KSCSAPT505 Answer key and Explanation

1) b

Statement 1 is correct as it was added to the Article 39 of DPSP's through the 42nd Amendment Act, 1976.

Statement 2 is not correct as it was a part of Article 39 of the original Constitution.

Statement 3 is correct as it was added to the Constitution through the 42nd Amendment Act,1976 , thus putting a new Article 39A.

2) d

The government has made many policies and laws to implement the DPSP's.

1 is correct as article 41 talks about securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement.

2 is correct as it is aimed to implement Article 50 which explicitly calls for the separation of judiciary and the executive. The Criminal Procedure Code (1973) separated the judiciary from the executive in the public services of the state. Thus, the judicial powers vested with the district authorities like Collectors,Tehsildars etc was taken away.

3 is correct as it is aimed to implement Article 48 under the DPSPâ€™s which calls for the modernization of Agriculture and Animal Husbandry.

4 is correct as it is aimed to provide living wages and work opportunities. Article 41 calls for providing Right to work while Article 43 calls for provision of living wages to all workers.

3) a

Sugarcane yields molasses and bagasse among other products. Bagasse is the fibrous matter that remains after sugarcane or sorghum stalks are crushed to extract their juice.

Molasses is used as an ingredient for manufacturing fertilizers, not bagasse. So, 3 is wrong.

Bagasse is often used as a primary fuel source for sugar mills; when burned in quantity, it produces sufficient heat energy to supply all the needs of a typical sugar mill. So, 1 is correct.

Bagasse is commonly used as a substitute for wood in many tropical and subtropical countries for the production of pulp, paper (even for newspapers) and board, such as India, China, Colombia, Iran, Thailand and Argentina. So, 2 is correct.

4) b

Biodiversity Management Committees are set up under the Biological Diversity Act, 2002.

Animal Welfare Board of India was set up under Prevention of Cruelty to Animals Act, 1960.

5) b

6) b

Ecolabelling scheme of Government of India supports cleaner (environmentally friendly) production practices. There is strong emphasis on cleaner manufacturing processes in the criteria used for the granting Eco-labels to products.

The scheme is limited to household and some consumer products to meet certain environment criteria along with quality requirements of Indian standards. The label is known as ‘Ecomark’.

The products for which notifications have been issued for the criteria are: toilet soaps, detergents, paper, architectural points and laundry soaps.

Eco-label is issued by the Central Pollution Control Board (CPCB) is represented by pitcher or an ‘earthen pot’ indicating that the product is not harmful to the environment like as an earthen pot which is made of soil and after its use returned to it the soil. It is without causing any harmful effect on the environment.

7) d

8) c

In March 1919, the government passed the Rowlatt Act even though every single Indian member of the Central Legislative Council opposed it. This Act authorised the Government to imprison any person without trial and conviction in a court of law. The Act would thus also enable the government to suspend the right of Habeas corpus which had been the foundation of civil liberties in Britain.

9) c

Indian Muslims were critical of the treatment meted out to Turkey (Ottoman Empire) under Treaty of Sevres. Khilafat movement was launched to influence British in its treatment of the Ottoman Empire post World War 1.

10) b

Statement 1 is incorrect: The Montagu-Chelmsford reforms introduced Dyarchy at the provincial level, with reserved and transferred subject. The reserved subjects like finance and law and order remained under the control of Governor, administered through bureaucracy. The transferred subjects were brought under the control of ministers responsible to the legislatures.

Statement 2 is correct: It introduced bicameral legislature at the centre i.e. two houses of legislature. Lower house was the legislative assembly and the upper house was the council of state.
Statement 3 is incorrect: At the central level, the legislature had no control over Governor General and his executive council.
11) c
Sadharan Brahmo Samaj:
The Sadharan Brahmo Samaj was formed in May 1878. Mr. Anandamohan Bose was appointed the first President Mr. Shib Chandra Deb the first Secretary and Mr. Umesh Chandra Dutta the Assistant Secretary. It was formed as a result of schisms in the Brahmo Samaj.
Debendranath Tagore, father of Rabindranath Tagore was actively involved with the organisation.
The Samaj had faith in a Supreme Being and believed that existence after Death is natural to man. It regarded the relation between God and men to be direct and immediate. It did not believe in the infallibility of any man or any scripture.
12) a
Scientists have detected an unexpected rise in atmospheric levels of CFC-11, a chlorofluorocarbon (CFC) highly damaging to the ozone layer. Banned by the Montreal Protocol in 1987, CFC-11 was seen to be declining as expected but that fall has slowed down by 50% since 2012. Researchers say their evidence shows it's likely that new, illegal emissions of CFC-11 are coming from East Asia. These could hamper the recovery of the ozone hole and worsen climate change.
13) c
Statement 1 is incorrect. Azad was more supportive of socialist ideas.
Statement 2 is correct. The Hindustan Republican Association was formed in 1924 to organise an armed revolution. But they became influenced by Socialist ideas. In 1928, under the leadership of Chandra Shekhar Azad, they changed the name of their organisation to the Hindustan Socialist Republican Association.
Statement 3 is incorrect. Bhagat Singh wanted to use the court as a forum for revolutionary propaganda after they threw bomb in Parliament. He never made any attempt to be a part of Parliament and use it as a forum for debate and discussion.
14) d
Statement 1 is correct. The Khilafat movement was an agitation by Indian Muslims, allied with Indian nationalists, to pressure the British government to preserve the authority of the Ottoman Sultan as Caliph of Islam after World War I. The leadership included the 'Ali brothers' Muhammad-Ali (1878-1931) and Shaukat 'Ali (1873-1938)' newspaper editors from Delhi; their spiritual guide Maulana Abdul Bari (1878- 1926) of Firangi Mahal, Lucknow; Abul Kalam Azad (1888-1958); and Maulana Mahmud ul-Hasan (1851-1920), head of the madrasa at Deoband, in northern India.
Statement 2 is correct. The Khilafat agitation brought urban Muslims into the nationalist movement and contributed to a sense of national unity as there was a predominant element of anti-imperialism in both the National and Khilafat Movement.
Statement 3 is correct. Comrade, Zamindar, Al Hilal amd Hamdard reflected the concerns of the educated Muslims during the Khilafat agitation. The helped in maintaing the anti- British and pan-Islamic sentiments. The Comrade was a weekly English-language newspaper that was published and edited by Maulana Mohammad Ali between 1911 and 1914. The Al-Hilal (The Crescent) was a weekly Urdu language newspaper established by Maulana Abul Kalam Azad.
15) c
Statement 1 is not correct. It was related to a dispute between the workers and the Gujarati millowners regarding the withdrawal of the plague-bonus, which was being given to dissuade workers from leaving the city in face of mounting plague-related deaths. This withdrawal came at a time when the workers were already facing hard times from the unusual high prices caused by World War I.
Statement 2 is correct. Gandhiji asked the workers to go on a strike and demand a 35% increase in wages. Gandhiji advised the workers to remain non-violent while on strike. He undertook a fast unto death to strengthen the resolve of workersâ€™. The fast also had the effect of putting pressure on mill owners who finally agreed to give the workers a 35% increase in wages. It was the first instance of a hungerstrike by Gandhiji in India.
Statement 3 is correct. This movement went a long way in mobilizing and organising the working classes in Ahemdabad, paving the way for foundation of the Textile Labour Association in February, 1920.
16) d
Marxist and Socialist Ideas inspired many socialist and communist groups to come into existence and resulted in the rise of a left wing, within the Congress, represented by Jawaharlal Nehru and Subhash Bose. These young nationalists,

inspired by the Soviet Revolution and dissatisfied with Gandhian ideas and political programme, began advocating radical solutions for economic, political and social ills of the country;
These younger nationalists
- Were critical both of Swarajists and No-changers
- advocated a more consistent anti-imperialist line in the form of a slogan for purna swarajya (complete independence).
- were influenced by awareness, though still vague, of international currents
- stressed the need to combine nationalism and anti-imperialism with social justice and simultaneously raised the question of internal class oppression by capitalists and landlords.
Hence all the statements are correct.
17) b
The Congress, for the first time at its Nagpur Session in 1920, enunciated its policy towards the peoplesmovement in the Princely States. It called upon the Princes to grant full responsible government in their States. Hence statement 1 is correct. However, it was pointed out that though the people belonging to the States could enroll themselves as members of the Congress, they could not initiate political activity in the State in the name of the Congress. They could carry on political activity in their individual capacity as members of the local Praja Mandals. Hence statement 3 is correct.
This policy of non-intervention in princely states by Congress continued till 1938. Hence statement 2 is incorrect.
18) b
19) c
Statement 1 is correct. On Baisakhi day, a large, crowd of people mostly from neighbouring villages, unaware of the prohibitory orders in the city, had gathered in the small park of Jallianwala bagh to protest against the arrest of their leaders, Saifuddin Kitchlew and Satyapal.
Statement 2 is not correct. The House of Lords of the British Parliament endorsed General Dyer's action and the British public showed solidarity with General Dyer by helping 'The Morning Post' collect 30,000 pounds for him.
Statement 3 is correct. The priests of Golden Temple at Amritsar honoured General Dyer, responsible for the Jallianwalla Bagh massacre, with a saropa (robe of honor) and declared him to be a Sikh.
20) b
The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) was announced in 2003 with objectives of correcting regional imbalances in the availability of affordable/ reliable tertiary healthcare services and also to augment facilities for quality medical education in the country. PMSSY has two components: 1. Setting up of AIIMS like institutions 2. Upgradation of Government Medical Colleges/Institutions.
21) d
22) c
Statement I is correct: The Department of Biotechnology (DBT), under the Ministry of Science and Technology, has proposed the idea of FarmerZone- a collective open-source data platform for ‘smart agriculture’ which will use biological research and data to improve the lives of small and marginal farmers.
Statement II is correct: It is envisaged that “FarmerZone” will help cater to all needs of the farmer, from dealing with climate change, weather predictions and soil, water, and seed requirements to providing market intelligence. The FarmerZone platform will connect farmers and scientists, government officials, thought leaders in agriculture, economists and representatives from global companies.
23) b
Statement I is correct: Square Kilometre Array (SKA) project is an international effort to build the world’s largest radio telescope.
Statement II is correct: The project has its headquarters in Manchester, UK.
Statement III is incorrect: The SKA is a global project with twelve member countries. India is a member state where National Centre for Radio Astrophysics, affiliated to the Department of Atomic Energy, Govt. of India is the stakeholder. Project is under Britain-based consortium which includes Canada, China, Germany, Italy, the Netherlands, the United Kingdom as well as Australia and South Africa
24) b
Statement I is incorrect: This is a treaty-based inter-governmental organization. The alliance will take the shape of an international treaty once its rules are worked out i.e the ISA agreement is separate from the United Nations-mandated climate change talks that are held every year.
Statement II is correct: The International Solar Alliance is an alliance of more than 120 countries, most of them being sunshine countries, which come either completely or partly between the Tropic of Cancer and the Tropic of Capricorn.

The primary objective is to collectively work for efficient exploitation of solar energy to reduce dependence on fossil based fuels.
25) d
Statement I is correct: NCLT hears matters relating to resolution under the Insolvency and Bankruptcy Code (IBC). It also hears cases that were transferred from the Company Law Board and corporate recovery cases before debt recovery tribunals.
Statement II is correct: The National Company Law Tribunal (NCLT) is a dedicated quasi-judicial body in India that adjudicates issues relating to companies in India, hence increasing confidence of investor in Indian Economy.
Statement III is correct: The NCLT was established under the Companies Act 2013 and was constituted on 1 June 2016.
26) c
Article 37, while stating that the Directive Principles are not enforceable in any court of law, declares them to be "fundamental to the governance of the country" and imposes an obligation on the State to apply them in matters of legislation.
27) b
43A. Participation of workers in management of industries.—The State shall take steps, by suitable legislation or in any other way, to secure the participation of workers in the management of undertakings, establishments or other organisations engaged in any industry.
50. Separation of judiciary from executive.—The State shall take steps to separate the judiciary from the executive in the public services of the State.
28) d
29) c
Green Gross Domestic Product is the index of the Economic growth of a particular country which enshrines the environment consequences of the economic growth.
Green GDP accounts the monetized loss of biodiversity, costs caused by climate change.
Green GDP is conventional gross domestic product figures adjusted for the environmental costs of economic activities.
It's a measure of how a country is prepared for sustainable economic development.
30) d
All of the above schemes are associated with development of urban infrastructure.
Smart Cities Mission is an urban renewal and retrofitting program by the Government of India with a mission to develop 100 cities all over the country making them citizen friendly and sustainable. The Union Ministry of Urban Development is responsible for implementing the mission in collaboration with the state governments of the respective cities.
The Swachh Bharat Mission (Urban) aims to create urban infrastructure like scientific processing/disposal reuse/recycle of Municipal Solid Waste, Capacity Building and Administrative & Office Expenses, Community and Public Toilets, Construction of Household Toilets etc.
The Pradhan Mantri Awas Yojana (Urban) is a programme of the Ministry of Housing and Urban Poverty Alleviation (MoHUPA) which envisions provision of Housing for All by 2022. It includes slum rehabilitation, Promotion of Affordable Housing for weaker section through credit linked subsidy, Affordable Housing in Partnership with Public & Private sectors and subsidy for beneficiary-led individual house construction /enhancement.
The National Heritage City Development and Augmentation Yojana (HRIDAY) scheme focuses on holistic development of heritage cities. The Scheme supports development of core heritage infrastructure projects which shall include revitalization of urban infrastructure for areas around heritage assets identified / approved by the Ministry of Culture, Government of India and State Governments. These initiatives shall include development of water supply, sanitation, drainage, waste management, approach roads, footpaths, street lights, tourist conveniences, electricity wiring, landscaping and such citizen services.
31) a
Exp) Statement 1 and 2 are correct.
As per the RBI's guidelines a part (i.e. maximum of 50 per cent) of the aggregate amount of loans may be extended for other purposes such as housing repairs, education, medical and other emergencies. However, aggregate amount of loans given to a borrower for income generation should constitute at least 50 per cent of the total loans from the NBFC-MFI.
Statement 3 is incorrect.
NBFC-MFIs cannot accept demand deposits. Thus, they are not allowed to open Savings bank account.
32) b
33) d

Exp) Soft currency is a currency which is hyper sensitive and fluctuates frequently. Such currencies react very sharply to the political or the economic situation of a country.
It is also known as weak currency due to its unstable nature. Such currencies mostly exist in developing countries with relatively unstable governments. Soft currencies cause high volatility in exchange rates as well, making them undesirable by foreign exchange dealers. These currencies are the least preferred for international trade or holding reserves.
The Zimbabwe dollar and the Venezuelan bolivar are two examples of soft currencies. Both these countries have experienced both political instability as well as hyperinflation which has led to sharp devaluation in its currency and the printing of high denominating notes.
34)d
35) a
Pagalpanthi Movement was a peasant movement and not a religious reform movement. Hence, option a is incorrectly matched.
Pagal Panthis were a mixture of the Hinduism, Sufism and Animism, which became prominent in Bengal (Now in Bangladesh). The sect was founded by Karam Shah, and his son Tipu Shah led these people to uphold the religion and rights of the peasants in Bengal. He captured Sherpur in 1825, after standing up against oppressive taxes and laws imposed by the Zamindars and the British. The rebels kept disturbed the area for more than 2 decades. Tipu Shah died in 1852, but the resistance movement continued
36) b
Tehrik-e-Khilafat, a was Punjab Khilafat deputation comprising Moulana Manzoor Ahmed and Moulana Lutfullah Khan Dankauri took a leading role throughout India, with a particular concentration in the Punjab. Hence, statement 1 is incorrect.
The Khilafat movement (1919–22) was a pan-Islamic, political protest campaign launched by Muslims in British India to influence the British government to protest against the dissolution of Turkish Caliphate. The movement became the reason for separation from mainland India of an Islamic Pakistan. The movement was a topic in Conference of London (February 1920); however, Arabs saw it as threat of continuation of Turkish dominance of Arab lands. Hence, statement 2 is correct.
37) c
38) b
The Constitution has not explicitly mentioned water is in the Union List. In the Constitution, water is a matter included in Entry 17 of List-II (State List). This entry is subject to the provision of Entry 56 of List-I i.e. Union List which enables the Union to deal with inter-State rivers if Parliament legislates for the purpose. This means that if Parliament considers it "expedient in the public interest" that the "regulation and development" of an inter-State river, say the Ganga or Yamuna or Narmada, should be "under the control of the Union", it can enact a law to that effect, and that law will give the Union legislative (and therefore executive) powers over that river.
Statement 2 is correct.
The Inter-State Water Dispute Act, 1956 has two provisions; In case, if a particular state or states approach to Union Government for the constitution of the tribunal:
Central Government should try to resolve the matter by consultation among the aggrieved states. In case, if it does not work, then it may constitute the tribunal.
39) a
40) b
Statement 1 is correct.
The South Asia Subregional Economic Cooperation (SASEC) program brings together Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal, and Sri Lanka in a project-based partnership that aims to promote regional prosperity, improve economic opportunities, and build a better quality of life for the people of the sub-region.
Statement 2 is correct.
The Asian Development Bank serves as the SASEC Secretariat.
Statement 3 is incorrect.
Pakistan is not a member of the South Asia Sub Regional Economic Cooperation (SASEC). In 2017, Myanmar became the 7th member of South Asia Sub-Regional Economic Cooperation (SASEC) program of Asian Development Bank (ADB).
41) d
RBI has the sole autonomy to print notes. GoI has the sole authority to mint coins and one rupee notes.

The power to appoint RBI Governor solely rest with the Centre and he holds office at the pleasure of Central Government (tenure not exceeding 5 years).
42) b
The training is only at block level.
Broadly, the following activities are supposed to be undertaken for development of Model Command Area. They are Water Conservation; Installation of Solar Power Panels; Use of Primary Treated Water for Irrigation; Use of Ground Water along with Artificial Recharge of Ground Water etc.
43) b
Art. 370, 371 A-I allow for asymmetric arrangements between the states.
The practice of granting special category status was entirely an executive decision taken by the erstwhile NDC on the recommendation of the Planning Commission.
Terms of reference of the 14th Finance Commission did not require it to deal with categorization of states into special or non-special category.
The Constitution also does not provide for such categorization.
44) c
Statements a, b and d are incorrect. Refer Citizenship chapter from Laxmikanth's Polity for details. Corrected statement 1: By birth, only if both of the person's parents ar citizens of India or one of whose parents is a citizen of India and the other is not an illegal migrant at the time of their birth. Corrected statement 2: By registration, so long as the person is not an illegal migrant. Corrected statement 3: By naturalisation, if he has an adequate knowledge of any eighth schedule language.
45) b
Rani-ki-Vav, on the banks of the Saraswati River (Patan, Gujarat), was initially built as a memorial to a king in the 11th century AD.
Stepwells are a distinctive form of subterranean water resource and storage systems on the Indian subcontinent, and have been constructed since the 3rd millennium BC. They evolved over time from what was basically a pit in sandy soil towards elaborate multi-storey works of art and architecture.
Rani-ki-Vav was built at the height of craftsmens' ability in stepwell construction and the Maru-Gurjara architectural style, reflecting mastery of this complex technique and great beauty of detail and proportions.
Designed as an inverted temple highlighting the sanctity of water, it is divided into seven levels of stairs with sculptural panels of high artistic quality; more than 500 principle sculptures and over a thousand minor ones combine religious, mythological and secular imagery, often referencing literary works.
46) c
The 'Adopt a Heritage: Apni Dharohar, Apni Pehchaan' scheme is an initiative of the Ministry of Tourism, in collaboration with the Ministry of Culture and the Archaeological Survey of India.
Under it, the government invites entities, including public sector companies, private sector firms as well as individuals, to develop selected monuments and heritage and tourist sites across India. Development of these tourist sites calls for providing and maintaining basic amenities
The sites/monument are selected on the basis of tourist footfall and visibility and can be adopted by private and public sector companies and individuals — known as Monument Mitras — for an initial period of five years.
Monument Mitras are selected by the 'oversight and vision committee,' co-chaired by the Tourism Secretary and the Culture Secretary, on the basis of the bidder's 'vision' for development of all amenities at the heritage site. There is no financial bid involved. The oversight committee also has the power to terminate a memorandum of understanding in case of non-compliance or non-performance.
The corporate sector is expected to use corporate social responsibility (CSR) funds for the upkeep of the site. Monument Mitras, in turn, will get limited visibility on the site premises and on the Incredible India website.
47) b
BASIC is a group of four newly industrialized countries. It was formed in 2008. These countries were committed to act jointly at the Copenhagen Climate Summit. Led by China, they brokered a deal with the US and EU.Apart from climate, these countries are also cooperating on economic and technological front. Recently, the 26th BASIC Ministerial Meeting on Climate Change was held in Durban.The countries committed to the full, effective and sustained implementation of the United Nations Framework Convention on Climate Change (UNFCCC), its Kyoto Protocol and Paris Agreement.
48) b

Queqiao is a relay satellite launched by China to explore the darker side of the Moon. It was launched on Long March-4C rocket from the Xichang launch centre in the southwest of the country. It is the first country to send a probe to soft-land on and rove the far side of the moon.
The satellit will settle in an orbit about 455,000 km from the Earth and will be the world's first communication satellite operating at that height.

49) d

According to Maharashtra cybercrime officials,GravityRAT, a malware allegedly designed by Pakistani hackers, has recently been updated further and equipped with anti-malware evasion capabilities. It was first detected by Indian Computer Emergency Response Team, CERT-In, on various computers in 2017.It is designed to infiltrate computers, steal the data of users, and relay it to command and control centres in other countries. The 'RAT' in its name stands for Remote Access Trojan, which is a program capable of being controlled remotely and thus difficult to trace.

50) d

The Nuclear Suppliers Group is a group of nuclear supplier countries that seeks to contribute to the nonproliferation of nuclear weapons through the implementation of two sets of Guidelines for nuclear exports and nuclear-related exports. The NSG first met in November 1975 in London, and is thus popularly referred to as the "London Club" .European Union is a permanent observer of the Nuclear Suppliers Group.In order to become a member, the country must fully comply with the obligations of one or more of the following: the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Treaties of Pelindaba, Rarotonga, Tlatelolco, Bangkok, or an equivalent international nuclear nonproliferation agreement

51. A

The word Puppet is derived from the Latin word 'Pupa' which means doll. Though India is said to be the home of puppets it is yet to awaken to its unlimited possibilities in this field of art. The Tamil classic '*Silappadikaaram*' has the earliest reference to the art of puppetry, written around the 1st or 2nd century B.C. Puppetry is believed to have been originated in India, more than 500 years before Christ and has gained significant traditional importance in India over the years. Epics and legends mostly form the basis for selection of themes for a puppet show. Legends, Puranic stories, local myths generally form the content of traditional puppet theatre in India. A puppet show is a creative effort of many artists working together. India has a rich and ancient tradition of string puppets.

Kathputli – Rajasthan

- These are carved from a single piece of wood and are colorfully dressed in Rajasthan style of clothing.
- The show is accompanied with dramatized version of the traditional Rajasthani music.
- The puppets do not have legs and are maneuvered using 5 strings.

Kundhei – Orissa

- The string puppets of Orissa are made up of light wood and are dressed in long flowy skirts.
- They have many joints and are easy to manoeuver.
- The costumes of Kundhei resemble those worn by actors of the Jatra traditional theatre.
- The music is often drawn from the popular tunes of the region and also are inspired by Odissi.

Gombeyata – Karnataka

- The dolls resemble the characters of Yakshagana- the regional traditional theatre form.
- Theatre performances are a glimpse of prasangas in Yakshagana.
- The puppets are maneuvered using strings attached.

Bommalattam – Tamil Nadu

- These are a combination of string and rod puppets.
- The dolls are made of wood and strings. The strings are tied to an Iron ring which the artist wears on his head.
- Bommalattam theatre has elaborate preliminaries which are divided into four parts – *Vinayak Puja, Komali, Amanattam and Pusenkanattam*

52. B

Ravanachhaya – Orissa

The shadow puppet form practiced in Orissa, is the most theatrically exiting form of shadow puppetry prevalent in India. *The puppets do not have joints and are in one single piece*. They are not coloured on either sides, therefore opaque shadows are thrown on the screen. The manipulation and movements of puppets requires great dexterity as there are no joints. The puppets are conceived in bold dramatic poses and are made of Deer skin. Apart from human and animal character, various props such as mountains, trees, chariots, houses are also used. The puppets create very sensitive, lyrical shadows on the screen. The Ravanachayya puppets are not more than two feet tall and are relatively smaller.

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Putul Nautch of West Bengal:

Putul Nautch is the traditional rod puppet form of West Bengal. The puppets are carved from wood and follow different artistic styles varying from region to region. In Nadia district, rod-puppets used were of human size, similar to the Bunraku puppets of Japan. This form of rod puppetry is now almost extinct. The Bengal rod-puppets are about 3 to 4 feet in height and are dressed like the actors of Jatra – the traditional theatre form widely practiced in the State. There are three joints in the puppet. The head supported by the main rod is joined at the neck and both hands attached to rods are joined at the shoulders. The technique followed for manipulation of the puppets is highly theatrical. The singer is often accompanied by a drummer, harmonium and cymbals. The music and verbal text have close similarity with the Jatra theatre**.**

Yampuri of Bihar:

The traditional Rod puppet of Bihar is known as Yampuri. These rod puppets of Bihar are made of wood. These puppets are in one piece and do not have joints. Great dexterity is required while playing these puppets as they do not have flexible arms and legs. These are different from the traditional rod puppetry practiced in Orissa and West Bengal.

53. D

Tamaasha

- It is a traditional folk theatre form in Maharashtra.
- It prospered during the reign of the Maratha rulers of the 18th and 19th centuries.
- It mainly progressed from the folk forms such as Jagran, Gondhal, and Kirtan.

54. C

Bhavai

- It is a traditional theatre form of Gujarat.
- It is also known as also known as Vesha or Swang.
- Bhungal, Tabla, Flute, Pakhaawaj, Rabaab, Sarangi, Manjeera, etc. are the instruments used.

Maach

- It is a traditional theatre form of Madhya Pradesh.
- It originated from the Khyal theatre form of Rajasthan.
- Songs are given importance in between the dialogues.
- The songs of this theatre form are identified as Rangat.

Bhaona is a traditional form of entertainment, always with religious messages, prevalent is Assam, India. It is a creation of Mahapurusha Srimanta Sankardeva, written in the early sixteenth century. He created the form to convey religious messages to villagers through entertainment. Later Srimanta Madhavdeva also wrote some plays The plays of bhaona are popularly known as Ankiya Natsand their staging is known as bhaona.Bhaona is generally staged at xatras and namghars in Assam. There are some special characteristics of Bhaona like the plays, dialogues, costumes, ornaments, entry and foot-steps of the characters. These characteristics helps to differentiate Bhaona from other plays

55. D

- This type of climate has **alternate wet and dry seasons** similar to monsoon climate but has **considerably less annual rainfall**.
- Also, there is **no distinct rainy season** like in monsoon climate.

[Only two seasons – winter and summer. **Rains occur in summer**].

- Floods and droughts are common.
- Vegetation, wildlife and human life are quite different from monsoon climate regions.

Rainfall

- Mean annual rainfall ranges from **80 – 160 cm** [Rainfall decreases with distance from equator].
- In the northern hemisphere, the rainy season begins in May and lasts till September.
- In the southern hemisphere, the rainy season is from October to March.

Temperature

- Mean annual temperature is **greater than 18° C.**
- The monthly temperature hovers between 20° C and 32° C for lowland stations.
- **Highest temperatures do not coincide with the period of the highest sun** (e.g. June in the northern hemisphere) but occur just before the onset of the rainy season, i.e. April in Northern Hemisphere and October in Southern Hemisphere.
- **Days are hot and nights are cold**. This **extreme diurnal range** of temperature is another characteristic feature of the Sudan type of climate.

Winds

- The prevailing winds of the region are the Trade Winds, which bring rain to the coastal districts.
- They are strongest in the summer [favorable position of ITCZ] but are relatively dry by the time they reach the continental interiors or the western coasts [Trade winds are easterlies – flow from east to west. So rainfall decreases from east to west here].
- In West Africa, the North-East Trades, in fact, blow off-shore [continent to sea] from the Sahara Desert and reach the Guinea coast as a dry, dust-laden winds.

Natural Vegetation of Savanna Climate

- The savanna landscape is typified by **tall grass and short trees**.
- The grasslands are also called as ***'bush-veld'.***
- The trees are **deciduous**, shedding their leaves in the cool, dry season to prevent excessive loss of water through transpiration, e.g. acacias.
- Trees usually have **broad trunks**, with water-storing devices to survive through the prolonged drought.
- Many trees are umbrella shaped, exposing only a narrow edge to the strong winds.
- In true savanna lands, the grass is **tall and coarse**, growing 6 to 12 feet high. The **elephant grass** may attain a height of even 15 feet.
- Grasses appear greenish and well-nourished in the rainy season but turns yellow and dies down in the dry season that follows.
- As the rainfall diminishes towards the deserts the savanna merges into thorny scrub.

56. D

- Mediterranean climate is found between the 30^{o}- 45^{o}N-S latitudes & gets its name from the climate found around the Mediterranean Sea.
- The basic cause of this type of climate is shifting of the wind belts with summers – warm to hot, and winters – cool but mild.
- These regions have also been called 'winter-rain & summer dry'
- The Mediterranean biome is divided into five floristic biome subtypes, according to the various floristic realms into which each fall –

Mediterranean	Areas around Mediterranean sea
Californian	Around San Francisco

Chilean	Central Chile (South America)
Capensic	Cape Town, Africa
Australian	Southern & Western Australia

- Though the area around Mediterranean Sea has the great extent of this type of agriculture, the best developed form of this peculiar type of climate is infact found in central Chile.
- Strong, cold up-welling currents bathe the coastal regions with cool marine air and moderate winter temperatures, except for the Mediterranean Basin and South and Western Australia.

Wine Cultivation

- A specialty of the Mediterranean countries
- The regions bordering Mediterranean Sea account for 3/4th of the total world's production of wine
- The long, sunny summer allow grapes to ripen with almost 85 % of grapes produced go into wine production

In summer , when the sun is overhead at the tropic of cancer, the belt of influence of the westerlies is shifted a little pole wards. Rain bearing winds are therefore not likely to reach the Mediterranean lands. The prevailing trade winds are off shore and there is practically no rain. The air is dry, the heat is intense and the relative humidity is low.

57. C

The aridity of the hot deserts is mainly due to the effects of **off-shore Trade Winds**, hence they are also called **Trade Wind Deserts.**

The major hot deserts of the world are located on the **western coasts of continents** between latitudes 15° and 30°N. and S (Question asked in Previous Mains Exam).

They include the biggest **Sahara Desert** (3.5 million square miles), **Great Australian Desert, Arabian Desert, Iranian Desert, Thar Desert, Kalahari** and **Namib Deserts**.

In North America, the desert extends from Mexico into U.S.A. and is called by different names at different places, e.g. the **Mohave, Sonoran, Californian** and **Mexican Deserts.**

In South America, the **Atacama or Peruvian Desert** (**rain shadow effect** and **off-shore trade winds**) is the **driest** of all deserts with less than 2 cm of rainfall annually.

Mid-Latitude Desert Climate

The temperate deserts are rainless because of either continentiality or rain-shadow effect. **[**Gobi desert **is formed due to** continentiality **and** Patagonian desert **due to** rain-shadow effect**]**

- Amongst the mid-latitude deserts, many are found on plateau and are at a considerable distance from the sea. These are **Ladakh, The Kyzyl Kum, Turkestan, Taklimakan and Gobi deserts of Central Asia, drier portions of the Great Basin Desert of the western United States** and **Patagonian Deserts of Argentina etc..**
- The Patagonian Desert is more due to its rain-shadow position on the leeward side of the lofty Andes than to continentiality.

Rainfall (Both Hot and Cold deserts)

- Deserts, whether hot or mid-latitude have an annual precipitation of **less than 25 cm.**
- **Atacama (driest place on earth)** has practically no rain at all.
- Rain normally occurs as violent thunderstorms of the convectional type.
- It 'bursts' suddenly and pours continuously for a few hours over small areas.
- The thunderstorm is so violent, and comes so suddenly that it has disastrous consequences on desert landforms [flash floods].
- There is no cold season in the hot deserts and the average summer temperature is high around 30°C.
- The highest temperature recorded is **57.77° C in 1922 at A1 Azizia, Libya.**
- The reasons for the high temperatures are obvious—a clear, cloudless sky, intense insolation, dry air and a rapid rate of evaporation.
- Coastal deserts by virtue of their maritime influence and the cooling effect of the cold currents have much lower temperatures.
- The desert interiors, however, experience much higher summer temperatures and the winter months are rather cold.

- The diurnal range of temperature in the deserts is very great. Intense insolation by day in a region of dry air and no clouds causes the temperature to rise with the sun.
- But as soon as the sun sets, the land loses heat very quickly by radiation and the mercury levels drop.
- **High diurnal temperature range** is a typical feature of hot deserts. Average diurnal range varies from 14 to 25° Celsius.
- Frosts may occur at night in winter.

58. A

Tropical cyclones always origin in large water bodies, where as temperate cyclones can origin on both landmass or water
Tropical cyclones have a definite structure of formation having a front end followed by a zone of calmness called 'eye' and ends with tail (rear end).in temperate cyclones, two different air masses collide each other so four different sectors are formed, they are cold sector(cold drier air mass), cold front, warm sector(warm moist air mass) and warm front

59. C

A low pressure area surrounded by high pressure area from all from all the sides along with winds moving from all the sides towards central low
Cyclones moves in Anti clockwise in N – Hemisphere & in Clockwise direction in S – Hemisphere under the effect of westerlies due to coriolis effect
No Cyclones at equator as coriolis force is 0 there

Anticyclones

- An anticycloneis just opposite to a cyclone
- Basically it is a large-scale circulation of winds around a central region of high atmospheric pressure
- Clockwise in the Northern Hemisphere and counterclockwise in the Southern Hemisphere
- Anticyclones are form from air masses, cooling more than their surroundings, which causes the air to contract slightly making the air denser
- Since dense air weighs more, the weight of the atmosphere overlying a location increases, causing increased surface air pressure
- Anticyclones herald fair weather, clearing skies, calm air with high temperature in summers & cold in winters
- Fog can also form overnight within a region of higher pressure

60. B

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Fog can also form overnight within a region of higher pressure

61. D

Annual range of temperature(ART) is the difference between mean temperature of the warmest and the coldest months.
Continentality or distance from sea

- water is bad conductor of heat. Due to this moderating effect of the sea, places near coast have low range of temperature and high humidity.
- The places in the interior of continent do not experience moderating effects of sea. These places have extreme temperature.
- We know that Shimla and Jalandhar are located @same latitude yet Shimla is cooler than Jalandhar because of difference in altitude. As we move up in the mountains, temperature goes down. but that is to justify difference in ART between two land-places.
- Observe that Western Ghats and Himalayas have lower ART compared to coastal areas in TN and Andhra, Goa and Kerala coast.

62. A

An easterly jet stream flows over the southern part of the Peninsula in June. The easterlies normally do not extend to the north of 30o N latitude in the upper atmosphere. The easterly jet stream steers the tropical depressions into India. These depressions play a significant role in the distribution of monsoon rainfall over the Indian subcontinent. The tracks of these depressions are the areas of highest rainfall in India. The easterly jet stream sets in along 15°N latitude only after the western jet stream has withdrawn itself from the region. This easterly jet stream is held responsible for the burst of the monsoon in India.

63. C

The system involves oceanic and atmospheric phenomena with the appearance of warm currents off the coast of Peru in the Eastern Pacific and affects weather in many places including India. This results in: (i) the distortion of equatorial atmospheric circulation; (ii) irregularities in the evaporation of sea water; (iii) reduction in the amount of planktons which further reduces the number of fish in the sea. EI-Nino is used in India for forecasting long range monsoon rainfall. In 1990-91, there was a wild EI-Nino event and the onset of southwest monsoon was delayed over most parts of the country ranging from five to twelve days.

64. A

Rajya Sabha Speaker M. Venkaiah Naidu has constituted a two-member committee to make changes in the rules and procedures of the House on 07 May 2018 and specifically for the suspension of a member who deliberately hindered the proceedings of the House.

It has been decided to change the rules and procedures for the purpose of running the work of the Upper House better. This committee will give its recommendations by talking to MPs and experts and studying the rules of the Houses of different countries.

Form of committee

The committee will chaired by **Rajya Sabha Secretary General V.K. Agnihotri** and will include retired **Joint Secretary RS Dhaleeta** of the Law Ministry.

The committee will present reports in two parts and give the first report in three months.

The recommendations of the committee will be sent to the Committee on Rules of the House, which will present its report in the House after discussions with political parties and MPs.

Why changes in rules need?

In the second phase of the budget session, no work was done due to the disruption in the phase. In view of this, the provision for automatic suspension is being made against those who make the changes in the rules. Like the **Lok Sabha,** the provision for automatic suspension of members who repeatedly commute to the chairmanship of the chair in the House is not currently in the **Rajya Sabha.**

Acts and Powers of the Rajya Sabha

In addition to the **Lok Sabha, the Rajya Sabha** also deals with lawmaking. Equal powers have been given to the **Lok Sabha and Rajya Sabha** both in relation to non-bills by the Constitution.

The amendment proposal will be deemed accepted only when the two Houses of Parliament are passed by their majority and two-thirds of the members participating in the election and voting.

On acceptance from the **Lok Sabha**, the Finance Bill will be sent to the **Rajya Sabha**, through which the Bill will be considered for more than 14 more days. According to article 249, the **Rajya Sabha** can declare a subject matter of national significance as a matter of national importance with a two-thirds majority of the members present and the participating voters.

65. C

Scheme provides an assured return of 8% p.a. payable monthly (equivalent to 8.30% p.a. effective) for 10 years.

Pension is payable at the end of each period, during the policy term of 10 years, as per the frequency of monthly/ quarterly/ half-yearly/ yearly as chosen by the pensioner at the time of purchase.
The scheme is exempted from Service Tax/ GST.
On survival of the pensioner to the end of the policy term of 10 years, Purchase price along with final pension installment shall be payable.
Loan upto 75% of Purchase Price shall be allowed after 3 policy years (to meet the liquidity needs). Loan interest shall be recovered from the pension installments and loan to be recovered from claim proceeds.
The scheme also allows for premature exit for the treatment of any critical/ terminal illness of self or spouse. On such premature exit, 98% of the Purchase Price shall be refunded.
On death of the pensioner during the policy term of 10 years, the Purchase Price shall be paid to the beneficiary.
The ceiling of maximum pension is for a family as a whole, the family will comprise of pensioner, his/her spouse and dependants.
The shortfall owing to the difference between the interest guaranteed and the actual interest earned and the expenses relating to administration shall be subsidized by the Government of India and reimbursed to the Corporation.

66. C
Objective

The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) aims at correcting the imbalances in the availability of affordable tertiary healthcare facilities in the different parts of the country in general, and augmenting facilities for quality medical education in the under-served States in particular. The scheme was approved in March 2006.
Implementation

First Phase
The first phase in the PMSSY has two components - setting up of six institutions in the line of AIIMS; and upgradation of 13 existing Government medical college institutions.
It has been decided to set up 6 AIIMS-like institutions, one each in the States of Bihar (Patna), Chattisgarh (Raipur), Madhya Pradesh (Bhopal), Orissa (Bhubaneswar), Rajasthan (Jodhpur) and Uttaranchal (Rishikesh) at an estimated cost of Rs 840 crores per institution. These States have been identified on the basis of various socio-economic indicators like human development index, literacy rate, population below poverty line and per capital income and health indicators like population to bed ratio, prevalence rate of serious communicable diseases, infant mortality rate etc. Each institution will have a 960 bedded hospital (500 beds for the medical college hospital; 300 beds for Speciality/Super Speciality; 100 beds for ICU/Accident trauma; 30 beds for Physical Medicine & Rehabilitation and 30 beds for Ayush) intended to provide healthcare facilities in 42 Speciality/Super-Speciality disciplines. Medical College will have 100 UG intake besides facilities for imparting PG/doctoral courses in various disciplines, largely based on Medical Council of India (MCI) norms and also nursing college conforming to Nursing Council norms.
In addition to this, 13 existing medical institutions spread over 10 States will also be upgraded, with an outlay of Rs. 120 crores (Rs. 100 crores from Central Government and Rs. 20 crores from State Government) for each institution. These institutions are

- Government Medical College, Jammu, Jammu & Kashmir
- Government Medical College, Srinagar, Jammu & Kashmir
- Kolkatta Medical College, Kolkatta, West Bengal
- Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, Uttar Pradesh
- Institute of Medical Sciences, BHU, Varanasi, Uttar Pardesh
- Nizam Institute of Medical Sciences, Hyderabad, Telangana
- Sri Venkateshwara Institute of Medical Sciences, Tirupati, Andhra Pradesh
- Government Medical College, Salem, Tamil Nadu
- B.J. Medical College, Ahmedabad, Gujarat
- Bangalore Medical College, Bengaluru, Karnataka
- Government Medical College, Thiruvananthapuram, Kerala
- Rajendra Institute of Medical Sciences (RIMS), Ranchi
- Grants Medical College & Sir J.J. Group of Hospitals, Mumbai, Maharashtra.

Second Phase

In the second phase of PMSSY, the Government has approved the setting up of two more AIIMS-like institutions, one each in the States of West Bengal and Uttar Pradesh and upgradation of six medical college institutions namely

- Government Medical College, Amritsar, Punjab
- Government Medical College, Tanda, Himachal Pradesh
- Government Medical College, Madurai, Tamil Nadu
- Government Medical College, Nagpur, Maharashtra
- Jawaharlal Nehru Medical College of Aligarh Muslim University, Aligarh
- Pt. B.D. Sharma Postgraduate Institute of Medical Sciences, Rohtak

The estimated cost for each AIIMS-like institution is Rs. 823 crore. For upgradation of medical college institutions, Central Government will contribute Rs. 125 crore each.

Third Phase

In the third phase of PMSSY, it is proposed to upgrade the following existing medical college institutions namely

- Government Medical College, Jhansi, Uttar Pradesh
- Government Medical College, Rewa, Madhya Pradesh
- Government Medical College, Gorakhpur, Uttar Pradesh
- Government Medical College, Dharbanga, Bihar
- Government Medical College, Kozhikode, Kerala
- Vijaynagar Institute of Medical Sciences, Bellary, Karnataka
- Government Medical College, Muzaffarpur, Bihar

The project cost for upgradation of each medical college institution has been estimated at Rs. 150 crores per institution, out of which Central Government will contribute Rs. 125 crores and the remaining Rs. 25 crore will be borne by the respective State Governments.

67. C

Nipah virus (NiV) is an emerging zoonotic virus (a virus transmitted to humans from animals). Nipah virus causes NiV. The Nipah virus infection is moderately contagious as it needs close observation and mostly infects the family members and/or medical caretakers of NiV-infected individuals.

When it was discovered?

Nipah Virus was first detected in 1998-99 in Malaysia. It was named after Kampung Sungai Nipah, a village in the Malaysia, where it was first discovered. Being an unknown virus, it spread widely and killed around 110 people. Medical experts suspected the infection to be Japanese encephalitis (JE) which, like the Nipah virus, induces brain inflammation. During a medical investigation, the virus, which was traced back to the pigs, led to a large-scale culling of the animals in the areas. Further researches, pointed that the initial transmission from bats to pigs probably occurred, when the pig feed was contaminated with bat excretions. These findings were titled 'Lessons from the Nipah virus outbreak in Malaysia', published in The Malaysian Journal of Pathology in 2007. In Bangladesh in 2004, humans became infected with NiV as a result of consuming date palm sap that had been contaminated by infected fruit bats. But, it is not the Kerala, India has already confirmed its first Nipah outbreak in Siliguri, West Bengal, in 2001. Around 45 people were killed due to Nipah. Once again, a second outbreak in Nadia district in 2007 led to the deaths of all the five persons infected.

How it was transmitted?

Researchers believe that Nipah virus was transmitted from flying foxes (mega bats) as they live by eating fruits and surviving in the trees. As the flying fox habitat are destroyed by human activities, these bats get stressed, weak and hungry, their immune system becomes bad, their virus load goes up and a lot of virus spills out in their urine and saliva. As a result, most of the bats often end up being pool for a number of severe infectious diseases, including Ebola, SARS coronavirus, Nipah and Hendra. When it comes to Nipah, disease transmission or the means by which a pathogen can be passed from one organism to another. When person or animal consumes infected fruits and fresh date palm sap contaminated by these bats, they get infected.

68. D

World Health Organization has urged developing nations to eliminate man-made trans fatty acids from their food supplies. About Trans-Fat

• Also known as Trans Fatty Acids (TFA), they are of 2 types

o Natural Trans-Fat- Occur naturally in the dairy and some meat products.

o Artificial Trans-Fat- They are created when the oil goes through hydrogenation, which involves adding hydrogen to the liquid oil to make it more solid.
• They help to increase the shelf life of oils and foods and stabilise their flavours.
• In India, Vanaspati, desi ghee, butter and margarine are the main sources of trans fat. Vanaspati is favoured by the industry as it prolongs a food product's shelf life and is cheap
"REPLACE" by WHO
• WHO has released a step by step guide for the industry to eliminate trans fats from the food by 2023.
• The guide, called REPLACE, has six actions, which include
o A review of dietary sources of trans fats,
o Promoting replacement with healthier fats,
o Setting up a regulatory framework,
o Assessing and monitoring trans fats content in food,
o Creating awareness and o Enforcing regulation.

69. A
Recently, Forest and Environment Department of Odisha recorded the presence of black panthers in a forest in Sundargarh district.
About Black Panther
• It is the same species as a normal coloured panther with a high amount of pigment (melanin caused by agouti gene) causing the animal to appear black
Odisha is the only state in the country to have melanistic tigers, white tigers and black panthers.
• Conservation Status of Black Panther
o Vulnerable: IUCN (International Union for Conservation of Nature).
o Schedule I: Indian Wildlife (Protection) Act, 1972,
o Appendix I: CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora).
70. C
USA has decided to withdraw from 2015 Nuclear Agreement with Iran and reinstate sanctions upon it. Background
• The Iran deal, also known as Joint Comprehensive Plan of Action (JCPOA), is an agreement reached in 2015 between Iran and six world countries - US, China, Russia, Britain, France and Germany, plus the EU (i.e. P5+Germany+EU).
• Under the agreement Iran agreed to completely eliminate its stock of medium enriched uranium, reduce the stock of low enriched uranium by 98% and reduce almost by 2/3rd its gas centrifuges for 13 years.
• It further sets out rigorous mechanisms for monitoring restrictions placed on Iran's nuclear programme.
• Until 2031, Iran will have to comply with any IAEA access request. If it refuses, the commission can decide on punitive steps, including the reimposition of sanctions through a majority vote.
• The reason sighted by the USA for withdrawal is that the deal does not target- Iran's ballistic missile programme, its nuclear activities beyond 2025 and its role in conflicts in Yemen and Syria.
• In current scenario, the nuclear deal itself won't be scrapped as long as Iran and the other signatories remain committed to it. Likely effects of withdrawal on the world
• One of the biggest concern is a likely rise in oil prices which could further lead to volatility in financial markets.
• 37% of Iranian oil reaches European destinations. The trade relations have expanded several folds after JCPOA. Exiting the agreement would tarnish Washington's credibility in the world especially with European countries and can weaken the NATO alliance.
• This would render life very difficult for the populace who might, in the absence of other avenues, take to the streets against the regime. Impact of decision on India
• Chabahar Port- This will impact the work on the project which is crucial for India in terms of better connectivity with Afghanistan and other Central Asian countries
. • Bilateral trade in oil- During previous sanctions, USA pressed Delhi to curtail its economic relations with Iran, specifically in the area of purchasing oil. Iran is presently India's third biggest supplier (after Iraq and Saudi Arabia), and any increase in prices will hit both inflation levels as well as the Indian rupee.
• Shanghai Cooperation Organisation- Iran's inclusion in the SCO as proposed by China may position it as an anti-American group which may further impact Indo-US relations.
• International North-South Transport Corridor (a ship, rail, road route between India and Central Asia, passing through Iran), is crucial for connecting India with Central Asia and Russia. New U.S. sanctions will affect these plans, especially if

any of the countries along the route or banking and insurance companies dealing with the INSTC plan also decide to adhere to U.S. restrictions on trade with Iran. 17

• NSG- Like France (EU), USA is also a strong backer of India's NSG membership. India's commitment towards JCPOA may complicate the matter as US might push India for support.

• Non-oil trade with Iran may not be impacted as much, as New Delhi and Tehran have instituted several measures in the past few months, including allowing Indian investment in rupees, and initiating new banking channels, between them. USA recently withdrew from various other forums like the U.N. Climate Change treaty (Paris Accord), and the Trans-Pacific Partnership with East Asian trading partners. Such behavior essentially means that India must handle its relations with USA a bit more strategically, as India believes in Rule based Order.

71. C

Biofuel is any hydrocarbon fuel that is produced from organic matter in a short period of time. This is in contrast with fossil fuels, which take millions of years to form. Biofuels are considered renewable form of energy as it emits less than fossil fuels. Different generation biofuels:

• First Generation Biofuels: It uses the food crops like wheat and sugar for making ethanol and oil seeds for bio diesel by conventional method of fermentation.

• Second Generation Biofuels: It uses non-food crops and feedstock such as Wood, grass, seed crops, organic waste are used in fuel preparation.

• Third Generation Biofuels: It uses specially engineered Algae whose biomass is used to convert into biofuels. The greenhouse gas emission here will be low in comparison to others.

• Fourth Generation biofuel: It aimed at not only producing sustainable energy but also a way of capturing and storing CO2.

Categorisation of biofuels to enable extension of appropriate financial and fiscal incentives under each category. The two main categories are:

o Basic Biofuels- First Generation (1G) bioethanol & biodiesel

o Advanced Biofuels - Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels, third Generation (3G) biofuels, bio-CNG etc.

72. B

Indian Naval Sailing Vessel Tarini (INSV Tarini) entered Goa harbour and came alongside the INS Mandovi jetty on completion of a historic global circumnavigation voyage on 21 May 18. The all-women crew of Tarini was received at the jetty by Smt. Nirmala Sitharaman, the Hon'ble Raksha Mantri who had also flagged them off on 10 Sep last year. Admiral Sunil Lanba, Chief of the Naval Staff, Vice Admiral AR Karve, Flag Officer Commanding-in-Chief, Southern Naval Command, senior officers and enthusiastic members from the naval community both serving and retired, as well as civilians were present at the Naval Boat Pool to welcome INSV Tarini .

It was a poignant moment for the "Navika Sagar Parikrama" team which included a number of naval personnel who worked behind the scenes from the time of origination of the idea of circumnavigation by an all women crew, right through the planning, implementation and training till the successful execution of the voyage. The women crew themselves were ecstatic on completion of the voyage. Speaking at the occasion, the Skipper Lt Commander Vartika Joshi said, "We knew at the very start of this voyage that we had a daunting task ahead. However, the many challenges we encountered brought in a new found strength from within, which we ourselves never knew we were capable of. Our close bonding helped us overcome those difficult times." It was also a time for happy reunion of the crew with their families after a period of over eight and half months.

This is the first-ever Indian circumnavigation of the globe by an all-women crew. The vessel was skippered by Lieutenant Commander Vartika Joshi, and the crew comprised Lieutenant Commanders Pratibha Jamwal, P Swathi, and Lieutenants S Vijaya Devi, B Aishwarya and Payal Gupta.

Speaking at the occasion, the Hon'ble Raksha Mantri, Mrs. Nirmala Sitharaman said that she is extremely honoured and feels humbled before the crew of team Tarini for what they have achieved. She further added that "it's not the girls achieving, it's the youngsters from India achieving. The women of this country have shown that it is possible for the youngsters, if they want to do something, that they can indeed do it, by showing commitment, grit and dedication".

During his address Admiral Sunil Lanba Chief of the Naval Staff said, "The grit and determination displayed by these young women officers would definitely encourage future generations to take on daunting challenges and strive for success".

During her 254 day long voyage, the vessel has covered over 22,000 Nautical miles, visiting five countries – Australia, New Zealand, Falkland Islands (UK), South Africa and Mauritius. At each of these countries the crew received a rousing welcome both from the Indian diasporas as also from the local community. During the course of her voyage, the vessel has met all criteria of circumnavigation, viz. crossing the Equator twice, crossing all Longitudes, as also the three great capes (Cape Leeuwin, Cape Horn and Cape of Good Hope). The expedition was covered in six legs, with halts at 5 ports: Fremantle (Australia), Lyttleton (New Zealand), Port Stanley (Falklands), Cape Town (South Africa) and Port Louis (Mauritius).

The crew and the vessel encountered rough seas on numerous occasions during the voyage. The extremely cold climate coupled with stormy weather conditions especially in the Southern Ocean made the task of circumnavigating the globe highly daunting and challenging. The vessel also witnessed winds in excess of 60 knots and waves up to 7 meters high, whilst crossing the Pacific Ocean.
The indigenously-built INSV Tarini is a 56-foot sailing vessel, which was inducted in the Indian Navy in February 2017, and has showcased the 'Make in India' initiative on the International forum.
The expedition titled 'Navika Sagar Parikrama' is in consonance with the National policy to empower women to attain their full potential. It has showcased 'Nari Shakti' on the world platform and helped change societal attitudes and mindset towards women in India by raising visibility of their participation in challenging environs.
The crew also collated and updated meteorological, ocean and wave data on a regular basis for accurate weather forecast by India Meteorological Department (IMD), as also monitored and reported marine pollution on the high seas. They interacted extensively with the local populace, especially children, during the port halts to promote Ocean sailing and the spirit of adventure.
A senior naval officer said, "The women officers have done the country proud not only in showing the Indian Flag at distant shores but also in demonstrating the sea faring capability of Indian women."

73. C
Ritual dance performed in some Kaali temples of Kerala
The theme of Mudiyettu is the mythological tale of a skirmish between the goddess Kali and the demon Darika.
It was formally acknowledged by UNESCO as a Masterpiece of the Oral and Intangible Heritage of Humanity in 2010.
The seven characters in mudiyettu-shiva, narada, darika, danavendra, badrakali, kooli and koimbidar
74. B
It is mainly practiced by peasants of the Konkan coast.
The artists personify the ten incarnations of Vishnu.
The performers wear masks of wood and papier mâché.
The three musical instruments used are Tabla, Zanj and paddle harmonium
75. D
Bommalattam – Tamil Nadu

- These are a combination of string and rod puppets.
- The dolls are made of wood and strings. The strings are tied to an Iron ring which the artist wears on his head.
- Bommalattam theatre has elaborate preliminaries which are divided into four parts – *Vinayak Puja, Komali, Amanattam and Pusenkanattam.*
- Bommalattam puppets are the laeges, heaviest and the most articulate of all traditional Indian marionettes.

76. A

Tholu Bommalata – Andhra Pradesh
The shadow theatre of Andhra Pradesh, Tholu Bommalata is known for its strongest and richest tradition. The shoulders, wait, elbows and knees of the puppets are jointed and are coloured on both the sides. The size of the puppets is large. The

themes for the show are usually drawn from the epics Mahabharata and Ramayana or from the Puranas. The background music for the theatre show is influenced by the classical music of the region

Putul Nautch of West Bengal:

Putul Nautch is the traditional rod puppet form of West Bengal. The puppets are carved from wood and follow different artistic styles varying from region to region. In Nadia district, rod-puppets used were of human size, similar to the Bunraku puppets of Japan. This form of rod puppetry is now almost extinct. The Bengal rod-puppets are about 3 to 4 feet in height and are dressed like the actors of Jatra – the traditional theatre form widely practiced in the State. There are three joints in the puppet. The head supported by the main rod is joined at the neck and both hands attached to rods are joined at the shoulders. The technique followed for manipulation of the puppets is highly theatrical. The singer is often accompanied by a drummer, harmonium and cymbals. The music and verbal text have close similarity with the Jatra theatre**.**

Yampuri of Bihar:

The traditional Rod puppet of Bihar is known as Yampuri. These rod puppets of Bihar are made of wood. These puppets are in one piece and do not have joints. Great dexterity is required while playing these puppets as they do not have flexible arms and legs. These are different from the traditional rod puppetry practiced in Orissa and West Bengal.

77. B

Recently, WHO has announced that Nepal has eliminated Trachoma and became the first country in South East Asia to do so.

What is Trachoma?

• It is a chronic infective eye disease caused by infection with the bacterium Chlamydia trachomatis which is transmitted through contact with eye and nose discharge of infected people, particularly young children who are most vulnerable to the infection.

• It is also spread by flies which come in contact with the infected person and is most common under poor environment, low personal hygiene and inadequate access to water.

• It is one of the causes of the avoidable blindness and one of the 18 Neglected Tropical Diseases (NTD).

• During 1950s, India was a hyperendemic to Trachoma. About 50%-80% children from North-west India were affected by it.

• Ministry of Health and Family Welfare of India had recently released National Trachoma Survey Report and also declared India Trachoma free under WHO GET2020 program, however it has not been yet announced by WHO

78. B

Recently, the Red Fort has been leased out to Dalmia group.

More about such lease

• The monument has been adopted under 'Adopt a Heritage' Scheme of Ministry of Tourism, wherein a company utilises its CSR to develop and upkeep the monument.

• The legal status of the monument does not change after adoption.

• The company does not collect any money from the public unless allowed by the government, and profits, if any, are used to maintain and upgrade tourism facilities. Arguments for involving private enterprises

• The ASI is responsible for the upkeep of these monuments. However, it faces various issues like lack of funds and expertise, inability in policing entry and warding off encroachers, etc.

• Outsourcing is already being done to restore monuments e.g. The Agha Khan and the Dorabji Tata Trusts were recently involved in the restoration of the Humayun's Tomb

. • Corporates frequently sponsor the development and upkeep of sites across the world, especially in Europe e.g. in restoration of the Colosseum, Trevi Fountain, management in Angkorvat Temple, etc.

• Along with the government, corporates can be allowed to take some responsibility with proper monitoring and safeguards. Arguments against their involvement

• The heritage of a country is national. It should be available to everybody and should not represent the agenda or interests of a private company.

• Many of the sites advertised for adoption are religious or of religious importance, pushing them further into the consumption-ruled private market can be seen questionable. Adopt A Heritage: Apni Dharohar Apni Pehchan

• It is a joint initiative of Ministry of Tourism, Ministry of Culture, ASI and State/UT Governments.

• It aims to involve public sector companies, private sector companies and corporate citizens/individuals to take up the responsibility for making heritage and tourism more sustainable through development, operation and maintenance of world-class tourist infrastructure and amenities at the Indian heritage sites.
• The program outlines concrete responsibilities for the private companies, such as creating new infrastructure, new amenities and new levels of cleanliness, maintaining the existing operations, making the monument more popular, and taking better care of tourists. • The firm will, among others, have a responsibility to better advertise the site but will also be able to advertise itself through the site.
• The companies are selected through Vision Bidding (i.e. company with best vision for the heritage site gets the opportunity), and are called Monument Mitras.
• The Project envisages limited 'access' to non-core areas and 'no handing over of monuments' are involved

79. D

This type of climate is found on the eastern margin of continent in warm temperate latitudes, just outside the tropics & comparatively has more rainfall than the Mediterranean climate in the same latitudes, coming mainly in summers.

- Eastern margin temperate climate can further be subdivided into 3 major type :

China Type	Temperate monsoonal (Central & North China including southern Japan)
Gulf Type	South eastern United States bordering Gulf of Mexico (slight monsoonal)
Natal Type	Natal (Africa), South Wales (Australia), Parana (Southern Brazil)-Paraguay-Uruguay & Northern Argentina (S America)

- Warm temperate eastern margin climate is typified by a warm, moist summer & a cool, dry winter strongly modified by maritime influence.
- Occasionally, the penetration of cold air from the continental interiors may bring down the temperature to the freezing point, but most of the time it is pleasantly warm.
- Rainfall is anything in-between 75 cm to 150 cm, fairly distributed throughout the year, with no dry month, except in the interiors of central China.
- Rain comes either as convection or orographic in summers & from depressions in winters.
- Great land mass of Asiatic interior & Pacific Ocean induces great pressure changes between summers & winters, giving rise to temperate monsoonal type of climate.
- In summers, intense heating of Asiatic interior sets up a region of low pressure in summer & tropical pacific air stream is drawn in as the rain bearing South-East Monsoon
- This results in heavy precipitation in China, approx. 100 cm of rainfall per annum, decreasing landwards with summer maximum in June & July
- In winters, a steep pressure gradient is set up between the cold interiors of Mongolia & Siberia, & a warmer Pacific coastland;
- This results in outward flow of continental polar air as the North West Monsoon, bitterly cold & very dry, causing only a little rain but considerate snow as the cold winds are warmed & moistened.
- Other characteristic features of China type of climate is great annual temperature range & occurrence of typhoons (intense tropical cyclones) that originate in Pacific Ocean, & move westward to the coastlands, bordering South China Sea.

80. D

Name of the Temperate Grassland	**Region**
Pustaz	Hungary and surrounding regions

Prairies	North America
Pampas	Argentina and Uruguay [Rain-shadow effect]
Bush-veld (more tropical)	Northern South Africa
High Veld (more temperate)	Southern South Africa
Downs	Australia
Canterbury	New Zealand

81. C

- Found **only** in the northern hemisphere [due to great east-west extent. Absent in the southern hemisphere because of the narrowness in the high latitudes].
- Experienced in the regions **just below Arctic circle.**
- On its poleward side, it merges into the **Arctic tundra**.
- The climate fades into the temperate **Steppe climate.**

Distribution

- It stretches along a continuous belt across **central Canada**, some parts of **Scandinavian Europe** and most of **central and southern Russian**. **[50° to 70° N]**

Absent in Southern Hemisphere

- Narrowness of the southern continents in the high latitudes is the main reason.
- The **strong oceanic influence** reduces the severity of the winter.
- Coniferous forests are found only on the mountainous uplands of southern Chile, New Zealand, Tasmania and south-east Australia.
- Summers are brief and warm reaching 20-25 °C whereas winters are long and brutually cold – always 30-40 °C below freezing.
- Annual temperature range of the Siberian Climate is the ***greatest [Almost 50-60 °C in Siberia].***
- Some of the lowest temperatures in the world are recorded in **Verkhoyansk** (68°N. 113°E) where -67 °C was once recorded.
- In North America, the extremes are less severe, because of the continent's lesser east-west stretch.
- All over Russia, nearly all the rivers are **frozen**. In normal years, the Volga is ice-covered more than 150 days.
- Occasionally cold, northerly polar local winds such as the **blizzards of Canada** and **buran of Eurasia** blow violently.
- Permafrosts [a thick subsurface layer of soil that remains below freezing point throughout the year] are generally absent as **snow is a poor conductor of heat** and protects the ground from the severe cold above.

82. D

Recently, work was started on Zojila tunnel in the north-east of Srinagar in Jammu and Kashmir. Importance of the tunnel

• It will provide all-weather connectivity between Srinagar, Kargil and Leh, which remain cut-off from rest of country for several months in the winter due to heavy snow.

• The project will make the travel free from threat of avalanches.

• The project is important from the strategic point of view as it will help the Leh-based 14 Corps, which is responsible for military developments in areas near the Pakistan and China borders.

83. D

Explanation:
Capital Market is the market is the market for medium and long term funds while money market is the market for short term funds. Capital market refers to all the facilities and the institutional arrangements for borrowing and lending medium term and long term funds. It deals with raising of money for purposes of investment by the central and state government. The supply of capital funds comes from :

1) Individual Savers
2) Corporate savings
3) Commercial Banks
4) Insurance companies
5) Specialized institutions like IFCI, ICICI, IDBI, UTI etc
6) Government
7) LIC, GIC
8) Provident funds
9) Mutual funds
10) Merchant bankers
11) Leasing companies

84. C
Explanation:
Capital market is broadly divided into two :

1) Gilt edged market
2) Industrial securities market

Gilt edged market refers to the market for government and semi government securities, backed by Reserve Bank of India. Hence securities traded in this market are more stable than industrial securities market. Industrial security market refers to the market for shares and debentures of old and new companies. The new issue markets are referred to as *primary market* that is raising new capital in the form of shares and debentures. The old issue markets are referred to as *stock exchanges*. It deals with securities already issued by the companies. Stock exchange is also referred to as *secondary market*.

85. A
Explanation:
G-SEC market is also known as Gilt edged market. Government securities are instruments issued by the government to borrow money from the market. "Government security" means a security created and issued by the Government for the purpose of raising a public loan or for any other purpose. Depending upon the expiry date, government securities are divided into short term and long term securities. Short term government securities are Treasury bills. They have a maturity of less than one year. There are three main treasury bills in India – 91 day, 182 day and 364 day. Long term government securities are known as government bonds or dated securities. They have a maturity period of five years, ten years, fifteen years etc. Now, government securities are popular investment assets for most of the financial institutions especially commercial banks. They prefer government securities because of many features unique to them. G secs is that they are very liquid. This is because the Gsecs are tradable in the stock m market. This means, to get money, the holder can sell it in the stock market. High marketability and tradability gives high liquidity for Gsecs. For commercial banks, by pledging government securities with RBI, it can avail a one day loan known as repo. Whenever a bank needs money it can approach the RBI to take loans by pledging the g secs. RBI plays a dominant role in G-SEC markets through its open market operations. Non resident Indians with proper authorization can invest in G-SEC markets. Minimum investment in G-SECs is Rs 10,000.

86. C
Explanation:
Industrial Finance Corporation of India (IFCI) is authorized to give long and medium term finance to companies engaged in manufacturing, mining, shipping, generation and distribution of electricity. IFCI was set up by Government of India in July 1948 . IFCI is authorized to issue bonds and debentures in the open market, to borrow foreign currency from World Bank and other organizations, accept deposits from public and also borrow from RBI.

87. B
Explanation:

Universal banks provides services such as investing in securities, credit cards, project finance, project counseling, merchant banking along with usual banking activities. S.H Khan Committee recommended for the setting up of Universal banks. He was the chairman of IDBI. This committee recommended the transformation of DFIs (Development Financial Institutions) to Universal banks in 1998. First Universal Bank was set up by ICICI (Industrial Credit and Investment Corporation of India).

88. B
Explanation:
Bioprospecting is an umbrella term describing the process of discovery and commercialization of new products based in biological resources, typically in less-developed countries. Bioprospecting often draws on indigenous knowledge about uses and characteristics of plants and animals. In this way, bioprospecting includes biopiracy, the exploitative appropriation of indigenous forms of knowledge by commercial actors, as well as the search for previously unknown compounds in organisms that have never been used in traditional medicine.

Bio-engineering is a branch which applies, engineering principles to living system. Bio-engineering is the application of engineering principles to address challenges in the field of biology and medicine. Various branches of life science like-molecular biology, bio-chemistry, pharmacology, micro-biology, cytology etc. are used in bio-engineering. Bioengineers have the ability to export new opportunities and solve problems within the domain of complex systems.

Biopsying : The removal and examination of a sample of tissue from a living body for diagnostic purposes.

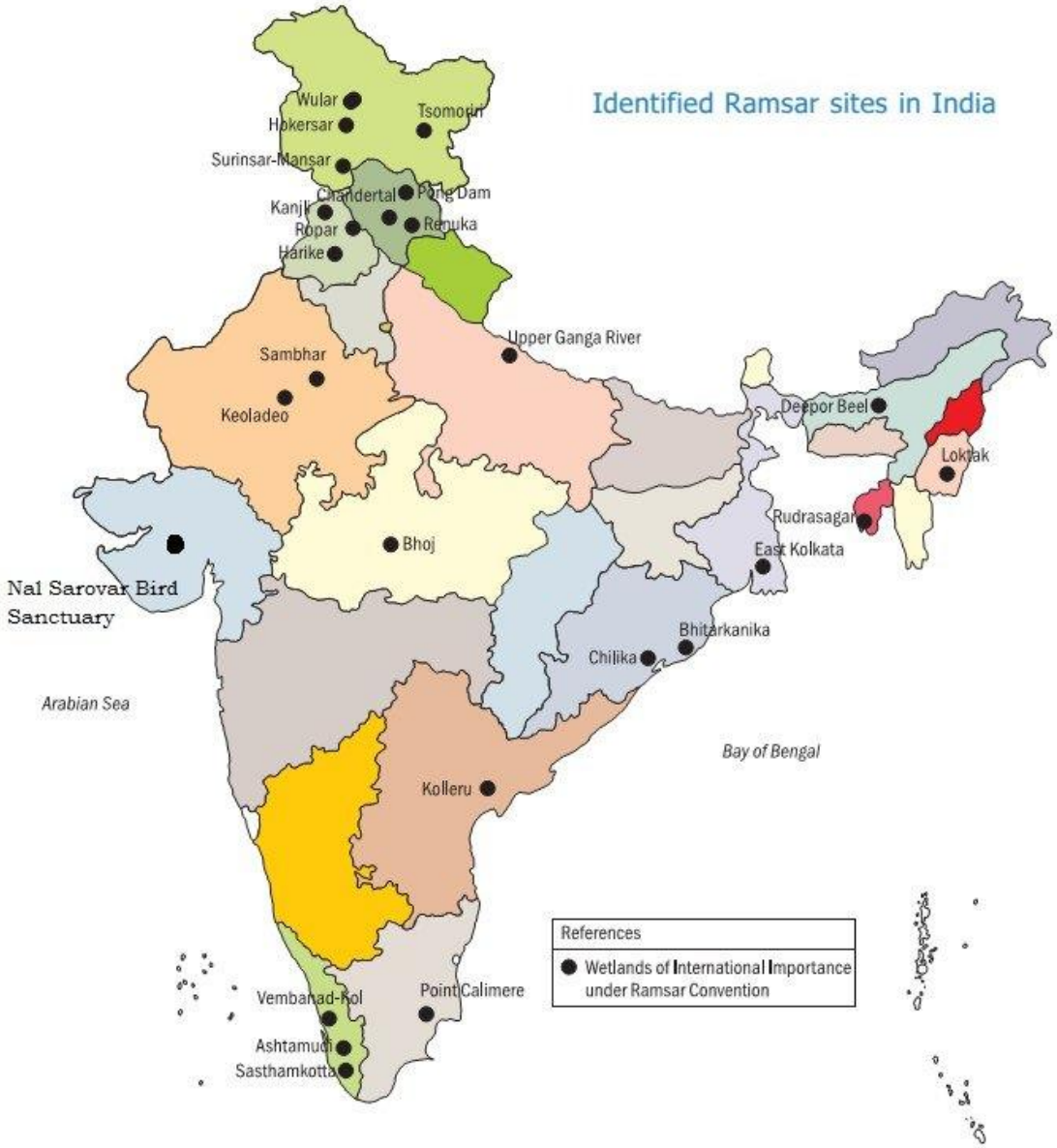
89. A
Explanation:
Biopiracy is the practice of commercially exploiting naturally occurring genetic material or biochemical. Most of the indigenous people possess a traditional knowledge that mainly comprises of genetic diversity and biological feature of the natural environment from generation to generation. Some of the traditional knowledge that is relevant to global survival includes the following components.
1) Medicinal Plants.
2) Farming or Agriculture.
3) Varieties of Food crops.
Biopiracy refers to use of bio-resources by multinational companies *without* proper authorization from the countries and people concerned *without* compensatory payment.

90. C
Explanation:
Biological Diversity Act, 2002

The government passed the biodiversity act to conserve and promote sustainable use of biological diversity and to regulate the access to biological resources of the country with equitable share in benefits.
It sets up National Biodiversity Authority (NBA), State Biodiversity Board (SBB) and Biodiversity Management Committees.
Besides, it aims to respect and protect knowledge of local communities traditional knowledge related to biodiversity and secure sharing of benefits with local people as conservers of biological resources and holders of knowledge and information relating to the use of biological resources.
Besides, it also has provisions for notifying heritage sites by State Government in consultation with local body.
The Act is meant to fulfill the objectives of the Convention on Biological Diversity.
National Biodiversity Authority, headquartered at Chennai was set up in 2003 to implement provisions of Biological Diversity Act 2002.

91. B
Explanation:

A wetland is a place where the land is covered by water. Marshes, ponds, the edge of a lake/ocean, the delta at the mouth of a river, low-lying areas that frequently flood — all of these are wetlands. Wetlands of international importance are also known as Ramsar sites.
Ramsar is a city in Iran. In 1971, an international treaty for conservation and sustainable use of wetlands was signed at Ramsar. The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".



92. B
Explanation:
The Act is to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.
whereas decisions were taken at the United Nations Conference on the Hum an Environment held in Stockholm in June, 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution;
and whereas it is considered necessary to implement the decisions aforesaid in so far as they relate to the preservation of the quality of air and control of air pollution.
The Central Board and State board were established under the Water (Prevention and Control of Pollution) Act, 1974.
The Act was amended in 1987 to include the noise pollution under this act.

93. B

Explanation:

The five major vegetation zones are :

1) Megatherms
2) Xerophytes
3) Mesotherms
4) Microtherms
5) Hekistotherms

A- Tropical

Average temperature of the coldest month is 18° C or higher

B- Dry Climates

Potential evaporation exceeds precipitation

C- Warm Temperate

The average temperature of the coldest month of the (Mid-latitude) climates years is higher than minus 3°C but below 18°C

D- Cold Snow forest

The average temperature of the coldest month is minus 3° C or below

E- Cold Climates

Cold Climates Average temperature for all months is below 10° C

The seasons of dryness are indicated by the small letters: f, m, w, and s.

f -no dry season

m – Monsoon climate

w- Winter dry season

s – Summer dry season

Megatherms: Where high temperatures prevail throughout the year and dominant vegetation is tropical rain forest

Xerophytes: xerophytes are plants which grow on substrate that usually become depleted of growth water to a depth of at least 2 decimeters during a normal season.

Thus, in arid zones, all plants not confined to the margins of streams or lakes have been considered as xerophytes

Mesotherms: With high temperature alternating with low temperature and dominant vegetation is tropical deciduous forests.

Microtherms: Where low temperatures prevail and vegetation is of mixed coniferous forests type, and

Hekistotherms: With very low temperatures and alpine vegetation being dominant

94. D

Explanation:

Equatorial hot, wet climate is found between 5* – 10* north & south of the equator mostly in

-the Amazon Basin (South America)

-the Congo Basin (Africa)

-Malaysia

-Indonesia

-Singapore

This climatic zone is subjected to seasonal shifting due to seasonal shifting of pressure and wind belts due to northward and southward migration of sun.

The convection uplift is related to the position of the ITCZ and rainfall totals double when the sun is directly overhead at the spring and autumn equinox, with the least rain falls at June & December solstices.

The relatively low nocturnal temperature becomes uncomfortable to local people(21 -24 degree Celsius).

Daytime temperature is unbearable due to high humidity , weak air circulation, bright sunlight.

95. B
Explanation:
The basic cause of monsoon climates is the difference in the rate of heating and cooling of land and sea. Average temperature of warm dry summer months ranges between 27°C and 32°C.
The natural vegetation of tropical monsoon lands depends on the amount of the summer rainfall. Trees are normally deciduous because of the marked dry period, during which they shed their leaves to withstand the drought.
In regions like the Indian sub-continent which have a true Tropical Monsoon Climate, three distinct seasons are distinguishable - The cool, dry season (October to February), the hot dry season (March to mid-June) and the rainy season (mid-June
to September).
Monsoon rainfall is basically cyclonic in character.

96. C
Explanation:
The Savannah or Sudan Climate is a transitional type of climate found between the equatorial forest and the trade wind hot deserts. It is confined within the tropics and is best
developed in the Sudan where the dry and wet seasons are most distinct, hence its name the Sudan Climate. The belt includes West African Sudan, and then curves southwards into East
Africa and southern Africa north of the Tropic of Capricorn. In South America, there are two distinct regions of savannah north and south of the equator, namely the llanos of the Orinoco basin and the Campos of the Brazilian Highlands. The savannah landscape is typified by tall grass and short trees. The terms 'parkland' or 'bush-veld' perhaps describe the landscape better.

During summer solstice (June 21), cyclones cause rainy conditions in these regions.
During winter solstice (December 23), anticyclones make these regions dry in these regions.

97. C
Explanation:
The Mediterranean type of climate, climatically known as subtropical dry summer climate is found in areas around Mediterranean Sea. This climate or biome is referred to as sclerophyll ecosystem because of the development of special features and characteristics in the dominant trees and shrubs to adapt to the typical environmental conditions –dry summer and wet winter. This climate has 3 distinct characteristics.
1) Wet winter and dry summer season
2) Warm and hot summers and mild winters
3) Abundant sunshine throughout the year.
This climate is found between 30 – 40 degree latitudes in both the hemispheres and mostly in the western parts of the continents. This climate originates due to seasonal shifting of wind and pressure belts.
The leaves have sclerophyllous characteristics in that they are stiff and hard and the stems have thick barks.
Mediterranean biomes are locally known by different names.
1) Maquis or garigue – Southern Europe
2) Chaparral – California
3) Fymbos – South Africa
4) Mallee – Australia

98. B
Explanation:
China type of climate is subtropical humid climate characterized by hot summer, mild to cold winter, spatial variation in temperature, humidity and precipitation and is located between 20 – 40 degree latitudes. Following are the difference between Mediterranean and China type of climate.
1) Mediterranean climate is found in the western part of the continent while China climate is on the eastern coastal areas.

2) Mediterranean climate has wet winter and dry summer while China climate has maximum rainfall in summer though rainfall is received throughout the year.
3) Mean annual rainfall is higher in China type of climate as compared to Mediterranean type.
China climate is similar to monsoon climate in some characteristics, hence it is also called sub monsoon climate.
Dense forests of evergreen nature are found in more humid areas and deciduous sparse forest and grasslands in moderate rainfall areas.

99. C
Explanation:
Tundra region is the region of least vegetation and polar or artic climates are found in this region. Tundra climate is characterized by absence of insolation and sunlight and very low temperature throughout the year. The average annual temperature is -12 degree Celsius. Winters are long, bitterly cold and very severe while summers are very short but cool. Diurnal range of temperature is very low because of very little difference in day and night temperatures. But annual range is large. The ground surface is covered with snow at least for 7 to 8 months. The region is swept by speedy cold powdery storms known as *blizzards*.
Ground is permanently frozen (Permafrost). The vegetation of tundra climate is cryophytes. That is, the vegetation well adapted to severe cold conditions.
100. D
The union ministry of power has launched web portal and app namely PRAAPTI(payment ratification and analysis in power procurement for bringing transparency in invoicing of generators).The web portal and app aims to bring transparency in power purchase transactions between generators and Discoms.This app will allow users to know the details related to payments made by Discoms to power generators and when they were made.

Prime Minister of India, Shri Narendra Modi launched today his ambitious multi-purpose and multi-modal platform PRAGATI (Pro-Active Governance And Timely Implementation). PRAGATI is a unique integrating and interactive platform. The platform is aimed at addressing common man's grievances, and simultaneously monitoring and reviewing important programmes and projects of the Government of India as well as projects flagged by State Governments.