not spent in that year, it will be carried forward.

13. (b)

In News: The Prime Minister, Shri Narendra Modi conveyed his message at the opening ceremony of the International Year of Millets at the headquarters of the Food and Agricultural Organization in Rome, Italy.

Statement 1 is not correct: The **United Nations General Assembly** has declared the year 2023 as the 'International Year of Millets'.

• It is the Prime Minister's vision and initiative that led to this United Nations Resolution being adopted with support from more than 70 nations across the globe.

Statement 2 is correct: India is poised to become the global hub for millets with a production of more than 170 lakh tonnes which makes for more than 80 % of the millets produced in Asia.

- The earliest evidence for these grains has been found in the Indus civilization and was one of the first plants to be domesticated for food.
 - It is grown in about 131 countries and is the traditional food for around 60 crore people in Asia & Africa.

14. (d)

In News: Since inception, about 4.35 lakh beneficiaries have been trained under the 'Nai Roshni' scheme. Nai Roshni scheme aims to empower and enhance confidence in Minority women by providing knowledge, tool and techniques for the Leadership Development of Women.

- It is a six-days non-residential/five-days residential training programme conducted for women belonging to a minority community between the age group of 18 years to 65 years.
- The training modules cover areas related to Programmes for women, Health and Hygiene, Legal rights of women, Financial Literacy, Digital Literacy, Swachch Bharat, Life Skills, and Advocacy for Social and Behavioural changes.

15. (a)

In News: The Government of India has extended the PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) Scheme beyond March 2022.

Statement 1 is correct: PM SVANidhi is a Central Sector Scheme to facilitate street vendors to access affordable working capital loans for resuming their livelihood activities, after the easing of the lockdown.

Statement 2 is not correct: PM SVANidhi has been extended with the following provisions:

- Extension of lending period till December 2024;
- Introduction of 3rd loan of up to ₹50,000 in addition to 1st & 2nd loans of ₹10,000 and ₹20,000 respectively.
- To extend the 'SVANidhi Se Samriddhi' component for all beneficiaries of PM SVANidhi scheme across the country.

INTERNATIONAL RELATIONS/ FOREIGN AFFAIRS

1.	stater 1. 2.	nents: It was established in 1967 through ⁻	the Bangk e the Free	Trade Agreement Partners of ASEAN.
2.	1. 2.		with Kolka ngthai in N	
3. 4.	Consid 1. 2. Which (a) (c)	der the following statements: There is no single United Nations en UN-Water's role is to ensure that N related challenges. In of the statements given above is/ar 1 only Both 1 and 2 der the following statements regarding bal: Both governments should inform e	ntity dedic Members e correct? (b) (d) ng the tre ach other	cated exclusively to water issues. and Partners 'deliver as one' in response to water-
5.	(a) (c) Consid 1. 2.	India and Nepal should give the sa each other's nationals in their territ of the statements given above is/ar 1 only Both 1 and 2 der the following statements:	me privile tory. e correct? (b) (d) backdrop	eges of employment and ownership of property to 2 only Neither 1 nor 2 of the economic crisis of India in 1991. global GDP.

6.	Recently, India and which other nation has started its maiden bilateral naval exercise "Al-Mohe Hind"?					
	(a)	Qatar	(b)	UAE		
	(c)	Egypt	(d)	Saudi Arabia		
7.	With	reference to the Wassenaar Arra	ngement, con	sider the following statements:		
	1.	It is an elite club of countries tl	hat subscribe t	o arms export controls.		
	2.	India is not yet a member of W	assenaar Arra	ngement.		
	Whick	n of the statements given above	is/are correct?	,		
	(a)	1 only	(b)	2 only		
	(c)	Both 1 and 2	(d)	Neither 1 nor 2		
8.		Vith reference to United Nations Convention for the Law of the Sea (UNCLOS), consider the following tatements:				
	1.	The International Seabed Auth	ority (ISA) is a	n intergovernmental body under the UNCLOS.		
	2.	Under the UNCLOS, all states h	ave a right to	exploit the resources of the sea and seabed.		
	Which	n of the statements given above	is/are correct?			
	(a)	1 only	(b)	2 only		
	(c)	Both 1 and 2	(d)	Neither 1 nor 2		
9.	Whick	n of the following countries are n	nembers of OF	PEC+?		
	1.	Russia	2.	Azerbaijan		
	3.	Bahrain	4.	Kazakhstan		
	5.	Malaysia				
	Select	t the correct answer using the co	de given belov	N:		
	(a)	1, 2, and 3 only	(b)	2, 3, and 4 only		
	(c)	1,3,4 and 5 only	(d)	1, 2,3,4 and 5		
10.	With	reference to the Community of	F Portuguese I	anguage Countries (CPLP), consider the following		
		ments:				
	1.					
	2.	2. Its founding members were Brazil and Japan.				
	July 2021.					
	Which	n of the statements given above	are correct?			
	(a)	1 and 2 Only	(b)	1 and 3 Only		
	(c)	2 and 3 Only	(d)	1, 2 and 3		
11.	11. Which of the following countries are part of the Central Asia region (CA)?					
	1.	Kazakhstan	2.	Iran		
	3.	Saudi Arabia	4.	Turkmenistan		
	5.	Afghanistan				
	Select the correct answer using the code given below:					
	(a)	1, 2, and 5 only	(b)	2 and 3 only		
	(c)	1 and 4 only	(d)	1, 2, 3, 4 and 5		
				44 P a g e		

12. Regarding "Singapore Declaration" recently seen in the news, consider the following statements:

1. It was adopted during the 17th Asia and the Pacific Regional Meeting of the International Labour Organisation (APRM of ILO).

2. According to it, social dialogue is key to building trust, and resilient labour market 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

13. Which of the following countries shares land borders with Syria?

- 1. Israel 2. Iraq
- 3.Lebanon4.Suadi Arabia

Select the correct answer using the code given below.

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

EXPLANATIONS

1. (c)

Statement 1 is correct: It is a political and economic organization. It was established in August 1967 in Bangkok, Thailand with the signing of the ASEAN Declaration (Bangkok Declaration) by the founding fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand.

Statement 2 is correct: ASEAN's free trade agreement (FTA) partners are Australia, China, India, Japan, Korea and New Zealand. India has signed 13 free trade agreements (FTAs), key among them being Japan, South Korea and the ASEAN (Association of Southeast Asian Nations) grouping.

2. (c)

Kaladan Multi-Modal Transit Project: It is a massive connectivity project to connect the Haldia port to Mizoram through Myanmar. The route envisages a marine journey from Haldia to Sittwe port in Myanmar. Sittwe would be connected to Lawngtlai in Mizoram, through a combination of inland water transport and highway.

3. (c)

Recently, the Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) report was released by the **World Health Organization (WHO) and UN-Water**.

Statement 1 is correct: UN-Water coordinates the United Nations' work on water and sanitation. There is no single United Nations entity dedicated exclusively to water issues. In fact, over 30 United Nations organisations carry out water and sanitation programmes because these issues run through all of the United Nations' main focus areas.

Statement 2 is correct: UN-Water is a 'coordination mechanism'. It is composed of United Nations entities (Members) and international organisations (Partners) working on water and sanitation issues. UN-Water's role is to ensure that Members and Partners 'deliver as one' in response to water-related challenges.

4. (c)

The treaty of Peace and Friendship of 1950

- About:
 - On 31 July 1950, India and Nepal signed a treaty of peace and friendship in an effort to "strengthen and develop these ties and to perpetuate peace between the two countries".

• Contentious articles of the treaty:

- Nepal has always had reservations with Articles 2, 6 and 7 of the treaty.
 - Article 2 states that both governments should "inform each other of any serious friction or misunderstanding with any neighbouring State likely to cause any breach in the friendly relations subsisting between the two Governments". Hence statement 1 is correct.
 - Articles 6 and 7 stipulate India and Nepal will give the same privileges of economic activity, employment, resident and ownership of the property to each other's nationals in their territory. Hence statement 2 is correct.

• Issues & concerns:

- Nepal's internal matters:
 - As time passed, Nepal believed the treaty was "incompatible with national self-respect".
 - India was seen interfering in the internal political matters of Nepal by brokering its first steps towards achieving democracy.
- Nepal-China ties:
 - Nepal was also questioned, albeit not publicly, for establishing defence ties with its northern neighbour China.
- Madhesi agitation:
 - Matters only got worse during a stiff economic blockade between India and Nepal due to the agitation by the Madhesi population there over Nepal's Constitution promulgated in 2015.

5.

About G20

(b)

Origin:

- The G20 was **formed in 1999** in the backdrop of the financial crisis of the late 1990s that hit East Asia and Southeast Asia in particular.
- Its aim was to secure global financial stability by involving middle-income countries.
- $\circ~$ As stated by the official G20 Website:
 - "On the advice of the G7 Finance Ministers, the G20 Finance Ministers and Central Bank Governors began holding meetings to discuss the response to the global financial crisis that occurred,"

• Objectives:

- Policy coordination between its members in order to achieve global economic stability, sustainable growth;
- o To promote financial regulations that reduce risks and prevent future financial crises; and
- To create a new international financial architecture.

• Members & guests:

- Members:
 - Argentina, Australia, Brazil, Canada, China, France, Germany, Japan, India, Indonesia, Italy, Mexico, Russia, South Africa, Saudi Arabia, South Korea, Turkey, the United Kingdom, the United States, and the European Union.
 - Spain is also invited as a permanent guest.
- Others:
 - Each year, the Presidency invites guest countries, which take full part in the G20 exercise. Several international and regional organizations also participate, granting the forum an even broader representation.



- Together, the G20 countries include:
 - o 60 percent of the world's population,
 - o 80 percent of global GDP, and
 - 75 percent of global trade.

6. (d)

Option d is correct: "Al-Mohed Al-Hind" is the first-ever joint naval exercise that was held between India & Saudi Arabia in the by year 2021. The decision on this Bilateral exercise was taken in the Riyadh Summit

held in 2019. The exercise demonstrated tactical maneuvers, over-the-horizon targeting, and electronic warfare operations.

7. (a)

Wassenaar Arrangement

- The **Wassenaar Arrangement** is an elite club of countries that subscribe to arms export controls, similar to the Nuclear Suppliers Group and the Missile Technology Control Regime.
- The body came into being in **1996 to succeed the Cold War-era Coordinating** Committee for Multilateral Export Controls.
 - The name comes from Wassenaar, a suburb of The Hague, where the agreement to start such a multi-lateral cooperation was reached in 1995.
- **Objectives:** The goal of the Arrangement is to "promote transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies".
 - Participants are required to "ensure that transfers of these items do not contribute to the development or enhancement of military capabilities which undermine the goal". The aim is also to prevent the acquisition of these items by terrorists.
- India joined the Wassenaar Arrangement, a multilateral export control regime, in 2017 and became its 42nd member.

8. (c)

Recently, China's top development aid agency convened the **first "China-Indian Ocean Region Forum"** in the southwestern Chinese city of Kunming.

Statement 1 is correct: United Nations Convention for the Law of the Sea (UNCLOS) is an international treaty which was adopted and signed in 1982. It replaced the four Geneva Conventions of April, 1958, which respectively concerned the territorial sea and the contiguous zone, the continental shelf, the high seas, fishing and conservation of living resources on the high seas. The Convention has created three new institutions on the international scene:

- the International Tribunal for Laws of the Sea
- the International Seabed Authority
- the Commission on the Limits of Continental Shelf

Statement 2 is correct: Under the Law of the Sea Convention, all states have a right to 200 nautical mile **Exclusive Economic Zone (EEZ)** to exploit the resources of the sea and seabed, as measured from their land territories. Where these zones overlap, countries are obliged to negotiate with other claimants.

9. (d)

In News: OPEC+ agreed to stick to its oil output targets at a meeting.

- In 2016, OPEC+ was created with the OPEC member nations allying with ten other oil-producing countries Russia, Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, South Sudan and Sudan inflating the group's strength to twenty-three.
 - While the OPEC Statute states that 'any country with a substantial net export of crude petroleum, which has fundamentally similar interests to those of Member Countries may be admitted under

special conditions, the formation of the OPEC+ group was seen as a response to protect their interests amid the rise of the U.S. shale industry.

10. (b)

In News: The Ministry of External Affairs (MEA) in partnership with the Indian Council of Cultural Relations (ICCR) and the Government of Goa is organizing the International Lusophone Festival in Goa from 3-6 December 2022.

Statements 1 and 3 are correct: The Community of Portuguese Language Countries (CPLP) is also known as the Lusophone Commonwealth (Comunidade Lusofona).

- It is a multilateral forum, founded on 17 July 1996 at the 1st CPLP Heads of State & Government Summit in Lisbon.
- India joined CPLP as an associate observer in July 2021.
 - As part of India's engagement with CPLP, the Ministry of External Affairs celebrated the World Portuguese Language Day in Delhi on 5 May 2022, soon after joining CPLP.

Statement 2 is not correct: The founding members were Angola, Brazil, Cabo Verde, Guinea Bissau, Mozambique, Portugal and Sao Tome and Principe; while Timor Leste and Equatorial Guinea joined later.

• These 9 Lusophone countries comprise approximately 300 million people in 4 different continents (Africa, Latin America, Asia and Europe).

11. (c)

In News: India's National Security Advisor recently chaired the first India-Central Asia meeting of NSAs and Secretaries of Security Councils in Delhi.

- The Central Asia region (CA) comprises the countries of Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
- It is a diverse region with a mix of upper-middle and low-income countries with major strategic importance due to their geographic location and natural resource endowments.

12. (c)

Statements 1 and 2 are correct: The "Singapore Declaration", was recently adopted during the 17th Asia and the Pacific Regional Meeting of the International Labour Organisation (APRM of ILO). The declaration said **social dialogue is key** to building trust, and resilient labour market institutions. It is essential to sustained recovery and inclusive and sustainable growth, and needs to be strengthened in the regions.

- It called for **closing gender gaps** in the world of work through measures that increase women's labour force participation, promote equal pay for work of equal value, balance work, and responsibilities, and promote women's leadership.
- It suggested that governments must develop and implement **inclusive labour market programs and policies** that support life transitions and demographic shifts.

13. (a)

In News: After weeks of deadly Turkish airstrikes in northern Syria, Kurdish forces and international players are trying to gauge whether Ankara's threats of a ground invasion are serious.

- Syria, country located on the east coast of the Mediterranean Sea in southwestern Asia.
- Syria is bounded by **Turkey** to the north, by **Iraq** to the east and southeast, by Jordan to the south, and by **Lebanon** and **Israel** to the southwest.



	ECOLOGY & ENVIRONMENT
1.	 Consider the following statements: 1. The Nilgiri Tahr was mentioned in Tamil Sangam literature dating back to 2,000 years. 2. It is categorised as Critically Endangered under the IUCN Red List. 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.	 With reference to the Arecanut/Areca palm, which of the following statements is/are correct? 1. It originated in India and is widely grown outdoors in the tropics later on. 2. India is the largest producer of Areca Palm, Karnataka being the highest cultivating state. 3. Brackish and calcareous soils are mostly suitable for arecanut cultivation. Select the correct answer using the codes given below (a) 1 and 2 only (b) 1 and 3 only (c) 2 only (d) 1, 2 and 3
3.	 Which of the following conventions/protocols originated from Rio Earth Summit 1992? 1. The United Nations Framework Convention on Climate Change (UNFCCC) 2. The Convention on Biological Diversity 3. The Declaration on the Principles of Forest Management 4. Aichi Targets 5. Kyoto Protocol Select the correct answer using the codes given below. (a) 1, 4 and 5 only (b) 1, 2 and 4 only (c) 1, 2 and 3 only (d) All of the above
4.	 With reference to India's updated NDC, consider the following statements: 1. It aims to reduce the emissions intensity of the GDP by 40% by 2030, compared to the 2005 level. 2. By 2030, India also plans to achieve about 50% of cumulative electric power installed capacity from non-fossil fuel-based energy resources. 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
5.	 With reference to the Kunming-Montreal Global Biodiversity Framework (GBF), consider the following statements: 1. The GBF aims to protect at least 30% of the planet by 2030. 2. The GBF replaces the UN Strategic Plan for Biodiversity 2011-2020, which included the Aichi Targets. 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.	Consi	ider the following statements:				
0.	1. Vembanad is the longest lake in India, and the largest lake in the state of Tamil Naidu.					
	 It is the second-largest Ramsar site in India only after the Sunderbans in West Bengal. 					
		h of the statements given above is/a				
	(a)	1 only	(b)	2 only		
	(c)	Both 1 and 2	(d)	Neither 1 nor 2		
7.	Which	h of the following cities is most and	least pollut	ed according to the 2021 Air Quality Index 2021 in		
	India	?				
	(a)	Bhiwadi, Ariyalur	(b)	Naugachia, Bhopal		
	(c)	Merta, Ooty	(d)	Salem, Indore		
8.	With	reference to the Programmes in Rei	newable En	ergy Sector, consider the following statements:		
	1.	Pradhan Mantri Kisan Urja Suraks	sha evam U	tthaan Mahabhiyan (PM-KUSUM) was launched in		
		2015 with the aim to help farmers	s access reli	able daytime solar power for irrigation.		
	2.	The Ministry of New and Renew	able Energy	(MNRE) launched the Atal Jyoti Yojana (AJAY) to		
		illuminate dark regions through th	ne establish	ment of solar street lights.		
	Which	h of the statements given above is/a	are correct?			
	(a)	1 only	(b)	2 only		
	(c)	Both 1 and 2	(d)	Neither 1 nor 2		
9.	The te	erm "sixth mass extinction/sixth ext	tinction" is	often mentioned in the news in the context of the		
	discus	ssion of				
	(a)	Widespread monoculture praction	ces in agrie	culture and large-scale commercial farming with		
	indiscriminate use of chemicals in many parts of the world that may result in the loss of good					
		native ecosystems.				
	(b)			with the Earth in the near future in the manner it		
	happened 65 million years ago that caused the mass extinction of many species including tho of dinosaurs.					
	(c) Mankind's over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats,					
	 destruction of ecosystems, pollution and global climate change. (d) Large scale cultivation of genetically modified crops in many parts of the world and promoting 					
	(d) Large scale cultivation of genetically modified crops in many parts of the world and promoting their cultivation in other parts of the world may cause the disappearance of good native crop					
		plants and the loss of food biodive				
10.	Consi		-	ergy Conservation (Amendment) Bill, 2022:		
10.	1.		-	fold of the Energy Conservation regime.		
	2.					
	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.	lt is c	considered India's most critically en	dangered h	ird species. It is especially found in Rajasthan and		
			-	to the Indian subcontinent. Which of the following		
	-	es is it?	as chachine			
				52 P a g e		

	(a)	Indian Vulture	(b)	Great Indian Bustard		
	(c)	Forest Owlet	(d)	Himalayan Quail		
12.	of the (a) (b) (c)	following? NITI Aayog Green Climate Fund United Nations Framework Convention		dia's Cooling Sector" was recently released by which imate Change		
13.	(d)	World Bank	idor +	ha fallowing statements		
13.	1. 2.					
	(a)	1 only	(b)	2 only		
	(c)	, Both 1 and 2	(d)	Neither 1 nor 2		
14.	With	reference to Koundinya wildlife sanctuar	y, con	sider the following statements:		
	1.	It is located in the forest ranges of the	Cutta	ck District of Odisha.		
	2. It comes under Project elephant.					
		3. Southern tropical dry deciduous forest is found here.				
	(a)	of the statements given above is/are co 1 only	(b)	2 and 3 only		
	(c)	3 only	(d)	1, 2 and 3		
15.		der the following statements:	. ,			
	1. Kaziranga National Park is the largest undivided representative area of Brahmaputra valley					
		floodplain grassland.				
	2.	Kaziranga National Park was declared a		_		
		of the statements given above is/are co				
	(a)	1 only	(b)	2 only		
	(c)	Both 1 and 2	(d)	Neither 1 nor 2		
16.	Consi	der the following pairs:				
		Species		N Red List of Threatened Species		
	1. 2.	Meizotropis pellita Fritilloria cirrhosa		tically Endangered' Inerable		
	2. 3.	Dactylorhiza		dangered		
		of the pairs given above are correctly m		<u> </u>		
	(a)	1 and 2 only	(b)	3 only		
	(c)	1 and 3 only	(d)	1, 2 and 3		
17.	With	reference to Okavango Delta, consider th	e foll	owing statements:		
	1.	-				
	2.	It is a UNESCO World Heritage Site and	is hor	me to Africa's Big Five wildlife 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 18. Wren Babbler recently seen in the news, it is a (a) Bird (b) Cyclone (c) Animal Volcano (d) 19. Which of the following are the Main pillars of the Namami Gange Programme? 1. Sewerage Treatment Infrastructure 2. **River-Front Development** 3. Afforestation 4. Industrial Effluent Monitoring Select the correct answer using the code given below: (a) 1, 2, and 3 only (b) 1, 2, and 4 only

(c) 1, 3, and 4 only (d) 1, 2, 3 and 4

EXPLANATIONS

1. (a)

The Tamil Nadu government recently launched an initiative for the conservation of the Nilgiri Tahr.

Background

- There are multiple references to the Nilgiri Tahr in Tamil Sangam literature dating back to 2,000 years.
- The late Mesolithic (10,000-4,000 BC) paintings highlight the significance of the Tahr in folklore, culture and life.
- It was designated as the State animal of Tamil Nadu in recognition of its ecological and cultural significance.

Nilgiri Tahr

- Local Name:
 - The species is locally known as Varaiaadu.
- IUCN Status:
 - It has been listed as an endangered species and is protected under Schedule-I of the Wildlife (Protection) Act of India, 1972.
- Habitat and Distribution:
 - The animal inhabits meadows with steep cliffs at elevations between 300 metres and 2,600 metres above sea level.
 - Historically, the Nilgiri Tahr was known to inhabit a large portion of the Western Ghats.
 - But today it remains restricted to a few scattered patches in Tamil Nadu and Kerala.
 - It has become locally extinct in around 14% of its traditional shola forest-grassland habitat.
- Estimates:
 - It is estimated that there are 3,122 Nilgiri Tahrs in the wild.

2. (c)

Areca Nut/Areca Palm

- About:
 - Usually referred to as Areca palm, but has also been called yellow palm, butterfly palm, yellow butterfly palm, cane palm and golden feather palm.
 - The arecanut palm is the source of a common chewing nut, popularly known as betel nut or Supari.
 - India is the largest producer of arecanut and at the same time largest consumer also.
 - Major states cultivating this crop are Karnataka (40%), Kerala (25%), Assam (20%), Tamil Nadu, Meghalaya and West Bengal.
 - Originated in Madagascar and is widely grown outdoors in the tropics.

• Growing Condition:

- The cultivation of arecanut is mostly confined to 28° north and south of the equator.
- It grows well within the temperature range of 14°C and 36°C and is adversely affected by temperatures below 10°C and above 40°C.
- Ideal rainfall 750 mm to 4500 mm/ Irrigation
- The largest area under the crop is found in **gravelly laterite soils of red clay type.** It can also be grown on **fertile clay loam soils**. Sticky clay, sandy, alluvial, brackish and calcareous soils are not suitable for arecanut cultivation.

3. (c)

Recently, India pushed for a **new fund to reverse biodiversity loss** at the U.N. biodiversity conference (COP-15) in Canada's Montreal.

Rio Earth Summit

- The 'Earth Summit' had many great achievements:
 - The Rio Declaration and its 27 universal principles,
 - The United Nations Framework Convention on Climate Change (UNFCCC),
 - The Convention on Biological Diversity;
 - The Declaration on the Principles of Forest Management .
 - Led to the creation of the Commission on Sustainable Development,
 - The holding of the first world conference on the sustainable development of small island developing States in 1994.

4. (b)

Statement 1 is not correct: In August 2022, India formally updated its nationally determined contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) which was made on October 2, 2015. The updated contributions include reducing the emissions intensity of the GDP by **45% by 2030**, compared to the 2005 level.

Statement 2 is correct: By 2030, India also plans to achieve about 50% of cumulative electric power installed capacity from non-fossil fuel-based energy resources. To accomplish this, India will use low-cost international finance, including the Green Climate Fund (GCF). The updated NDC is a step towards India's goal to reach net-zero emissions by 2070.

5. (c)

Statement 1 is correct: The Kunming-Montreal Global Biodiversity Framework (GBF), with four goals and 23 action-oriented targets, comes after two weeks of intense negotiations at COP15, in Montreal, Canada. The agreement preserves the headline goal to "ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed," while recognizing "indigenous and traditional territories, where applicable."

Statement 2 is correct: The GBF replaces the UN Strategic Plan for Biodiversity 2011-2020, which included the Aichi Targets, which was adopted in Nagoya, Japan in 2010 — none of which, according to a 2020 CBD report were fully met, largely due to failure to monitor and report the implementation of goals.

6. (b)

Statement 1 is not correct: Vembanad is the longest lake in India, and the largest lake in the state of Kerala.

Statement 2 is correct: With an area of 2033 square kilometres, it is the second-largest Ramsar site in India only after the Sunderbans in West Bengal. It receives water from rivers like the Pamba and Periyar. The lake is a major source of fresh water for the state but also has brackish water areas. Also known as Vembanad Kayal, Vembanad Kol, Punnamada Lake (in Kuttanad) and Kochi Lake (in Kochi). The lake witnessed the Snake boat race known as Nehru Trophy Boat Race (locally known as Vallam Kali) in August. The Kumarakom Bird Sanctuary is located on the east coast of the lake.

7. (a)

Recently, the World bank (WB) released a report titled "Striving for Clean Air: Air Pollution and Public Health in South Asia".

2021 India cleanest city: Ariyalur , Tamil Nadu

2021 India most polluted city: Bhiwadi , Rajasthan

8. (b)

- Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)
 - It was launched in 2019 and it aims to help farmers access reliable day-time solar power for irrigation, reduce power subsidies, and decarbonise agriculture.
 - PM-KUSUM provides farmers with incentives to install solar power pumps and plants in their fields.

Atal Jyoti Yojana (AJAY) Phase-II

- The Ministry of New and Renewable Energy (MNRE) launched the Atal Jyoti Yojana (AJAY) to illuminate dark regions through the establishment of solar streetlights. The installation of solar street lights with a 25% fund contribution from MPLAD Funds.
- It is a sub-scheme under off –the grid and decentralized solar application scheme of the Ministry of New and Renewable Energy (MNRE), Govt. of India.
- Phase I was implemented from September 2016- March 2018. Phase II is being implemented during 2018-19 and 2019-20.
- A Scheme for the installation of solar street lights with a 25% fund contribution from MPLAD Funds.

9. (c)

Option c is correct: A mass extinction is a short period of geological time in which a high percentage of biodiversity, or distinct species—bacteria, fungi, plants, mammals, birds, reptiles, amphibians, fish, invertebrates—dies out. The planet has experienced five previous mass extinction events, the last one occurring 65 million years ago which wiped out the dinosaurs from existence. Studies show that loss of species is taking place across all ecosystems — from land to oceans, from sea surface to the yet-to-be-fully-explored seafloors, from forests to desert, and from swamps to rivers. Humans have annihilated 83 percent of all wild mammals and half of all plants, according to a census of the biomass on Earth.

10. (c)

The Energy Conservation (Amendment) Bill, 2022:

• Key provisions of the Energy Conservation (Amendment) Bill:

- The bill seeks to mandate the use of non-fossil sources, including Green hydrogen, green ammonia, biomass, and Ethanol for energy and feedstock;
- Establish Carbon Markets;
- Bring large residential buildings within the fold of the Energy Conservation regime; Hence, statement 1 is correct:
- Enhance the scope of the Energy Conservation Building Code;
- Amend penalty provisions;
- Increase members in the governing council of the Bureau of Energy Efficiency (BEE);
- Empower the State Electricity Regulatory Commissions to make regulations for smooth discharge of its functions
- To put in place enabling provisions to make the use of clean energy, including green hydrogen, mandatory and to establish carbon markets.

• Statement 2 is correct:

- Selling Carbon Credits to other countries:
 - Carbon credits will not be sold to other countries. When we sell credits to other countries, we cannot add them to our NDCs.

 However, there is a provision to sell them to other countries when there is a surplus or a need to finance some cutting-edge technology.

11. (b)

Recently, the Supreme Court (SC) sought the **Centre's review on the idea of 'Project Great Indian Bustard'** to save endangered birds.

Great Indian Bustard

- Great Indian Bustard is considered India's most critically endangered bird species.
- It is especially found in Rajasthan and Gujarat.
- One of the heaviest flying birds endemic to the Indian subcontinent.
- State Bird of Rajasthan

12. (d)

Climate Investment Opportunities in India's Cooling Sector

• The World Bank report:

- Recently, the report, "Climate Investment Opportunities in India's Cooling Sector" was released by the World Bank.
- Exposure to heat waves:
 - From 2030 onwards, more than 160 to 200 million people could be exposed to a lethal heat wave in India every year.

• Productivity Decline:

- Around 34 million Indians will face job losses due to heat stress-related productivity decline.
- Demand for cooling:
 - By 2037, the demand for cooling is **likely to be eight times more than current levels**, the World Bank has said in a report.
 - In this scenario, it is imperative for India to **deploy alternative and innovative energy-efficient technologies** for keeping spaces cool.

13. (c)

Statements 1 and 2 are correct: The Great Barrier Reef is **unique** as it extends over 14 degrees of latitude, from shallow estuarine areas to deep oceanic waters. The reef is located in the Coral Sea, off the coast of Queensland, Australia.

• Within this vast expanse is a **unique** range of ecological communities, habitats and species – all of which make the **Reef** one of the most complex natural ecosystems in the world. The Great Barrier Reef was **declared a World Heritage Area in 1981 because of its 'outstanding universal value'**

14. (b)

In News: An 18-member herd of all female elephants from the forests of Gudiyattam and Pernambattu of Tamil Nadu are currently on the prowl in the Koundinya wildlife sanctuary zone in Chittoor district, apparently "in search of mates".

Statement 1 is not correct: Koundinya wildlife sanctuary is located in Palamner - Kuppam forest ranges of the Chittoor district of Andhra Pradesh, on the **Andhra Pradesh - Chittoor road.**

Statements 2 and 3 are correct: This Sanctuary comes under Project elephant - a Countrywide Elephant Conservation Project taken up by the Government of India.

- The only home for Asiatic elephants in the State of Andhra Pradesh.
- Southern tropical dry deciduous forest, with patches of thorn, scrub and grassy plains.

15. (c)

In News: Some measures taken at the Kaziranga National Park in Assam will form the cornerstone of an Indo-French initiative.

Statements 1 and 2 are correct: Kaziranga National Park is the largest undivided representative area of Brahmaputra valley floodplain grassland, a complex ecosystem of grassland, where various stages of biotic succession in the grassland ecosystem are explicit.

- The Park is the abode of more than 70% of One Horned Rhinoceros in the world.
- It is one of the oldest wildlife conservancy reserves of India, first notified in 1905 and constituted as a Reserved Forest in 1908.
- It was declared a Wildlife Sanctuary in 1950, and notified as Kaziranga National Park in 1974 under the Wildlife (Protection) Act, of 1972.
- It was declared a World Heritage Site back in 1985. It is recognized as an Important Bird Area by Bird Life International.

16. (d)

In News: Three medicinal plant species found in the Himalayas have made it to the IUCN Red List of Threatened Species following a recent assessment.

• Meizotropis pellita has been assessed as 'critically endangered', Fritilloria cirrhosa as 'vulnerable', and Dactylorhiza hatagirea as 'endangered'.

17. (b)

- In Context: Oil companies are threatening two of Africa's most iconic biodiversity hotspots named as Okavango delta and Murchison Falls in an effort to drill for oil that will ultimately make its way to a global elite and won't benefit Africans
- Statement 1 is not correct: The Okavango Delta is a large low gradient alluvial fan or 'Inland Delta' located in north-western Botswana.
- Statement 2 is correct: The Okavango Delta is a UNESCO World Heritage Site and the delta is home to Africa's Big Five wildlife species: Savanna elephants, Cape buffaloes, rhinos, lions, and leopards. There are also giraffes, zebras, antelopes, pangolins, 400 bird species, and over 1,000 plant species.

18. (a)

In News: A six-member team of birdwatchers has said that they have discovered a new species of Wren Babbler(**Bird**) during an expedition to Arunachal Pradesh.

• The grey-bellied wren babbler is mostly found in Myanmar with some birds occurring in adjoining China and Thailand.

19. (d)

In News: The Union government's flagship Namami Gange programme, conceived to improve the sanitation levels in the Ganga river is now geared towards conservation, tourism, and providing economic livelihoods.

'Namami Gange Programme' is an Integrated Conservation Mission, approved as a 'Flagship Programme' by the Union Government in June 2014 with a budget outlay of Rs.20,000 Crore to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga.

Main pillars of the Namami Gange Programme are:

- Sewerage Treatment Infrastructure
- River-Front Development
- River-Surface Cleaning
- Bio-Diversity
- Afforestation
- Public Awareness
- Industrial Effluent Monitoring
- Ganga Gram

DEFENSE/ INTERNAL SECURITY

- 1. Which of the following statements is *not correct* regarding the 'Theatre Command System'?
 - (a) The idea behind the 'Theatre Command System' is to bring synergistic coordination between the three branches of the armed forces.
 - (b) There are no joint services commands in India.
 - (c) The USA was the first country to enforce a theatre command system
 - (d) None of the above
- 2. It is a cyberattack using malware that encrypts the victim's files and requires users to pay to decrypt the files. Which of the following options is most appropriate to this cyberattack?
 - (a) Hacking (b) Phishing
 - (c) Ransomware attack (d) None of the above
- 3. In context of Brahmos missiles, consider the following statements :
 - 1. It is an indigenously developed supersonic missile developed by DRDO.
 - 2. It is a 3 stage rocket system with a couple of solid propellant engines in the first two stages and liquid ramjet in the third stage.
 - Which of the statements given above is/are correct?
 - (a) 1 only
 - (c) Both 1 and 2

(c)

- (b) 2 only
- (d) Neither 1 nor 2

Malnutrition in India

Central Bureau of Investigation

4. The 'I4C initiative' of the Indian government is primarily aimed towards which of the following?

- (a) Education
 (b) Women Empowerment
 (c) Cybercrimes
 (d) North Eastern Region
- 5. SAMADHAN doctrine is related to which of the following?
 - (a) Easing taxation norms in India (b)
 - (c) Left-Wing Extremism in India (d) Development of North East Sector
- 6. `Operation Trident' recently seen in the news, it is related to which of the following?
 - (a) Directorate of Enforcement (b)
 - Indian Navy (d) Border Security Force
- 7. With reference to ChatGPT, consider the following statements:
 - 1. It is a prototype dialogue-based AI chatbot capable of understanding natural human language.
 - 2. It has been developed by Ministry of Communication, Government of India
 - Which of the statements given above is/are correct?
 - (a) 1 Only (b) 2 Only
 - (c) Both 1 and 2 (d) Neither 1 nor 2

EXPLANATIONS

1. (b)

Joint Theatre Commands

- Idea: The idea behind 'Theatre Command System' is to bring synergistic coordination between the three branches of the armed forces. Hence statement (a) is correct.
- Besides the operational synergies, the theatre command system will also contribute to more streamlined costs and a leaner fighting force.
- There are two joint services commands in India: Hence statement (b) is incorrect.

• Andaman and Nicobar Command (ANC):

 Based on the principle of theatre command system, ANC is considered to be the only one of its kind in the country that amalgamates the army, navy and air force.

• Strategic Forces Command (SFC):

 As SFC takes care of the nuclear assets of India and is not related to any specific theatre of war.

• Countries with theatre commands:

- Various countries around the globe already have some form of theatre or joint command in place to bring better integration among their military forces.
- Notably, the USA was the first country to enforce a theatre command system with six geographical and four functional commands presently in place. Hence statement (c) is correct.

2. (c)

Recently, **e-services** at the All-India Institute of Medical Sciences (AIIMS) were **crippled by** what is suspected to be a ransomware attack.

Ransomware Attack

- A ransomware attack is a cyberattack using malware that encrypts the victim's files and requires users to pay a ransom to decrypt the files.
- It is often designed to spread across a network and target database and file servers, and can thus quickly paralyze an entire organization.
- It is a growing threat, generating billions of dollars in payments to cyber criminals and inflicting significant damage and expenses for businesses and governmental organizations.

3. (d)

About:

- The missile is capable of being launched from **land**, **sea**, **sub-sea** and **air** against surface and seabased targets.
- The Extended Range air-launched missile weighs 2.65 tonnes, which will come down to 1.33 tonnes with the **BrahMos-NG** (Next Generation) that is under development.

Origin of Name:

• The missile derives its name from **Brahmaputra and Moskva** rivers.

Developed By:

• BrahMos is a **joint venture** between the Defence Research and Development Organisation (DRDO) and **Russia's** NPO Mashinostroyeniya.

Two-stage Missile with a Solid Propellant Booster Engine:

- First stage brings the missile to supersonic speed and then gets separated.
- The liquid ramjet or the second stage then takes the missile closer to **three times the speed of sound** in cruise phase.

Range:

- The range of the missile was **originally capped at 290 kms** as per obligations of the Missile Technology Control Regime (MTCR).
- Following India's entry into the club in June 2016, DRDO officials had stated that the range would be extended to 450 km and to 600 km at a later stage.

4. (c)

Indian Cyber Crime Coordination Centre (I4C):

• The MHA launched this I4C Indian Cyber Crime Coordination Centre program to combat cybercrime in the country, through a coordinated and efficient method.

The scheme has the following seven components:

- National Cybercrime Threat Analytics Unit.
- National Cybercrime Reporting Portal.
- Platform for Joint Cybercrime Investigation Team.
- National Cybercrime Forensic Laboratory Ecosystem.
- National Cybercrime Training Centre.
- Cybercrime Ecosystem Management Unit.
- National Cyber Research and Innovation Centre.

5. (c)

SAMADHAN doctrine is the one-stop solution for the Left Wing Extremism (LWE) problem. It encompasses the entire strategy of government from short-term policy to long-term policy formulated at different levels. The acronym as S-smart leadership, A-aggressive strategy, M-motivation and training, A-actionable intelligence, D-dashboard-based KPIs (key performance indicators) and KRAs (key result areas), H-harnessing technology, A-action plan for each theatre and N-no access to financing.

6. (c)

Recently, The Indian Navy celebrated Navy Day for the first time outside Delhi, in Visakhapatnam.

• The Navy day is celebrated each year on December 4 to acknowledge the role of the service and to also commemorate the navy's achievements in **`Operation Trident' during the Indo-Pak war of 1971.**

 The Navy Day celebrations are aimed at fostering greater outreach, renewing maritime consciousness amongst our citizens, and highlights the Navy's contributions towards national security

7. (a)

In News: Artificial Intelligence (AI) research company OpenAI announced ChatGPT.

Statement 1 is correct: ChatGPT is a prototype dialogue-based AI chatbot capable of understanding natural human language and generating impressively detailed human-like written text.

- It is the latest evolution of the GPT or Generative Pre-Trained Transformer family of textgenerating Als.
- It is trained using a machine learning technique called Reinforcement Learning from Human Feedback (RLHF).

Statement 2 is not correct: ChatGPT has been developed by OpenAI, which is a research institute and company that focuses on developing artificial intelligence technology in a responsible and safe way.

• It was founded in 2015 by a group of entrepreneurs and researchers, including Elon Musk, Sam Altman, and Greg Brockman.

SCIENCE & TECHNOLOGY

1.

2.

3.

4.

5.

Consider the following statements: 1. A scramjet is a ramjet with supersonic combustion. 2. Scramjets can't produce thrust at zero velocity. Which of the statements given above is/are correct? 1 only (a) 2 only (b) (c) Both 1 and 2 (d) Neither 1 nor 2 With reference to the Gallium Nitride (GaN), consider the following statements: 1. It is a very hard, mechanically stable wide bandgap semiconductor. 2. It is 1000 times more efficient than silicon. 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 Consider the following statements: 1. Satellite broadband is network connectivity provided through geostationary satellites only. 2. Satellite internet has extremely low latency, due to the distance between satellites and the surface of the Earth. Which of the statements given above is/are **not** correct? (a) 1 only (b) 2 only (c) Both 1 and 2 (d) Neither 1 nor 2 Consider the following statements: 1. Agni-V ballistic missile has a three-stage solid-fuel engine and can strike targets with a high degree of precision at distances up to 10,000 kilometers. 2. Nag is a third-generation, fire-and-forget, anti-tank guided missile having a maximum range of 200 kms. Which of the given above statements is/are correct? (a) 1 only (b) 2 only Both 1 and 2 (c) (d) Neither 1 nor 2 Consider the following statements: 1. In Nuclear Fusion, the nuclei of two lighter elements are made to fuse together to form the nucleus of a heavier atom. 2. Compared to nuclear fission, the waste produced by nuclear fusion is less radioactive and decays much more quickly. Which of the statements given above is/are correct? (a) 1 only 2 only (b) (c) Both 1 and 2 (d) Neither 1 nor 2

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6.	Consider the following statements:					
	1. Haemophilia is a genetically inherited Rare Disease.					
	2. Those who are suffering from rare diseases will have financial support under the umbrella					
	scheme of Rashtriya Arogya Nidhi. 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.						
7.	 DNA fingerprinting was first developed in 1984 by Alec Jeffreys. 	Consider the following statements:				
	 Lalji Singh is known as the father of DNA fingerprinting in India. 					
	Which of the statements given above is/are correct?					
	(a) 1 only (b) 2 only					
	(c) Both 1 and 2 (d) Neither 1 nor 2					
8.	Consider the following statements:					
0.	1. Anti smog guns are devices which release infrared to neutralize smog during th	e smoggy davs				
	and enhance the visibility					
	2. LiDAR can be used for monitoring pollution					
	Which of the statements given above is/are correct?					
	(a) 1 only (b) 2 only					
	(c) Both 1 and 2 (d) Neither 1 and 2					
9.	With reference to Black Holes, consider the following statements:					
	1. Space telescopes with special tools can help find black holes.					
	2. Stellar, a kind of black hole, has mass up to 20 times greater than the mass of the Sun.					
	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					
10.	With reference to SpaceTech Innovation Network (SpIN), consider the following stateme	nts.				
	1. It is India's first dedicated platform for innovation curation and venture develo	pment for the				
	burgeoning space entrepreneurial ecosystem.					
	2. It is a collaboration between the Indian Space Research Organisation (ISRO) and the European					
	Space Agency.					
	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.	Consider the following statements:					
	1. Ramjet engine uses the vehicle's forward motion to compress incoming air for combustion					
	without a rotating compressor.The Scramjet engine efficiently operates at hypersonic speeds and allows supersonic combustion.					
	ic combustion.					

Which of the statements given above is/are correct?

(a) 1 only

(c)

, Both 1 and 2

- (b) 2 only
- (d) Neither 1 nor 2
- **12.** With reference to Navigation with Indian Constellation (NavIC), consider the following statements:
 - 1. It is a collaboration of the Indian Space Research Organisation (ISRO) and the European Space Agency.
 - 2. It is designed with a constellation of 7 satellites and a network of ground stations.
 - 3. It offers Standard Position Service (SPS) for civilian users and Restricted Service (RS) for strategic users.

Which of the statements given above is/are correct?

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

13. Lecanemab drug recently seen in the news, it is related to

- (a) Tuberculosis (TB) (b) Alzheimer's
- (c) Rabies (d) COVID-19

EXPLANATIONS

1. (c)

A scramjet is a ramjet with supersonic combustion. In ordinary ramjets, the air is decelerated to subsonic velocities before combustion, but this is not the case in a scramjet.

- Ramjets have a velocity range of 1 to 6 Mach in theory, but Scramjets have a range of 12 to 24 Mach in theory.
- Ramjets and scramjets can't produce thrust at zero velocity, they need a lot of airflow to start.
- Scramjets have a higher specific impulse than Ramjet.
- **Owing to subsonic combustion**, Ramjet has greater efficiency and operability than Scramjet, which has a lesser efficiency due to supersonic combustion.
- 2. (c)

About Gallium Nitride (GaN)

- One of the most advanced semiconductors. It is a widely used material for blue light emission.
- Advantages: Reliable, compact size, high efficiency, fast switching speed, low on-resistance, and high thermal conductivity.
- It is 1000 times more efficient than silicon.
- GaN Technology is of strategic importance with its application to 5G, space and defence applications.

3. (c)

Statement 1 is not correct: Satellite broadband is network connectivity provided through low-earthorbit (LEO), Medium Earth Orbits or geostationary satellites, with the geostationary satellites providing much faster data rates. Jio's Joint Venture will use geostationary (GEO) and medium earth orbit (MEO) satellites, while Starlink and OneWeb use low earth orbit (LEO) satellites. LEO satellites are cheaper to make and deploy, but require a satellite constellation working in sync to offer coverage on earth. **Statement 2 is not correct:** Latency is the amount of time that it takes for a signal to travel from your computer to a remote server (such as the physical machine where Netflix stores its video) and back. Wired connections generally have the lowest latency, with fibre being the lowest of them all. Satellite internet has extremely high latency, due to the distance between satellites and the surface of the Earth. (Though low-Earth orbit satellite constellations like Starlink could offer much lower latency connections.)

4. (d)

India successfully test-fired nuclear-capable ballistic missile Agni-V.

Statement 1 is not correct: It is an ingeniously built advanced surface-to-surface ballistic missile developed under the Integrated Guided Missile Development Programme (IGMDP).

- The missile has a three-stage solid-fuel engine and can strike targets with a high degree of precision at distances up to 5,000 kilometres. Agni-5 can cover a range of even 8000 kms.
- The missile can reach an exceptional Mach 24 speed and has a **very high degree of accuracy** to hit targets.

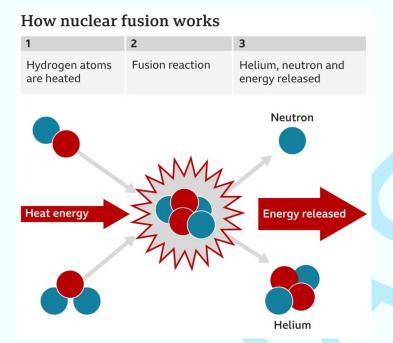
Statement 2 is not correct: The Nag has been manufactured by the Defence Research and Development Organisation (DRDO). After the successful completion of the trials, the DRDO stated that the missiles are ready for induction into the army. It is an all-weather missile and has an operational range of 500m to 20 km.

5. (c)

Statement 1 is correct: When two atoms of a light element such as hydrogen are heated and combine to form a single heavier element such as helium, the nuclear reaction produces massive amounts of energy which can be captured.

Statement 2 is correct: Nuclear fission produces a lot of radioactive waste, which can be dangerous and must be stored safely - potentially for hundreds of years. The waste produced by nuclear fusion is less radioactive and decays much more quickly.

Nuclear fusion doesn't need fossil fuels like oil or gas. It also doesn't generate greenhouse gases, which trap the Sun's heat and are responsible for climate change. Most fusion experiments use hydrogen, which can be extracted cheaply from seawater and lithium, meaning fuel supplies could last for millions of years.



6. (c)

Recently, NCP MP raised concern over rare diseases, stating no patient has benefited from the new policy.

Statement 1 is correct: There are 6,000-8,000 classified rare diseases, but less than 5% have therapies available to treat them.

- **Examples:** Lysosomal Storage Disorders (LSD), Pompe disease, cystic fibrosis, muscular dystrophy, spina bifida, haemophilia etc.
- Haemophilia is usually an inherited bleeding disorder in which the blood does not clot properly. This can lead to spontaneous bleeding as well as bleeding following injuries or surgery. Blood contains many proteins called clotting factors that can help to stop bleeding.

Statement 2 is correct: Those who are suffering from rare diseases listed under Group 1 will have financial support of up to Rs. 20 lakh under the umbrella scheme of Rashtriya Arogya Nidhi.

7. (c)

DNA fingerprinting was first developed in 1984 by Alec Jeffreys in the UK.

- No two people could have the same DNA sequence.
- UK achieved the world's first conviction based on DNA evidence in a case of rape and murder.

How is DNA fingerprinting done?

- By analysing selected DNA sequences (called loci), a crime laboratory can develop a profile to be used in identifying a suspect.
- **DNA can be extracted from many sources:** such as hair, bone, teeth, saliva, and blood.
 - Samples may even be extracted from used clothes, linen, combs, or other frequently used items.

- There is DNA in most cells in the human body: even a minuscule amount of bodily fluid or tissue can yield useful information.
- Advanced DNA fingerprinting can make separate prints of various individuals even from a sample mixture found at the crime scene this is of help during gang rape investigations as each perpetrator can be individually identified.

DNA fingerprinting in India

- By 1988, Lalji Singh, who had been in the UK from 1974 to 1987 on a Commonwealth Fellowship, developed DNA fingerprinting for crime investigations at the Centre for Cellular and Molecular Biology (CCMB) in Hyderabad.
 - Lalji Singh, who passed away in 2017, is known as the father of DNA fingerprinting in India.
- In 1989, DNA fingerprinting was first used in a case by the Kerala Police.
- By the early 1990s, the technology had begun to be used for establishing paternity, and to link criminals and identify victims in sensational crimes.
- From the 2000s onwards: the technology became a staple in rape cases where vaginal swab samples were matched with semen samples from suspects.

8. (b)

Statement 1 is not correct: Anti-smog guns are the device that sprays nebulized water droplets into the air through high-pressure propellers, which help particles to settle down. According to findings of a study by the CPCB and DPCC, anti-smog guns are effective in controlling localized dust during the period of application and more suitable to high dust emission zones such as large construction sites that release PM 2.5 & 10.

Statement 2 is correct: LiDAR or Light Detection and Ranging is a high-end application of LASER-based technology for monitoring pollution. This technology may be adopted for vertical monitoring at a few places to track the transport of pollutants at higher altitudes.

9. (c)

Statement 1 is correct: A black hole is a place in space where gravity pulls so much that even light cannot escape. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying. Because no light can get out, they are invisible. Space telescopes with special tools can help find black holes. The gases swirling around actually help in getting their images.

Statement 2 is correct: Black holes can be big or small. Scientists think the smallest black holes are as small as just one atom. These black holes are very tiny but have the mass of a large mountain. Another kind of black hole is called "stellar". The mass of a stellar black hole can be up to 20 times greater than the mass of the sun and can fit inside a ball with a diameter of about 10 miles. The largest black holes are called 'supermassive' and they have masses that are more than 1 million suns together.

10. (a)

In News: Recently, The Indian Space Research Organisation (ISRO) signed an MoU with Social Alpha to launch SpaceTech Innovation Network (SpIN).

Statement 1 is correct: SpIN is India's first dedicated platform for innovation, curation, and venture development for the burgeoning space entrepreneurial ecosystem.

• A one-of-its-kind public-private collaboration for start-ups and SMEs in the space industry, this novel partnership is a significant step forward in providing further stimulus to India's recent space reform policies and will work towards identifying and unleashing the market potential of the most promising space tech innovators and entrepreneurs in India.

Statement 2 is not correct: ISRO and Social Alpha joined hands to establish SpaceTech Innovation Platform - SpIN: Focussed on Lab to Market Transition and Venture Development in Space Industry.

• Social Alpha is a multistage innovation curation and venture development platform for science and technology start-ups.

11. (c)

In News: Scramjet engine's 11 second long hot test was conducted successfully at ISRO's Propulsion Research Complex at Mahendragiri in the Tirunelveli district of Tamil Nadu.

Statements 1 and 2 are correct: A scramjet engine is an improvement over the ramjet engine as it efficiently operates at hypersonic speeds and allows supersonic combustion.

- Thus it is known as Supersonic Combustion Ramjet or Scramjet.
- A ramjet is a form of air-breathing jet engine that uses the vehicle's forward motion to compress incoming air for combustion without a rotating compressor.
- Fuel is injected in the combustion chamber where it mixes with the hot compressed air and ignites.

12. (b)

In News: With an aim to promote the civilian use of NAVigation with the Indian Constellation (NavIC), the regional navigation satellite system **developed by the Indian Space Research Organisation (ISRO)**, the space agency is introducing the L1 frequency in all its future satellites.

Statement 1 is not correct: To meet the positioning, navigation and timing requirements of the nation, **ISRO** has established a regional navigation satellite system called Navigation with Indian Constellation (NavIC). NavIC was erstwhile known as Indian Regional Navigation Satellite System (IRNSS).

Statements 2 and 3 are correct: NavIC is designed with a constellation of 7 satellites and a network of ground stations operating 24 x 7. The ground network consists of a control center, precise timing facility, range, and integrity monitoring stations, two-way ranging stations, etc.

• NavIC offer two services: Standard Position Service (SPS) for civilian users and Restricted Service (RS) for strategic users.

13. (b)

In News: The drug, lecanemab, jointly developed by pharma companies Biogen and Eisai, was tested on patients with early **Alzheimer's**.

- Lecanemab belongs to a class of drugs called monoclonal antibodies.
- These antibody-mediated drugs target beta-amyloid, the protein deposition that is seen in patients with Alzheimer's disease, and disrupts cell function.

MISCELLANEOUS

- 1. "India Inequality Report 2022: Digital Divide" was recently released by which of the following? (a) Oxfam India (b) Organisation for Economic Co-operation and Development (OECD) (c) NITI Aayog (d) **UN** - Internet Society 2. Consider the following statements: 1. The International Civil Aviation Organization (ICAO) is a specialized agency of the United Nations for the planning and development of international air transport. 2. The Directorate General of Civil Aviation (DGCA) co-ordinates all regulatory functions with the ICAO. Which of the statements given above is/are correct? (a) 1 only 2 only (b) (c) Both 1 and 2 (d) Neither 1 nor 2 3. Which of the following reports are published by the International Labour Organisation (ILO)? 1. Global Wage Report 2. Social Dialogue Report 3. World Social Protection Report 4. World Employment and Social Outlook Select the correct answer using the code given below: (a) 1, 2 and 3 only (b) 2, 3 and 4 only (c) 1, 2 and 4 only (d) 1, 2, 3 and 4 4. 'Goblin mode' term recently seen in the news, it is related to Group of reptiles **Electricity Saving Device** (a) (b) (c) Type of behaviour (d) Illegal drug trafficking Market 5. Consider the following statements: 1. In the context of prisons, Conjugal visits refer to the concept of allowing a prisoner to spend some time in privacy with his spouse outside the jail. 2. Prisoner rights are internationally recognised through the United Nations Standard Minimum Rules for the Treatment of Prisoners. 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. Consider the following statements:
 - 1. Beypore Uru is a wooden dhow handcrafted by skilled artisans and carpenters of Kerala.
 - 2. The Khalasis are the prominent class associated with Uru-making.

Which of the statements given above is/are correct?

(a) 1 only

(c) Both 1 and 2

- (b) 2 only
- (d) Neither 1 nor 2
- 7. With reference to the FIFA World Cup 2022, consider the following statements:
 - 1. It was the first World Cup held in the Arab world.
 - 2. The headquarter of Fédération Internationale de Football Association (FIFA) is in Zürich, Switzerland.

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
- 8. Consider the following statements regarding a personality:
 - 1. He was a self-taught mathematician and is known as the 'man who knew infinity'.
 - 2. National Mathematics Day is celebrated every year on December 22nd to mark his birth anniversary.

3. He is the first Indian to be elected a Fellow of Trinity College, Cambridge.

The statements given above are related to which of the following personalities?

- (a) Prasanta Chandra Mahalanobis
- (c) C. R. Rao

- (b) Srinivasa Ramanujan
- (d) Vikram Sarabhai
- **9.** With reference to United Nations Convention on the Law of the Sea (UNCLOS), consider the following statements:
 - 1. India is not a signatory to the UNCLOS.
 - 2. As per UNCLOS, the sea is divided into 4 parts, i.e., territorial waters, contiguous zone, Exclusive Economic Zone (EEZ) and Continental Shelf

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
- **10.** Consider the following statements regarding "Tawang":
 - 1. It is the birthplace of the sixth Dalai Lama and an important pilgrimage centre for Tibetan Buddhists.
 - 2. It is the site of a famous Thikse Gompa or Thikse Monastery.
 - 3. The inhabitants of Tawang are "Monpa tribes".

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
- **11.** Nidhi Khare Committee was recently seen in the news, it was constituted in the context of which of the following?
 - (a) To develop a comprehensive framework for Net Neutrality.
 - (b) To develop a uniform policy framework in view of rising cyberattacks.

- (c) To develop a comprehensive framework on the right to repair.
- (d) None of the above
- **12.** Consider the following statements regarding the "Dhanu Yatra" festival:
 - 1. It is an ancient Festival of Odisha that is celebrated annually.
 - 2. The festival is about the episode of Krishna and Balaram visiting Mathura to witness the Dhanu ceremony organized by their (maternal) uncle Kansa.
 - 3. It is a drama-based open-air theatrical performance celebrated in Bargarh, Odisha.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
- (c) 2 and 3 only (d) 1, 2 and 3
- **13.** With reference to the National Archives of India (NAI), consider the following statements:
 - 1. It was originally established as the Imperial Record Department in 1891 in Calcutta.
 - 2. It keeps and conserves records of the government and its organisations only.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
- (c) Both 1 and 2

(d) Neither 1 nor 2

- 14. With reference to the International Energy Agency (IEA), consider the following statements:
 - 1. It is a grouping of major oil-exporting nations which was created by the members of the Organization for Economic Cooperation and Development (OECD).
 - 2. All the OECD member states are the members of the International Energy Agency (IEA).
 - 3. India is an associate member of IEA.

Which of the statements given above is/are correct?

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

- (d) 1, 2 and 3
- EXPLANATIONS

1. (a)

'India Inequality Report 2022: Digital Divide'

- Recently, the NGO Oxfam India released 'India Inequality Report 2022: Digital Divide'.
- Data from CMIE:
 - The report analyses the primary data from Centre for Monitoring Indian Economy's (CMIE)
 household survey held from Jan 2018 to Dec 2021.
- Indian Women internet users:
 - Indian women are 15 percent less likely to own a mobile phone and 33 percent less likely to use mobile internet services than men.
 - \circ $\;$ Women constitute only one-third of internet users in India.
 - India's position globally:

 In Asia-Pacific, India fares the worst with the widest gender gap of 40.4 percent, says the study.

• Rural-urban digital divide:

- The report also points to the rural-urban digital divide.
 - Despite registering a significant (digital) growth rate of 13 percent in a year, only 31 percent of the rural population uses the Internet compared to 67 percent of their urban counterparts, says the report.

2. (c)

In the latest rankings by the International Civil Aviation Organisation (ICAO), India's position has **jumped** to the 48th place from the 102nd spot in 2018.

Statement 1 is correct: The International Civil Aviation Organization (ICAO) is a specialized agency of the United Nations that coordinates the principles and techniques of international air navigation, and fosters the planning and development of international air transport to ensure safe and orderly growth. ICAO headquarters are located in the Quartier International of Montreal, Quebec, Canada.

Statement 2 is correct: The Directorate General of Civil Aviation (DGCA) is the regulatory body in the field of Civil Aviation, primarily dealing with safety issues. It is responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations, air safety, and airworthiness standards. The DGCA also co-ordinates all regulatory functions with the International Civil Aviation Organisation (ICAO).

3. (d)

Recently, the International Labour Organisation (ILO) released two reports that gave an indication of the global employment scenario post-pandemic.

Explanation: The International Labour Organization (ILO) is the only tripartite U.N. agency. Since 1919 the ILO brings together governments, employers and workers of 187 Member States, to set labour standards, develop policies and devise programmes promoting decent work for all women and men. Flagship Reports of ILO are:

- Global Wage Report
- World Employment and Social Outlook (WESO)
- World Social Protection Report
- World of Work Report
- Social Dialogue Report
- 4. (c)

In News : 'Goblin Mode' is Oxford's Word of the Year for 2022.

• The slang term describes "a type of behaviour which is unapologetically self-indulgent, lazy, slovenly, or greedy, typically in a way that rejects social norms or expectations".

The National Single Window System (NSWS) is a digital platform for the guidance of investors to identify and apply for approvals as per their business requirements. The platform is built to serve as an advisory tool to identify approvals based on user input and is to be used for guidance purposes only.

5. (b)

In News : The State of Punjab has furthered the cause of the right to life and personal liberty of prisoners by allowing conjugal visits for inmates.

• It is expected that this initiative will strengthen matrimonial bonds and ensure prisoners' good conduct.

Statement 1 is not correct: Conjugal Rights are rights created by marriage, that is, the right of the husband or the wife to the company of their spouse.

• In the context of prisons, however, conjugal visits refer to the concept of allowing a prisoner to spend some time in privacy with his spouse within the precincts of a jail.

Statement 2 is correct: Prisoner rights are internationally recognized through the **United Nations Standard Minimum Rules** for the Treatment of Prisoners, the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, etc.

6. (c)

About Beypore Uru

- It is a **wooden dhow** (ship / sailing boat / sailing vessel) handcrafted by skilled artisans and carpenters in Beypore, Kerala.
- The Beypore Urus are a symbol of Kerala's trade relations and friendship with the Gulf countries.
- Records show that there are several communities traditionally associated with Uru-making.
 - The prominent people among them are **Odayis**.
 - They manage the technical matters of ship building. Their family name comes from Odam (a type of small ship previously used in interactions/trade between the Malabar coast and Lakshadweep).
 - The Khalasis are another prominent class associated with Uru-making after the Odayis.
 - They are also referred to as Mappila Khalasis as majority of them are Mappila Muslims.
 - They are world-famous for their skill and expertise in launching the completed Urus into the water by using only traditional methods.
 - They also haul the Urus in need of repairs back to the shipyard at Beypore.

7. (c)

Recently, Argentina won the FIFA World Cup 2022 beating France in the final.

FIFA World Cup 2022

- It was the 22nd **edition** of the FIFA World Cup.
- It was an **international football tournament** contested by the men's national teams of FIFA's member associations.
- Host Country: Qatar (awarded in 2010)
- It was the first World Cup held in the Arab world and Muslim world.
- At an estimated cost of over \$220 billion, it is the **most expensive** World Cup ever held to date.
- This tournament was the last with **32 participating teams**, with the field set to increase to 48 teams for the 2026 edition.

- France were the defending champions, having defeated Croatia 4–2 in the **2018 final.**
- Next World Cup 2026 will be held in **Canada, Mexico and the United States**.

About FIFA

- Fédération Internationale de Football Association, meaning International Association Football Federation.
- It is the international governing body of association football, beach football and futsal.
- It was **founded in 1904** to oversee international competition among the national associations of Belgium, Denmark, France, Germany, the Netherlands, Spain, Sweden and Switzerland.
- Membership:
 - Now comprises 211 national associations.
 - These national associations must each also be members of one of the six regional confederations into which the world is divided: CAF (Africa), AFC (Asia and Australia), UEFA (Europe), CONCACAF (North & Central America and the Caribbean), OFC (Oceania) and CONMEBOL (South America).
- Headquartered in: Zürich, Switzerland

8. (b)

Srinivasa Ramanujan

- National Mathematics Day is celebrated every year on December 22 to mark the **birth anniversary** of legendary mathematician, **Srinivasa Ramanujan**.
- His journey in Mathematics:
 - Srinivasa Ramanujan's journey to being a genius started when he sent a letter to Professor GH Hardy where he mentioned about 120 mathematical theorems.
 - Bachelor of Science degree:
 - He joined Trinity College a few months before World War 1 started.
 - In 1916 Ramanujan was awarded the Bachelor of Science degree.
 - Elected to the London Mathematical Society:
 - In 1917, he was elected to the London Mathematical Society.
- Fellow of the Royal Society in London:
 - On May 2, 1918, he became a fellow of the Royal Society in London, one of youngest people to receive such an honour.
 - Elected as a Fellow of Trinity College, Cambridge:
 - The same year (1918) in October he became the first Indian to be elected a Fellow of Trinity College, Cambridge.
- Contribution to the field of Mathematics:
 - Ramanujan was a self-taught mathematician and is considered one of the greatest Indian mathematicians of all time.
 - During his short but impactful lifespan, Ramanujan worked on theorems that seemed impossible to solve.
 - He is known for the work he did in the following areas

- Continued fractions,
- Riemann series,
- Elliptic integrals,
- Hypergeometric series and
- Functional equations of the zeta function.
- Man who knew infinity:
 - Srinivasa Ramanujan is also known as the 'man who knew infinity'. Ramanujan who did not receive any formal education in Mathematics has made several important contributions to the field of Mathematics.
 - His biography 'The Man Who Knew Infinity' by Robert Kanigel depicts his life and journey to fame.
 - A film of the same name was released in 2015.

9. (b)

Statement 1 is not correct: United Nations Convention on the Law of the Sea (UNCLOS) is also sometimes referred to as the Law of the Sea Convention or the Law of the Sea treaty. UNCLOS came into operation and became effective in 1994. India became a signatory to the UNCLOS in 1982.

It replaced the four Geneva Conventions of April, 1958, which respectively concerned the territorial sea and the contiguous zone, the continental shelf, the high seas, fishing and conservation of living resources on the high seas.

Statement 2 is correct: As per UNCLOS, the sea is divided into 4 parts:

- Territorial waters
- Contiguous Zone
- Exclusive Economic Zone (EEZ)
- Continental Shelf

It defines a distance of 12 nautical miles (approx. 22 km) from the baseline as Territorial Sea limit and a distance of 200 nautical miles distance as Exclusive Economic Zone (EEZ) limit.

10. (c)

Tawang:

- Historical:
 - Tawang is the birthplace of the sixth Dalai Lama and an important pilgrimage centre for Tibetan Buddhists. Hence statement 1 is correct.
 - The 14th Dalai Lama took refuge in Tawang after he crossed over from Tibet to India in 1959, spending some days in the monastery there before proceeding further.
- Culture & Festivals:
 - The inhabitants of the districts are all Monpa tribes. There are two major religious festivals of the Monpas, Losar and Torgya. Both festivals are celebrated annually. Hence statement 3 is correct.

- Losaris celebrated the commencement of the New Year. Every third year of Torgya, the festival of Dungyur is celebrated. Both Dungyur and Torgya festivals are celebrated at the premises of the Tawang Monastery with traditional gaiety and enthusiasm.
- Statement 2 is incorrect: Thikse Gompa or Thikse Monastery is a gompa affiliated with the Gelug sect of Tibetan Buddhism. It is located on top of a hill in Thiksey approximately 19 kilometres east of Leh in Ladakh, India.

11. (c)

Option c is correct: Union Food and Consumer Affairs Minister unveiled the 'right to repair' portal on National Consumer Day. The Right to Repair refers to government legislation that is intended to allow consumers the ability to repair and modify their own consumer electronic devices, where otherwise the manufacturer of such devices requires the consumer to use only their offered services. The right to repair has been recognised in many countries across the globe, including the US, UK and European Union.

Nidhi Khare Committee

- Recently, the Department of Consumer Affairs has **set up a committee under Nidhi Khare** to develop a comprehensive framework on the right to repair.
- The aim of the framework is to empower consumers and product buyers in the local market and harmonize trade between the original equipment manufacturers and the third-party buyers and sellers.
- It also aims to emphasize developing sustainable consumption of products and reduction in ewaste.

12. (c)

Dhanu Yatra

- Origin of the festival:
 - The 'Dhanu Yatra', which marks the victory of good over evil, came into existence in Bargarh in 1947-48 as part of the celebration of the country's Independence (it is not an ancient festival) and is held annually. Hence statement 1 is incorrect.
- Dhanu ceremony:
 - It is about the episode of Krishna and Balaram visit to Mathura to witness the Dhanu ceremony organized by their (maternal) uncle Kansa. Hence statement 2 is correct.
 - The enactments of the play are being performed in many other places in Western Odisha. The major one of these is the original one at Bargarh. Hence statement 3 is correct.

• Enactment of Krishna's life:

- With the commencement of the festival, Bargarh becomes King Kansa's Mathura, and Amapali, located about eight km away, becomes Gopapura, where Lord Krishna is said to have spent his childhood.
- The Jeera river which flows between the two places becomes the Yamuna river.
- The rule of Kansa, his death and the exploits of Lord Krishna are enacted in 14 places across the area during the open-air festival.

13. (c)

National Archives of India (NAI)

- About:
 - Originally established as the Imperial Record Department in 1891 in Calcutta, the capital of British India.
 - The NAI is the **repository of all non-current government records**, holding them for the use of administrators and scholars.
 - o The NAI is now located in **Delhi**.
- Functions under: The Ministry of Culture.
- Its Role & Significance:
 - It keeps and conserves records of the government and its organisations only.
 - It does not receive classified documents.
 - As per the Public Records Act, 1993, various central ministries and departments are supposed to transfer records more than 25 years old to the NAI, unless they pertain to classified information.
 - However, it is up to the respective ministries and departments to ascertain what is classified information.
- Abhilekh Patal portal:
 - NAI has also made efforts to make available all the records digitally on the newly created portal.
 - However, five years later, it's a work in progress and the entire holdings haven't been digitised so far, with 1,27,136 records available for online access.

14. (c)

Option (c) is correct: The IEA was born with the 1973-1974 oil crisis when industrialised countries found they were not adequately equipped to deal with the oil embargo imposed by major producers that pushed prices to historically high levels. It has 31 member nations and only OECD nations are given membership to the IEA. All the OECD member states except for Chile, Iceland, Israel, Mexico and Slovenia are members of IEA. India became an associate member of the International Energy Agency in 2017. It is headquartered in Paris, France. World Energy Outlook report is released by IEA annually.

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