

###ANSWERS###

1. Ans. A.

Odia poet Dr. Rajendra Kishore Panda was chosen for the 2020 Kuvempu award. Hence, option A is correct.

Explanation)

- A three-member panel have chosen Odiya poet Rajendra Kishore Panda for the 2020 Kuvempu Rashtriya Puraskar.
- Rashtrakavi Kuvempu Pratishtana secretary Kadidal Prakash said in a press release that the panel, which included Kannada poet H S Shivaprakash, member Agrahara Krishnamurthy, & eminent Bengali literature writer Shyamal Bhattacharya, chose Panda for the prestigious award, which comes with a cash prize of Rs 5 lakh, a silver medal, as well as a citation.
- The award ceremony was postponed due to the Covid-19 pandemic. Panda would receive it in the near future, he added.

2. Ans. B.

Avani Lek-hara became the first Indian woman to win two Paralympics medals at the Tokyo Paralympics 2020. The shooting was her discipline. Hence, option B is correct.

Explanation)

- Avani Lekhara, a trailblazing shooter, became the first-ever Indian woman to win two Paralympic medals, adding the 50m Rifle 3 Position SH1 bronze to the gold she had won earlier in the Games here.
- Lekhara, 19, qualified for the event in second place with a score of 1176, including 51 inner tens.
- In the fiercely contested finals, Lekhara totalled 445.9 to finish ahead of Ukraine's Iryna Shchetnik, who lost her medal position due to a poor third shot of 9.9 in the elimination.









3. Ans. C.

Bagram Air Base is located in Afghanistan. Hence, option C is correct.

Explanation)

- Bagram Airfield-BAF, also known as Bagram Air Base, is an Afghan military base that was previously the largest US military base in Afghanistan.
- It is situated next to the ancient city of Bagram, 11 kilometres (6.8 miles) southeast of Charikar in Afghanistan's Parwan Province.
- It has a single runway that can accommodate large military aircraft such as the Lockheed Martin C-5 Galaxy and Antonov An-225.
- It was manned by the 455th Air Expeditionary Wing of the United States Air Force, as well as rotating units of the United States and coalition forces.

4. Ans. D.

The Panchmuli Lake is situated near the Statue of Unity. Hence, option D is correct.

Explanation)

- Panchmuli Lake is located in Kevadia, Gujarat, near the Sardar Vallabhbhai Patel 'Statue of Unity.'
- It made headlines because 194 crocodiles were relocated from the lake in the last two years for the safety of tourists.
- According to officials, 143 crocodiles were relocated in the year 2019-20, and 51 were relocated to two rescue centres in the year 2020-21.

5. Ans. B.

Pinaka, developed in India, is a multi-barrel rocket launcher. Hence, option B is correct.

Explanation)

2 | Page







- Pinaka is a multiple rocket launcher developed in India for the Indian Army by the DRDO (Defence Research & Development Organisation).
- The system can fire a salvo of 12 HE rockets in 44 seconds and also has a maximum range of 40 km for the Mark-I and 60 km for the Mark-I enhanced version.
- For mobility, the system is installed on a Tatra truck. During the Kargil War, Pinaka was used to successfully neutralise enemy positions on the mountain tops.
- It has since been integrated in large numbers into the Indian Army.

'itat e-dwar' is an e-filing portal of the Income Tax Appellate Tribunal. Hence, option B is correct.

Explanation)

- The 'ITAT e-dwar' portal aims to improve accountability, accessibility, and transparency in the ITAT's day-to-day operations.
- It would not only result in a reduction in paper use & cost savings, but also in a rationalisation of case fixation, resulting in faster case disposition.
- The e-Filing Portal will allow parties to file Appeals, documents, Miscellaneous Applications, and paper books electronically.
- All communications regarding their appeals, such as the filing of the appeal or the hearing date, pronouncements, adjournments, and dispositions, will be sent to the appellant's mobile phone and email address.
- 7. Ans. A.

1000 – 2000 km is the range capability of Agni-P Ballistic Missile. Hence, option A is correct.

Explanation)









- Agni-P, also known as Agni-Prime, is a medium-range ballistic missile being developed by the DRDO (Defence Research & Development Organisation) as a replacement for the Agni-I & Agni-II missiles in the operational service of Strategic Forces Command, with major improvements in the form of the composite motor casing, manoeuvrable reentry vehicle (MaRV), enhanced propellants, navigation, & guidance systems.
- It is the 6th ballistic missile in the Agni (missile) series. Agni Prime can be transported by train or kept in a canister.

8. Ans. D.

Goa has recently declared itself as the first rabies-free State. Hence, option D is correct.

Explanation)

- According to Goa Chief Minister Pramod Sawant, the state has not observed a single rabies case in the last three years.
- This makes Goa the nation's first rabies-free state.
- Over 5 lakh dogs have been immunised against rabies in the state.
- It has also established 24-hour rabies surveillance, as well as an emergency hotline and even a rapid response team for dog bite victims.

9. Ans. A.

Department of Public Enterprises is a part of the Ministry of Finance. Hence, option A is correct.

Explanation)

- BPE was elevated to the status of a full-fledged Department in May 1990, when it was renamed the Department of Public Enterprises (DPE). It is currently part of the Ministry of Finance.
- The Department of Public Enterprises (DPE) is the nodal department for all Central Public Sector Enterprises (CPSEs) and develops CPSE policy.









- It establishes policy guidelines for CPSEs in areas such as performance improvement as well as evaluation, autonomy & financial delegation, and personnel management.
- It also collects & maintains information in the form of a Public Enterprises Survey on a variety of CPSE topics.

Rakesh Sharma, a former Indian military pilot and cosmonaut, became the first Indian and the 138th person to travel in space on this day in the year 1984.

Kalpana Chawla's first space mission began on 19th November 1997, when she was a member of the six-person crew of the Space Shuttle Columbia flight STS-87. Kalpana Chawla was the first Indian-born woman as well as the second Indian to fly in space, after cosmonaut Rakesh Sharma, who flew in a spacecraft in the year 1984.

On 9th December 2006, Williams boarded the space shuttle Discovery for the STS-116 mission to the International Space Station, where she served as a flight engineer for Expeditions 14 & 15.

After Rakesh Sharma, Kalpana Chawla, and Indian-American Sunita Williams, Sirisha Bandla became the fourth person of Indian origin to accomplish the feat.

Hence, option B is correct.

11. Ans. B.

Jovenel Moise, the president of Haiti, was assassinated recently on 7th July 2021. Hence, option B is correct.

Explanation)

- The killing is being blamed on a group of 28 foreign mercenaries. First Lady Martine Mose was also shot multiple times during the attack and also was airlifted to the US for emergency treatment.
- Later that day, three of the suspected assassins were killed & 20 others were arrested.







- A manhunt is underway for five additional gunmen, and also the masterminds of the attack, one of whom was apprehended on 11th July.
- The president's security guards were not killed or injured in the attack, according to Haitian Chief Prosecutor Bedford Claude.

12. Ans. C.

Recently, the Ministry of Cooperation was formed under the Government of India. Hence, option C is correct.

Explanation)

The Ministry of Cooperation is a govt ministry in India that was established in July 2021. The ministry provides a distinct administrative, legal, as well as the policy framework for strengthening the nation's cooperative movement.

The establishment of the ministry was announced on 6th July 2021, along with its vision statement of "Sahkar se samriddhi" (i.e. prosperity through cooperation). Prior to the establishment of this ministry, the Ministry of Agriculture was in charge of its objectives.

The ministry works to enhance co-operatives at the grassroots level by streamlining processes for 'Ease of Doing Business' for co-operatives & facilitating the development of Multi-State Co-operatives (MSCS).

13. Ans. D.

Indian Naval Ship INS Tabar had recently participated in a two-day naval exercise with the Italian Navy. The exercise was conducted the Mediterranean Sea. Hence, option D is correct.

Explanation)

- The INS (Indian Naval Ship) Tabar recently took part in military exercises with the Italian Navy's frontline frigate.
- INS Tabar joined the Italian Navy and arrived in Port of Naples on 3rd July as part of the ongoing Mediterranean deployment.

6 | Page



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- During his visit, Commanding Officer Captain Mahesh Mangipudi met with senior officers from the Prefect of Naples Authority, the regional Italian navy headquarters, and the coast guard headquarters.
- This exercise covered a variety of naval operations, including replenishment at sea, air defence procedures, communication drills, and day & night cross deck helo operations.
- The exercise benefited both parties by improving interoperability as well as consolidating combined operations against maritime threats.

14. Ans. C.

China has recently been awarded a malaria-free certification by the WHO. Hence, option C is correct.

Explanation)

- China has been declared "malaria-free" by the WHO (World Health Organization).
- It is the result of a seven-decade-long, multi-pronged health strategy that has successfully eliminated indigenous cases for four years in a row.
- The certification is granted by WHO after a country has demonstrated, through rigorous, credible evidence, that the system of indigenous malaria transmission by Anopheles mosquitoes has been disrupted nationwide for at least three consecutive years.
- A country must also demonstrate its ability to prevent transmission from resuming.
- The WHO Director-General makes the final decision on whether to award a malaria-free certification, centred on a recommendation from the independent MECP (Malaria Elimination Certification Panel).

15. Ans. B.

Sheikh Mujibur Rahman was honoured with Gandhi Peace Prize for the year 2020. Hence, option B is correct.

Explanation)

7 | Page







- Bangabandhu Sheikh Mujibur Rahman has been awarded the Gandhi Peace Prize for 2020. The Gandhi Peace Prize is an annual award established by the Govt. of India since 1995, the year of Mahatma Gandhi's 125th birth anniversary. The award is open to all individuals, regardless of nationality, language, race, caste, creed, or gender.
- The award includes a citation, a plaque, as well as an exquisite traditional handicraft/handloom item worth Rs. 1 crore.
- As Bangladesh commemorates Mujib Borsho, India is honoured to be commemorating his legacy alongside the people and government of Bangladesh.

16. Ans. D.

Dholavira was in the news as it received the UNESCO World Heritage Tag. Hence, option D is correct.

Explanation)

- During the 44th meeting of UNESCO's World Heritage Committee, Dholavira, an archaeological site of a Harappan-era city, was designated a UNESCO World Heritage Site.
- Dholavira is also known as Kotada timba in the local dialect.
- Previously, the Govt submitted a nomination dossier for 'Dholavira: A Harappan City' to be included on the World Heritage List in the year 2020.
- Dholavira is now the 40th Indian site to be inscribed on the UNESCO World Heritage List.

17. Ans. C.

Durand Cup is the oldest football tournament in Asia. Hence, option C is correct.

Explanation)

- The Durand Cup is well-known for being Asia's oldest football tournament. The first edition of the competition was held in the year 1888.
- Since then, there have been 130 editions of the Durand Cup, with only wars and the COVID-19 pandemic interfering with the tournament's staging.

8 | Page



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• East Bengal & Mohun Bagan are the most successful teams in the tournament's history, with both Kolkata giants winning it 16 times.

18. Ans. A.

Karnam Malleswari is the first Indian woman to win a medal in the Olympics. Hence, option A is correct.

Explanation)

- Karnam Malleswari is a retired Indian weightlifter who was born on 1st June 1975.
- She was the first Indian woman to win an Olympic medal in the year 2000.
- She received the Arjuna Award in the year 1994 and the Rajiv Gandhi Khel Ratna award, India's highest sporting honour, as well as the civilian Padma Shri award in the year 1999.
- Malleswari won the 54 kg world title in 1994 & 1995 and finished third in 1993 & 1996.
- 19. Ans. A.

The Russian Federation participated in the Tokyo Olympics, 2020 under the name ROC (Russian Olympic Committee). Hence, option A is correct.

Explanation)

- Russia, or the Russian Federation, is the official designation of the world's largest country, which finished fourth in Rio 2016 after winning 56 medals.
- However, the country cannot use its name, flag, or anthem at the 2021 Tokyo Olympics.
- Instead, the country will compete under the nickname "ROC," which stands for the Russian Olympic Committee.
- This is because Russia was sanctioned by the CAS (Court of Arbitration for Sport) after being accused of operating a state-sponsored doping programme.
- 20. Ans. B.









North-East Region and Andaman and the Nicobar Islands are in special focus in the National Mission on Edible Oils – Oil Palm. Hence, option B is correct.

Explanation)

- The Union Cabinet, chaired by PM Shri Narendra Modi, has approved the launch of a new oil palm mission called the national Mission on Edible Oils Oil Palm (NMEO-OP) as a new Centrally Sponsored Scheme with a special emphasis on the North East region as well as the Andaman and Nicobar Islands.
- Because of the country's reliance on imported edible oils, it is critical to make efforts to increase domestic production of edible oils, which includes increasing the area and productivity of oil palm.
- The scheme has received a financial outlay of Rs. 11,040 crores, of which Rs. 8,844 crores is the Govt. Of India share and Rs. 2,196 crores are the State share, which involves viability gap funding.

21. Ans. B.

The town of Chisht, from which the Sufi Chishti Silsila derives its name, is located in Central Afghanistan. Hence, option B is correct.

Explanation)

- The Chishti silsila was introduced to India by Sufi saint Khwaja Muin-ud-Din Chishti. He arrived in India in the year 1161 with Mahmud of Ghazni and stayed in Ajmer until 1236.
- His tomb, or dargah, is considered an important pilgrimage site, and an annual festival called Ursis is held there. Many devotees & followers continue to visit the tomb.
- Bakhtiyar Kaki & his disciple Fariduddin Ganj-i-Shakar were two other saints and followers of Khwaja Muin-ud-Din.
- Nizamuddin Auliya & Shaikh Nasiruddin Mahmud were known as 'Chirag-i-Delhi' in Delhi. Another well-known Sufi saint was Sheikh Salim Chishti of Ajmer.

22. Ans. A.









The rules for congregational worship (Sangat) involving collective recitation were organized by Guru Nanak. Hence, option A is correct.

Explanation)

About Guru Nanak:

- He saw the god as formless and genderless and proposed a simple way to connect with him by simply remembering and repeating his name.
- He established rules for congregational worship (Sangat), which included collective recitation.
- He named Angad as his successor as Guru.
- He never intended to found a new religion, but after his death, his followers consolidated his practices and distinguished themselves from both Hindus and Muslims by calling themselves 'Sikhs.'

23. Ans. C.

Malti at Pithoragarh will be at more risk with respect to the earthquake hazard zone specified by the Geological Survey of India. Hence, option C is correct.

Explanation)

- This zone includes Kashmir, the Central and Western Himalayas, North & Middle Bihar, the Rann of Kutch, the North-East Indian region, and the Andaman & Nicobar Islands.
- In general, earthquakes are more likely in areas with trap rock or basaltic rock.

24. Ans. D.

The Government wants to prepare a plan for drought-prone areas of the country. Kutch region will be predominantly focused. Hence, option D is correct.

Explanation)

Drought killed tens of millions of people in India during the 18th, 19th, and 20th centuries.

11 | Page







- A favourable sour monsoon is crucial to securing water for irrigating India's crops.
- The failure of the monsoons induces water shortages in parts of India, which tends to result in p yields.
- This is especially true in drought-prone areas such as eastern Maharashtra, Andhra Pradesh, northern Karnataka, Gujarat, Odisha, Telangana, and Rajasthan.

25. Ans. A.

Four persons are travelling to the different states of India. I will advise the person travelling to Arunachal Pradesh to protect oneself from blizzards. Hence, option A is correct.

Explanation)

- The blizzard hit Arunachal Pradesh, as well as the local army unit swung into action within an hour to save the tourists, who included nationals from New Zealand, Japan, and Bulgaria.
- The blizzard hit Sela, Ahirgarh, and Nuranang in the West Kameng district, disrupting traffic from Tezpur to Tawang.
- After becoming trapped in a raging snowstorm at the historic Sela Pass near Tawang in Arunachal Pradesh, 127 other tourists, which include five foreigners, were rescued by the army.

26. Ans. A.

Rajasthan state is not prominent for plantation agriculture. Hence, option A is correct.

Explanation)

Plantation agriculture is described as the development of one or more crops, usually cash crops, on a large scale. It is most prevalent in tropical climates, where cash crops grow more naturally.







Rajasthan has three agricultural seasons: Rabi (winter season), Kharif (rainy season), and Jayad (summer season). Kharif crops include maize, bajra, jawar, groundnut, rice, gram, wheat, jou, mustured, and so on.

27. Ans. C.

The distance between Manali to Leh has been reduced by the Atal Tunnel. Hence, option C is correct.

Explanation)

- The tunnel shortens the distance and time it takes to travel between Manali & Keylong on the way to Leh. The previous route, which went via Gramphu, was 116 kilometres (72.1 miles) long and took 5 to 6 hours in good conditions.
- The Atal Tunnel (also recognised as the Rohtang Tunnel) is a highway tunnel built beneath the Rohtang Pass on the Leh-Manali Highway in Himachal Pradesh, State of India, in the eastern Pir Panjal Range of the Himalayas.
- With the current Atal Tunnel & the completion of the under-construction Shingo La Tunnel, both the Leh-Manali Highway and the Nimmu-Padum-Darcha road routes will be all-weather roads by the year 2024.

28. Ans. B.

Gulf of Mannar biosphere reserve is the biosphere reserve that comprises islands with estuaries, beaches, coral reefs, salt marshes and mangroves. Hence, option B is correct.

Explanation)

- The Gulf of Mannar Biosphere Reserve spans 1,050,000 hectares on India's south-east coast, across from Sri Lanka. In terms of marine biodiversity, it is among the world's richest regions.
- The biosphere reserve is made up of 21 islands with estuaries, beaches, & nearshore forests, as well as a marine component with algal communities, coral reefs, sea grasses, salt marshes, and mangroves.









 Among the 3,600 plant and animal species found in the Gulf are the worldwide endangered sea cow (Dugong dugon) and six mangrove species found only in peninsular India.

29. Ans. A.

To make the right to free & compulsory education a fundamental right, the Constitution (Eighty-third Amendment) Bill, 1997, not Constitution (Eighty-Fifth) Amendment Act, was introduced in Parliament to add a new article, namely, article 21 A, conferring the right to free as well as compulsory education on all children aged 6 to 14 years. Hence, option A is correct.

Explanation)

Article 22 ensures that each arrested person faces a trial & is adequately represented in a legal manner. The Article 22 did not exist in India's draught constitution. This right falls under the category of "Right to Freedom" and is one of the most essential safeguards for Indian arrestees and detainees.

Part III of the Indian Constitution provides for legal remedies to protect these rights in the event that they are violated by the State or other institutions/individuals. It empowers Indian citizens to petition the Supreme Court or High Courts for the enforcement of their rights.

The high court has broader writ jurisdiction than the Supreme Court. This is due to the SC's ability to issue writs only for the enforcement of fundamental rights and not for any other purpose, i.e. it does not extend to cases where an ordinary legal right is alleged to have been violated.

30. Ans. B.

Elections for the Constituent Assembly were held for the first time under the Cabinet Mission Plan of 1946. The Constituent Assembly drafted the Indian Constitution, which was implemented on 16th May 1946, as part of the Cabinet Mission Plan. Hence, option B is correct.

Explanation)

• Cripps Mission Proposals:

14 | Page



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- Establishment of an Indian dominion. This dominion would have the option of remaining in the British Commonwealth or seceding from it. It would also be free to participate in international organisations.
- A Constituent Assembly would be formed to draught the country's new constitution. Members of this Assembly would indeed be elected by provincial assemblies & nominated by the princes.
- Any province that refuses to join the Indian dominion may form a separate union with its own constitution.
- Negotiations between both the Constituent Assembly as well as the British government would ensure the transfer of power & the rights of minorities.
- Meanwhile, until the new constitution takes effect, the British will control India's defence, and the Governor-powers General's will remain unchanged.

The procedure for amending the Indian Constitution is outlined in Article 368. The Indian Constitution is neither rigid nor flexible because, according to Article 368, the Constitution can be amended by a simple majority, a special majority, as well as a majority of not less than two-thirds of the members of each house.

A Constitution Amendment Bill introduced under Article 368 may be introduced in either House of Parliament and must be passed by a special majority in each House.

Part-xx Article 368 (1) of the Indian Constitution grants constituent power to make formal amendments & empowers Parliament to amend the Constitution by adding, modifying, or repealing any provision in accordance with the procedure set out in the Constitution, which differs from the procedure for the ordinary legislation.

Hence, option B is correct.

32. Ans. C.

The internal disturbance is not a circumstance for the proclamation of Emergency by the President of India under Article 352 of the Constitution of India. Hence, option C is correct.

15 | Page







Explanation)

- According to Article 352, if the President believes that a grave emergency exists in which the security of India or any part of its territory is threatened, whether, by war, external aggression, or armed rebellion, he may issue a proclamation to that influence in respect of the whole of India or such part of its territory as may be specified in the Proclamation Explanation.
- A Proclamation of Emergency proclaiming that the security of India or any part of its territory is threatened by war, external aggression, or armed rebellion may be issued prior to the actual occurrence of war, aggression, or rebellion if the President is satisfied that there is an obvious threat of such occurrence.

33. Ans. B.

Akbar issued a Farman in 1598 permitting in the city of Cambay (Khambat), Gujarat, the construction of a Church. Hence, option B is correct.

Explanation)

- An excerpt from a Farman (an imperial order) issued by Akbar in the year 1598 depicts a church in Khambat.
- Whereas it has come to our eminent as well as holy attention that the Padris (fathers) of the Holy Society of Jesus wish to create a house of prayer (church) in the city of Kambayat (Khambat, in Gujarat), an exalted mandate is being issued, that such dignitaries of the city of Kambayat should in no way stand in their way, but should develop a church so that they can engage in their own worship.

34. Ans. B.

Domingo Paes, the medieval traveller, has! described the city of Vijayanagara. Hence, option B is correct.

Explanation)

• Domingo Paes was a Portuguese traveller who visited the Vijayanagara Empire in the southern India's Deccan around 1520.

16 | Page



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- He went there as part of a group of traders from Goa's former colony. His visit occurred during King Krishna Deva Raya's reign, and Paes documented his impressions of the Vijayanagara state in his Chronica dos reis de Bisnaga ('Chronicle of the Vijayanagar kings').
- His detailed description is among the few known descriptions of the empire & its capital, Vijayanagara (Hampi), by an outsider.

35. Ans. D.

The extent of damage caused by an earthquake is not influenced by the climate of the area. Hence, option D is correct.

Explanation)

The severity of damage caused by an earthquake is determined by the intensity of the earthquake shaking. The main factors influencing earthquake shaking intensity are, in turn, earthquake depth, the underlying soil, proximity to the fault, and building characteristics, particularly height.

Factors Influencing the Impact of an Earthquake:

- Location
- Magnitude
- Depth
- Distance from epicentre
- Local geological conditions
- Secondary effects
- Architecture

36. Ans. B.

An avalanche is a 'Terrestrial' type of disaster. Hence, option B is correct.

17 | Page



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Explanation)

Atmospheric disasters include blizzards, lightning, tropical cyclone, thunderstorm, tornado, drought, heatwaves, hailstorms, frost, cold waves, etc.

Terrestrial disasters include earthquakes, landslides, volcanic eruptions, avalanches, subsidence, etc.

Aquatic disasters include flood, storm surge, tidal waves, tsunami, etc.

Biological disasters include bacterial, fungal, and viral diseases (for e.g. bird flu, dengue, etc.).

37. Ans. A.

An infection constantly maintained at a baseline level in a geographic area without external input is known as Endemic. Hence, option A is correct.

Explanation)

- In epidemiology, an infection is seen to be endemic in a population when it is constantly retained at a baseline level in a geographic area without the presence of external inputs.
- In the United Kingdom, for example, chickenpox is endemic (present all year), but malaria is not. Each year, a few cases of malaria are reported in the United Kingdom, but these do not result in sustained transmission in the population due to a shortage of a suitable vector (mosquitoes of the genus Anopheles).

38. Ans. C.

Streams and rivers coming from the mountains deposit heavy materials of rocks and boulders in Bhabar. Hence, option C is correct.

Explanation)

• Bhabar is a narrow belt that runs parallel to the Shiwalik foothills at the slope's break. As an outcome, streams and rivers flowing from the mountains deposit heavy materials such as rocks & boulders and, in some cases, disappear in this zone.

18 | Page







- Only large trees with large roots are available in this area, which is unsuitable for agriculture.
- Construction materials are available in the form of large boulders.
- Footloose industries have recently been encouraged.

There shall be one general electoral roll for each territorial constituency for election to either House of Parliament or to the House or either House of a State's Legislature, and no person shall be ineligible for inclusion in any such roll or claim to include in any special electoral roll.

Article 325 states that no one shall be denied inclusion on the electoral roll solely on the basis of religion, race, caste, sex, or any combination of these factors.

Citizens are eligible to vote under the following conditions, according to the Election Commission of India:

- Unless disqualified, any citizen who is 18 years old on the qualifying date (January 1 of the year) is eligible to enrol.
- Enrollment is only available at the normal place of residence.
- Enrollment is only available in one location.
- Overseas Indians who are deemed to be ordinarily resident at the address listed on their passport.

Hence, option B is correct.

40. Ans. B.

Freedom of speech, Freedom of religion, Artistic Freedom, Freedom to love or work wherever are individual freedoms denied in a totalitarian state. Hence, option B is correct.

Explanation)

19 | Page







- Totalitarianism is a recent form of autocracy that is distinguished by the concentration of power in a single centre, whether it is an individual dictator or a group of power holders such as with a committee or a party leadership.
- The primary distinction between totalitarian & authoritarian governments is that totalitarian govt. exercise total control over citizens' lives and freedoms, whereas authoritarian governments grant citizens certain individual liberties.
- Totalitarianism is a type of government that seeks total control over its citizens' lives. It is distinguished by a strong central rule that attempts, through coercion and repression, to control and direct all aspects of individual life. It does not allow for individual liberty.
- One-party states are typically considered authoritarian, to the point of being totalitarian at times. On the other hand, not all authoritarian or totalitarian states are ruled by a single party. Some, particularly absolute monarchies and military dictatorships, believe that there is no need for a ruling party and thus declare all political parties illegal.

The federation of the United States of America (U.S.A) has been described as "an indestructible union of indestructible states". Hence, Option B is correct.

Explanation)

- States in India, unlike most other federations, have no right to territorial integrity. Any state's area, boundaries, or name can be changed unilaterally by the Parliament. Furthermore, it only requires a simple majority, not a special majority.
- As a result, the Indian Federation is defined as "an indestructible Union of destructible states." In contrast, the American Federation is characterised as "an indestructible Union of indestructible states."

42. Ans. A.

"The End of History and the Last Man" was Francis Fukuyama. Hence, Option A is correct.

Explanation)

20 | Page



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- The End of History and the Last Man is a 1992 book of political philosophy written by American political scientist Francis Fukuyama.
- It contends that with the ascendancy of Western liberal democracy following the Cold War (1945–1991) as well as the dissolution of the Soviet Union (1991), humanity has reached "not just the passing of a particular period of post-war history, however the end of history as such: That is, the end-point of mankind's ideological evolution & the unification of the world."

43. Ans. D.

The Gauhati High Court's main seat is in Guwahati, Assam. There are three outlying benches on the court. They are as follows:

- The Kohima bench for Nagaland state (est. on 1st December 1972)
- The Aizawl bench for Mizoram state (est. on 5th July 1990)
- The Itanagar bench for Arunachal Pradesh state (est. on 12th August 2000)

Hence, Option D is correct.

44. Ans. C.

The Member abstains from voting in the House without prior permission is not a condition for the disqualification of a Member of Parliament. Hence, Option C is correct.

Explanation)

Article 102 of the Indian constitution states that a member of parliament will be disqualified if any of the following conditions are met:

- He holds any profit-making office in the federal or state govt (except that of a minister or any other office exempted by Parliament)
- He is of unsound mind, as determined by a court.
- He is an unsolved insolvent.

21 | Page



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- He is no longer an Indian citizen.
- Parliament has disqualified him under any other law.

Granville Austin considered the Directive Principles of State Policy as aiming at 'furthering the goals of social exclusion. Hence, Option B is correct.

Explanation)

- According to the famous author Granville Austin, the Indian Constitution is first & foremost a social document.
- The large number of the provisions are either aimed specifically at furthering the goals of the social revolution or endeavour to foster this revolution by establishing the conditions for its success.
- Despite the fact that the goal of national renaissance pervades the entire Constitution, the core of the devotion to the social revolution is found in Parts III & IV, the Fundamental Rights, and the DPSP.

46. Ans. A.

D performs her train journey by the shortest route from Bengaluru to New Delhi. She will not cross river Narmada while performing the journey. Hence, Option A is correct.

Explanation)

She will cross through all other three rivers, Yamuna, Godavari, and Krishna.

- The catchment of the Yamuna river system covers parts of Uttar Pradesh, Haryana, Uttarakhand, Rajasthan, Himachal Pradesh, Madhya Pradesh & Delhi states.
- Godavari river flows through the States of Maharashtra, Chhattisgarh, Telangana, and Andhra Pradesh & finally out falls into the Bay of Bengal.
- The Krishna River flows through the Karnataka state before entering Telangana State.

22 | Page







The tropic of Cancer passes through eight states in India - Gujarat, West Bengal, Madhya Pradesh, Rajasthan, Chattisgarh, Tripura, Jharkhand, and Mizoram.

Mizoram is one of India's most thinly populated states. Population density reduces from north to south, owing to a southward increase in temperature and humidity, which makes the area less desirable for habitation. Aizawl is the state's only major city; other large towns involve Lunglei in the east as well as Champhai in the south-central region.

Mizoram is the northeast's southernmost landlocked state, sharing boundaries with three of the seven sister states Tripura, Assam, & Manipur. In addition, the state shares a 722-kilometer border with the neighbouring nations of Myanmar and Bangladesh.

Hence, Option B is correct.

48. Ans. B.

M wants to visit a place in a Union Territory, which is located at 34° N and 77° E. He has planned to visit the Union Territory of Lakshadweep. Hence, Option B is correct.

Explanation)

Lakshadweep is located in the emerald Arabian Sea, between 8° – 12° 13" North latitude and 71° – 74° East longitude, 220 to 440 kilometres from that of the coastal city of Kochi in Kerala. Given its lagoon area of approximately 4,200 sq. kms, (20,000 sq.).

49. Ans. B.

According to India's Census 2011, the adolescent population (age group of 10 to 19 years) of India, account for one-fifth (19.1%) of the total population. By 2020, India's youth population is expected to account for 34.33 per cent of the total population. Hence, statement 1 is incorrect.

In the adolescent population (age group of 10 to 19 years) of India, according to the 2011 Census, there is the greater number of males than females. Hence, statement 3 is incorrect.

Hence, Option B is correct.

23 | Page



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Explanation)

With 253 million adolescents, India has the world's largest adolescent population, with one in every five people aged 10 to 19. India will benefit politically, socially, and economically if this large number of adolescents is kept safe, educated, healthy, and equipped with information & life skills to help the country's continued development.

50. Ans. B.

J from Assam as per Census 2011, has the maximum density of population. Hence, Option B is correct.

Explanation)

Assam's population density in 2011 was 398 people per square kilometre. Assam's population density increased from 138 people per square kilometre in 1961 to 398 people per square kilometre in the year 2011, growing at a 19.79 per cent annual rate.

Arunachal Pradesh is an Indian state with a population of approximately 13.84 lakh people. Arunachal Pradesh has a population of 1,383,727 people. Arunachal Pradesh has a population density of 17 people per square kilometre.

Meghalaya had a population density of 132 people per square kilometre in the year 2011. Meghalaya's population density increased from 34 people per square kilometre in the year 1961 to 132 people per square kilometre in 2011, growing at a 25.98 per cent annual rate.

Nagaland had a population density of 119 people per square kilometre in the year 2011. Nagaland's population density increased from 22 people per square kilometre in the year 1961 to 119 people per square kilometre in 2011, growing at a 35.23 per cent annual rate.

51. Ans. B.

Swami Dayanand Saraswati took inspiration from Vedas. Hence, Option B is correct.

Explanation)

• Swami Dayanand Saraswati was raised in a devout, prosperous family, where he learned Sanskrit and absorbed the wisdom of Hindu scriptures, particularly the Vedas.

24 | Page



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- Specific incidents that took place during his childhood, such as the death of his younger sister, gradually caused young Shankar to ponder the larger meaning of life.
- At a time when his parents were concerned about his unusual questions, he chose to leave home as part of his quest for the truth.
- The holy man advised the young person to discard all of his books & seek knowledge directly from the Vedas.

52. Ans. A.

The call for renunciation of (all) voluntary associations with the (British) Government' was given during Non-Cooperation Movement. Hence, option A is correct.

Explanation)

- Gandhiji, emboldened by the movement's success, called for a campaign of "non-cooperation" with British rule. Indians who wanted colonialism to end were told not to attend schools, colleges, or law courts, and also not to pay taxes. In short, they were asked to "renounce all voluntary association with the (British) Government."
- Gandhiji predicted that if noncooperation was carried out successfully, India would win swaraj within a year. To widen the struggle, he had joined the Khilafat Movement, which sought to establish the Caliphate, a symbol of Pan-Islamism that had recently been repealed by Turkish ruler Kemal Attaturk.

53. Ans. A.

Because Lakshadweep and Andaman & Nicobar Islands are in the same time zone, you can call anyone during your normal business hours and the time would be the same in Andaman & Nicobar Islands as it is in Lakshadweep. If you are scheduling a call, try to check for any time changes due to daylight savings. Hence, statement 2 is incorrect.

The time difference between IST (India Standard Time) & Greenwich Mean Time (GMT+5.5) is 5:30 hours (5 hours 30 minutes). Indian Standard Time is based on 82.5° E longitude, that's just west of Mirzapur, near Allahabad in the state of Uttar Pradesh. Hence, statement 3 is incorrect.

Hence, option A is correct.

25 | Page







Explanation)

The Republic of India uses only one-time zone (although it spans two geographical time zones) across the entire country and all of its territories, known as IST (Indian Standard Time), which corresponds to UTC+05:30, or five & a half hours ahead of Coordinated Universal Time (UTC).

54. Ans. D.

D had recently visited Khardung La, Nubra Valley and several Buddhist monasteries. She had visited UT of Ladakh. Hence, option D is correct.

Explanation)

- The northernmost region of Jammu & Kashmir is Nubra Valley. The Valley, located about 150 kilometres from Leh, is recognised as the Orchard of Ladakh and was originally named as Ldumra, which means "Valley of Flowers."
- Khardung La is a mountain pass in the Indian UT of Ladakh's Leh district.
- Monasteries exemplify the glory of Buddhism in the region, particularly in the Leh district. Gompas are places of worship, & monks or lamas carry out their duties according to an ancient formed routine, oblivious to the world around them.

55. Ans. D.

Tamil Nadu state receives rainfall from both the Arabian Sea branch and the Bay of Bengal branch of Monsoon. Hence, option D is correct.

Explanation)

- Tamil Nadu is situated on India's eastern coast. South India typically receives rain from the south-west monsoons. However, the south-west monsoon from the Arabian Sea is obscured by the Western Ghats.
- As a result, during the winter season, Tamil Nadu receives the majority of its rain from the northeast & retreating monsoons. Furthermore, many low-pressure systems form in the Bay of Bengal during this time & move eastward along the coast of Tamil Nadu, usually causing heavy rain.

26 | Page



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Inceptisols, Entisols, Vertisols and Mollisols are orders of Soil. Hence, option B is correct.

Explanation)

- The Soil Order is the most general level of classification in the USDA system of Soil Taxonomy. Entisols, Mollisols, Alfisols, Inceptisols, Andisols, Spodosols, Ultisols, Oxisols, Histosols, Aridisols, Gelisols, and Vertisols are the 12 orders of soils on the planet.
- Soil orders are commonly defined by a single dominant attribute affecting soils in that location, such as the predominant vegetation (Mollisols, Alfisols), the type of parent material (Vertisols, Andisols), or climate variables such as aridity (Aridisols) or the existence of permafrost (Gelisols).

57. Ans. C.

Shad witnessed contour bunding and contour ploughing while visiting Himachal Pradesh state in India. Hence, option C is correct.

Explanation)

Soil & water conservation practices of Farming in Himachal Pradesh state:

- Contour bunding
- Bench terrace
- Compartmental bunding
- Contour ploughing
- Ridges & furrows
- Check dams
- Farm Pond
- Gully plugging

27 | Page



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All returning migrants are the beneficiary of the "Garib Kalyan Rojgar Abhiyan scheme. Hence, option B is correct.

Explanation)

- The Pradhan Mantri Garib Kalyan Yojana or Package is a comprehensive relief package worth Rs 1.70 Lakh Cr. Yojana for the poor to assist them in fighting the Corona Virus.
- This was launched in March 2020, with the goal of reaching out to the poorest of the poor with food and supplies, so that they do not face difficulties purchasing essential supplies as well as meeting basic needs.

59. Ans. C.

Lorenz curve - Inequality in the distribution of income or wealth

Phillips curve - Inflation and employment

Engel curve – Income and proportion of expenditure on food

Laffer curve – Tax rates and tax revenue

Hence, option C is correct.

Explanation)

- A Lorenz curve is a graphical representation of income or wealth inequality that was developed by American economist Max Lorenz in the year 1905. In practice, a Lorenz curve is typically a mathematical function projected from an incomplete set of income or wealth observations.
- W. Phillips developed the Phillips curve, which states that inflation and unemployment have a stable as well as an inverse relationship. According to the theory, economic growth leads to inflation, which leads to more jobs and lowers unemployment.
- An Engel curve in microeconomics describes how household incomes on a specific good or service varies with household income. Engel curves are classified into two types. Share

28 | Page



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of the budget Engel curves describes how the proportion of total household income spent on a good varies as income increases.

• The Laffer Curve is a theory developed by supply-side economist Arthur Laffer to demonstrate the relationship between tax rates & tax revenue collected by govt. The curve is used to demonstrate how, in some cases, lowering tax rates can result in increased total tax revenue.

60. Ans. B.

The market for soaps is a typical example of monopolistic competition. Hence, option B is correct.

Explanation)

Monopolistic competition is a market structure in which many firms produce similar, but not interchangeable, products. This type of competitive market is classified as being somewhere between monopoly & perfect competition in economics. When one firm has complete market power & sets the market price, this is referred to as a monopoly. Perfect competition is a concept in which companies produce products that are perfect substitutes for one another and buyers have perfect market information.

Consider some of the following examples.

- Grocery stores: Grocery stores operate in a monopolistic market since there are so many firms that sell many of the same goods but with different branding & marketing.
- Hotel: Hotels are an excellent example of monopolistic competition. Each hotel company provides a similar service with minor differences in pricing as well as quality levels.
- Clothing stores: Another instance of a large number of firms competing for market share, particular clothing stores offer differentiated but often very similar products.

61. Ans. C.

Following the Constitution (One Hundred and First Amendment) Act, 2016, the Parliament of India enacted quite a few GST Acts in the year 2017. The Goods and Services Tax (Compensation to States) Acts does not fall in this category. Hence, option C is correct.

29 | Page



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Explanation)

- This amendment, officially known as The Constitution (One Hundred & First Amendment) Act, 2016, implemented a national GST (Goods & Services Tax) in India on 1st July 2017.
- It was introduced as the One Hundred & Twenty-second Amendment Bill to the Indian Constitution.
- The GST (Goods & Services Tax) is a Value Added Tax (VAT) proposed at the national level to be an extensive indirect tax levy on the manufacture, sale, and consumption of goods and services.
- It is intended to replace all indirect taxes imposed on services and goods by the Indian Central & state governments. It is intended to be comprehensive for the majority of goods & services.

62. Ans. D.

The directorate of Enforcement does not enforce the Prohibition of Benami Property Transaction Act, 1988. Hence, option D is correct.

Explanation)

- The Directorate of Enforcement investigates a violation of FEMA, 1999, which went into effect on 1st June 2000. Penalties of up to three times the monetary amount involved may be imposed.
- The property attached shall be confiscated during the investigation of the offence if it is determined to be proceeds of crime obtained from a Scheduled Offence under the PMLA, and the individuals involved in the offence of money laundering shall be prosecuted.
- Under the FERA 2002, a notice will be issued for the alleged violation of a provision of the relevant Act, which may result in penalties.
- According to the Fugitive Economic Offenders Act of 2018, all fugitive cases must be processed in an attempt to preserve the sanctity of the rule of law in India.
- In the case of FEMA violations, the Conservation of Foreign Exchange & Prevention of Smuggling Activities Act of 1974 (COFEPOSA) shall sponsor cases of preventive detention.

30 | Page



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• Under the clauses of the PMLA, render cooperation to foreign countries & seek cooperation in matters relating to money laundering & asset restitution.

63. Ans. B.

Price control is not a subject under the Concurrent List. Hence, option B is correct.

Explanation)

The concurrent list allows the government to make laws & regulations at both the state & federal levels. These laws & regulations are only applicable to the subjects on the concurrent list.

Criminal law, administration of justice, criminal procedure, evidence and oaths, preventive detention, inland shipping, property other than agricultural land, marriage and divorce, population control and family planning, contracts, trade unions, actionable wrongs, prevention of cruelty to animals, lunacy, forests, trust and trustees, transfer of bankruptcy and insolvency, contempt of court, civil procedure. The concurrent list includes 47 subjects.

64. Ans. D.

The Constitution's emergency provisions enable the federal govt. to acquire the strength of a unitary system when any exigencies of the situation demand it. Hence, option D is correct.

Explanation)

- The Indian Constitution grants the union extraordinary powers in response to various types of emergencies. The Constitution's emergency provisions enable the federal govt. to acquire the strength of a unitary system when any exigencies of the situation demand it.
- There are times when a nation is suddenly and unexpectedly overtaken by events & forces that endanger its security as well as the lives of its citizens.
- The emergency provision in the Indian Constitution is a distinctive feature that allows the Centre to assume broad powers in order to deal with special situations. In an emergency, the Centre has the authority to take full executive and legislative control of any state.

31 | Page







• The emergency provision even allows the Centre to limit or suspend citizens' freedom. The presence of an emergency provision in the Constitution is one of the main reasons academics are hesitant to label the Indian Constitution as completely federal.

65. Ans. D.

The Constitution of India guarantees freedom of speech and expression. But the freedom is subject to certain reasonable restrictions imposed by the State. These restrictions may relate to Defamation, Decency or morality, and Incitement to an offence. Hence, option D is correct.

Explanation)

There are some grounds on which the Indian Constitution imposes restrictions. Article 19 (2) of the Indian Constitution gives the state the authority to impose reasonable restrictions on the following matters:

- Security of the State;
- Friendly relation with the foreign states;
- Public order;
- Decency & morality;
- Contempt of court;
- Defamation;
- Incitement to the offence;
- Integrity & Sovereignty of India.

66. Ans. C.

42nd Amendment in the Constitution of India made a Proclamation of Emergency immune from judicial review. Hence, option C is correct.

Explanation)

32 | Page



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- In the case of Minerva Mills Ltd. versus Union of India, the court ruled that there is no bar to judicial review of the authenticity/validity of the president's proclamation of emergency under 352 (1).
- However, the court's authority is limited to determining whether or not the limitations imposed by the Indian Constitution have been observed. It can determine whether or not the president's satisfaction is valid. If the satisfaction is based on false, absurd, or irrelevant grounds, it is invalid.

67. Ans. A.

Car Warren Hastings was a British official who was elevated to the position of Governor-General after the Regulating Act of 1773. Hence, option A is correct.

Explanation)

- The Regulating Act of 1773 was the British government's first step in regulating & controlling the company's operations in India.
- It forbade company servants from engaging in any private trade or accepting gifts or bribes from "natives."
- The Act elevated the Governor of Bengal, Warren Hastings, to the position of Governor-General of Bengal and brought the presidencies of Madras and Bombay under the control of Bengal. It laid the groundwork for India's centralised administration.
- The Regulating Act of 1773 placed the presidencies of Madras & Bombay under the control of Bengal. It promoted Hastings to the new post of Governor-General but restricted his power by making the Governor-General one of five members of the Supreme Council.
- The Governor of Bengal was elevated to the position of Governor-General of Bengal, with a four-member executive council to assist him. Decisions would be made by majority vote, with the Governor-General voting only in the event of a tie.

68. Ans. B.

Monotheism and internal social reform were preached by the Kherwar or Sapha Har movement of the 1870s. Hence, option B is correct.

33 | Page







Explanation)

- The Kherwar Movement appears to have begun in the year 1868.
- It is also referred to as the Sapha Har movement.
- This movement popularized the concept of One God while also aiming for social reform.
- He demanded the establishment of a Santal raj.

69. Ans. D.

In the year 1970, Poona Sarvajanik Sabha was established. Hence, option D is correct.

Explanation)

- The Pune Sarvajanik Sabha was founded in 1870 as a social and political reform organisation.
- It began as a democratically elected body. It had 95 members who were chosen by a vote of 6000 people.
- It was successful in bringing the issue of peasants' legal rights to the forefront of national political debates.
- It was to act as a mediator, coordinating and presenting the people's demands to the British govt.
- Mahadev Govind Ranade founded the organisation. Ranade is also credited with founding the Hindu reformist organisation Prarthna Samaj.
- MG Ranade worked as a barrister, a teacher, and eventually as a judge in the Bombay High Court.

70. Ans. B.

Korkai was an important Pandya port, celebrated for its pearls in Sangam poems and Greek accounts. Hence, option B is correct.

Explanation)

34 | Page



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- Pearl fishing was a thriving industry during the Sangam period. The Pandyan port city of Korkai was the epicentre of the pearl trade.
- Written records from the Greek & Egyptian voyagers provide information about the Pandyan coast's pearl fisheries.
- In foreign markets, the inferior variety of pearls that the Tamils did not involve for their use were in high demand.
- The pearl from the Gulf of Mannar, which was even in demand in the kingdoms of north India, was perhaps the most expensive animal product imported from India by the Roman Empire.

71. Ans. C.

Samudragupta was praised in glowing terms in the Prayaga Prashasti. Hence, option C is correct.

Explanation)

- In Samudragupta's prashasti, the poet lavished praise on him. Samudragupta was a great warrior who managed to win battles, according to this prashasti.
- He was a wise king and a great poet. He was on par with the gods. He was a valiant ruler of the Gupta Dynasty whose sphere of influence was vast.

72. Ans. C.

The Self-Respect Movement was initiated by E.V. Ramaswamy Naicker. Hence, option C is correct.

Explanation)

• The Self-Respect Movement is a South Asian movement that aims to create a society in which oppressed castes have equal human rights, as well as to encourage backward castes to have self-respect in the context of a caste-based society that considers them to be at the bottom of the hierarchy.

35 | Page







- It was founded in the year 1925 by S. Ramanathan, who invited E. V. Ramasamy (also known as Periyar by his followers) to lead the anti-Brahminism movement in Tamil Nadu, India.
- The movement had a significant impact not only in Tamil Nadu but also in countries with large Tamil populations, such as Singapore and Malaysia.

73. Ans. A.

The location of the ancient city of Taxila (Takshshila), mentioned in ancient Indian texts, was identified by Alexander Cunnigham. Hence, option A is correct.

Explanation)

- Taxila has changed hands multiple times over the centuries due to its strategic location, with many empires vying for control.
- When the great ancient trade routes that connected these regions ceased to be essential, the city faded into obscurity and was eventually destroyed by the nomadic Hunas in the 5th century.
- In the mid-nineteenth century, the ruins of Taxila were rediscovered by the world-famous archaeologist Sir Alexander Cunningham. Taxila was designated a UNESCO World Heritage Site in the year 1980.

74. Ans. B.

Khema was not a Jain Acharya. Hence, option B is correct.

Explanation)

- Khema practised Buddhism and was a Buddhist nun.
- She is regarded as the Buddha's first female disciple.
- Her husband persuaded her to visit the Buddha by having poets sing to her about the beauty of the monastery where he was staying.

36 | Page







• She attained enlightenment as a laywoman while listening to one of the Buddha's speeches, which is considered an exceptional achievement in the Buddhist teachings.

75. Ans. C.

In India, the first major public appearance of Mahatma Gandhi was in the Inauguration of Banaras Hindu University in 1916. Hence, option C is correct.

Explanation)

- Gandhi made his first major public appearance in February 1916, at the opening of the BHU (Banaras Hindu University).
- Among those invited to this event were the princes and philanthropists whose contributions had aided in the establishment of the BHU.
- Important Congress leaders, like Annie Besant, were also present. Gandhiji was relatively unknown in comparison to these dignitaries.
- He had been invited because of his work in South Africa, not because of his status in India.

76. Ans. B.

Patanjali's Mahabhaya is a commentary on selected rules of Sanskrit grammar from the Paini's treatise, the Aadhyayi, as well as Katyayana's Varttika-stra, an elaboration of Paini's grammar. Hence, statement 1 is incorrect.

Patanjali's Mahabhashya is a book on grammar and refers to historical personalities only incidentally. Hence, statement 2 is correct.

Hence, option B is correct.

Explanation)

• Mahaabhashyakaara Patanjali quoting the work of Bhaasa Mahakavi "Vasavadatta" in his commentary – The Mahabhasya to be of great historical significance. The reference to this great work by Bhaasa, who came before Kalidasa, can be found in Patanjali's comment on Paniniya sootra, "adhikrutya krute granthe."

37 | Page



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A change in its price may lead to a movement along the demand curve of a commodity. Hence, option A is correct.

Explanation)

- When the quantity demanded changes due to a change in price, there is movement along the demand curve. It is critical to differentiate between movement across a demand curve and a shift in a demand curve.
- Only when the price of good changes do movements along a demand curve occur. The demand curve moves when a non-price determinant of demand changes. The demand function includes these "other variables."
- They are "simply grouped into the intercept term of a simple linear demand function." Thus, a change in a non-price determinant of demand causes a shift in the x-intercept, which usually causes the curve to shift along the x-axis.

78. Ans. D.

The value of the next best alternative that is given up is the opportunity cost of a chosen activity. Hence, option D is correct.

Explanation)

- The value of the advantages of the foregone alternative, the next best alternative that could have been preferred but was not, is referred to as the opportunity cost.
- Another way of looking at it is that "choosing is refusing;" one option can only be accepted by rejecting another.

79. Ans. C.

There was a stagnation in the spending on education as a per cent of GDP during 2014 – 19 (both States and the Union Government together). Hence, option C is correct.

Explanation)

38 | Page



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According to the Economic Survey 2020-21, education spending as a percentage of GDP remained stable at 2.8 per cent from 2014 to 2019 and increased to 3-3.5 per cent in 2019-21. Experts believe that 6% of GDP should be allocated to education.

80. Ans. D.

According to UNDP's Human Development Report – 2020, India improved in the following components in recent years.

- Life expectancy at birth
- Expected years of schooling
- GNI per capita
- Mean years of schooling

Hence, option D is correct.

Explanation)

- The UNDP calculates the Gender Development Index, or GDI, as part of its Human Development Report. According to the HDR 2020, India's GDI value is 0.820, with females having a GDI value of 0.573 and males having a GDI value of 0.699, demonstrating a significant disparity.
- In terms of health, females in India had a life expectancy at birth of 71.0 years, while males had a value of 68.5 years. In terms of education, the index considers expected years of schooling for children and mean years of schooling for adults. Males in India were expected to complete 11.7 years of schooling, while females completed 12.6 years.
- The report also computes the Gender Inequality Index (GII) to highlight gender-based inequalities in the nations based on three indicators: economic activity, reproductive health, and empowerment.
- In terms of empowerment, the index takes into account the percentage of female seats in Parliament, which in India is 13.5 per cent, as well as the percentage of males and females with at least some secondary education. In India, this was 27.7 per cent for females and 47 per cent for males.

39 | Page



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81. Ans. B.

Both gain; it is a win-win situation is true of a pure voluntary exchange between two parties A and B. Hence, option B is correct.

Explanation)

- A zero-sum game is one in which if one party loses, the other party wins, & the net wealth change is zero.
- Zero-sum games can have as few as two players or as many as millions.
- Futures and options are regarded as zero-sum games in financial markets because the contracts represent agreements among two parties and, if one investor loses, the wealth is transmitted to another investor.
- Because the final outcome can benefit both parties, most transactions are non-zero-sum games.

82. Ans. A.

The provision, the State shall take steps to separate the Judiciary from the Executive in the public services of the State' is incorporated Part-IV of the Constitution of India. Hence, option A is correct.

Explanation)

- Part IV of the Indian Constitution addresses the DPSP (Directive Principles of Indian State Policy).
- The provisions in this Part cannot be enforced by a court, however, these principles are fundamental in the governance of the nation, and it is the State's duty to apply these principles in making laws.
- Separation of the judiciary and the executive is provided for in Article 50. The State shall take steps to separate the judiciary as well as the executive in the State's public services.
- 83. Ans. A.





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Speaker may permit any Member to address the House in his/her mother tongue if he/she cannot adequately express in either Hindi or English. Hence, statement 1 is correct.

Business of the Parliamentary Committees is transacted either in Hindi or in English. Hence, statement 2 is correct.

The minutes of the Parliamentary Committees are prepared invariably in Hindi or English. Hence, statement 3 is correct.

Hence, option A is correct.

Explanation)

- Article 120 comprises Language to be used in Parliament. It is provided that the Chairman of the Council of States or the Speaker of the House of People, or a person acting in their stead, may allow any member who cannot adequately express himself in English or Hindi to address the House in his mother tongue.
- Regardless of what is stated in Part XIV A of this constitution, but subject to the provisions of Article 301F of this constitution, business in the Parliament shall be conducted in Hindi or English.
- Parliamentary Committee minutes & reports are always prepared and presented to the House in both Hindi & English.

84. Ans. D.

The term 'State', as defined in Article 12 of the Constitution of India refers to the Government of India, Parliament of India, Governments and Legislatures of each State, and all local or other authorities within the territory of India. Hence, option D is correct.

Explanation)

The term 'State' refers to the union and state governments, the Parliament and state legislatures, and all the local or other authorities within Indian territory or under the control of the Indian Govt, according to Article 12 of the Indian Constitution. Article 12 of the Constitution defines the state as consisting of the following parts:

• The Indian Government & Parliament

41 | Page



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- Each state's government & legislature.
- Local governments & other government entities.

85. Ans. B.

Bihar is the largest State in terms of seats in the Rajya Sabha among the given options. Hence, option B is correct.

Explanation)

Andhra Pradesh has 11 Rajya Sabha seats.

Bihar has 16 Rajya Sabha seats.

Rajasthan has 10 Rajya Sabha seats.

Karnataka has 12 Rajya Sabha seats.

86. Ans. C.

Article 243 D of the Constitution of India has provision been made for reservation of seats for women in Panchayats. Hence, option C is correct.

Explanation)

Clause (3) of Article 243D of the Indian Constitution ensures women's participation in Panchayati Raj Institutions by mandating a one-third reservation for the women out of the total number of seats to be filled by direct election & the number of Panchayat chairpersons.

87. Ans. A.

The painted illustration of the moving of the Ashoka Pillar at-Topra is found in Tarikh-i-Firuz Shahi. Hence, option A is correct.

Explanation)

42 | Page



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- The original home of the Delhi-Topra Ashokan pillar, one among many Ashoka pillars moved from Topra to Feroz Shah Kotla in Delhi in the year 1356 CE by Firuz Shah Tughlaq.
- The transport of the Topra pillar to Delhi. Illustration from Sirat i-Firuz Shahi, 14th century.
- The original inscription on the Delhi-Topra Ashokan obelisk is in the Brahmi script, but the language was Prakrit, with Pali & Sanskrit added later. James Prinsep successfully translated the inscription in the year 1837.

Srirangam is a temple of the Vaishnavite tradition. Hence, option A is correct.

Explanation)

- The Sri Ranganathaswamy Temple is a Hindu temple in Srirangam, Tiruchirapalli, Tamil Nadu, the State of India, dedicated to Ranganatha, a form of the Supreme God, Maha Vishnu.
- The temple, built in the Dravidian architectural style, is glamorised by Alvars in their Divya Prabhanda and has the contrast of being the first among the 108 Divya Desams dedicated to The Supreme God Vishnu.
- It is one of South India's greatest illustrious Vaishnava temples, steeped in legend and history.
- ullet Beginning in the 11^{th} century with Ramanuja & his predecessors Nathamuni & Yamunacharya in Srirangam, the temple has played a significant role in Vaishnavism history.

89. Ans. A.

The biography of Shaikh Muinuddin Chishti, authored by Jahanara, is known as Munis al Arwah. Hence, option A is correct.

Explanation)

43 | Page



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- Jahanara wrote Mu'nis al-Arw, a biography of Moinuddin Chishti, the pioneer of the Chishti Order in India, and also Rislah-i ibyah, a biography of Mullah Shah, in that she also described her initiation by him.
- Her biography of Moinuddin Chishti is praised for its accuracy & literary quality. In it, she recognised him as having spiritually introduced her four centuries after his death, mentioned her pilgrimage to Ajmer, and referred to herself as a faqrah to denote her vocation as a Sufi woman.

Overthrow of alien rule is not a political method of the moderates in the National Movement. Hence, option A is correct.

Explanation)

The moderates used the following methods:

- Petitions are being sent to government officials.
- Memorandums are being sent to officers.
- Resolutions are being passed.
- Delegations are being sent to England.
- Meetings are being planned in cities, towns, as well as in villages.
- Leaflets & pamplets are distributed.

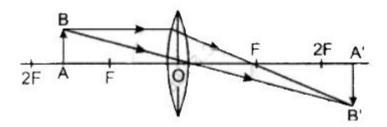
91. Ans. C.

To form a real and enlarged image by a convex lens, then the object must be placed between the principal focus and twice the focal length in front of the lens.

44 | Page







This ray diagram explains that for the object AB, the image will be A'B'. At twice the focal length, the image formed by the convex lens is real and from the principal focus it will be an enlarged image.

92. Ans. D.

One end of the solenoid acts as a magnetic north pole, while the other end acts as the magnetic south pole. The magnetic field lines inside a current carrying a long solenoid are in the form of parallel straight lines. This indicates that the magnetic field is the same at all points inside the solenoid. It proves that the field is uniform inside the solenoid.

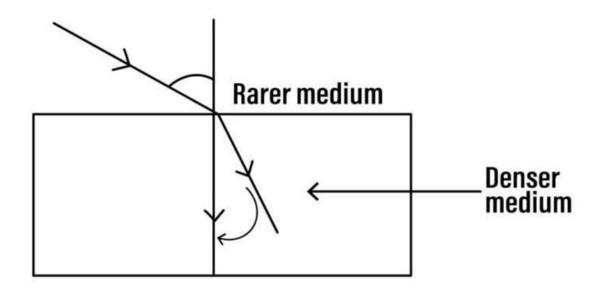
93. Ans. B.

Refraction is the process of bending of light rays after entering a medium where its speed is different. During the process, if a ray of light passes from a rarer medium to a denser medium, then it bends towards the normal to the boundary between the two mediums. The number of bending rays depends upon the indices of refraction of the two media.

Hence, when a ray of light travels from a rarer medium to a denser medium, it bends towards the normal.







94. Ans. B.

The ammeter reading will be doubled because, with the decrease in length, the resistance of the circuit also decreases. Hence, the current in the circuit will be increased.

Ammeter reading will be increased because of $R = \frac{\rho \frac{l}{A}}{A}$.

Where L is the length of the wire and A is an area of the cross-section of the wire. So, When the length is changed to half by keeping the area of cross-section is constant. Then the resistance will also be decreased as it is inversely proportional to the area of the cross-section, so with the decrease in length, the resistance of the wire will decrease, and the ammeter reading will be increased.

95. Ans. A.

$$\frac{Force}{Area}$$
Pressure= $\frac{Area}{A}$

$$Pressure \propto \frac{1}{Area}$$

46 | Page



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Pressure is inversely proportional to area. If the area is smaller, the pressure is greater and when the area is larger the pressure is smaller.

While standing on loose sand, the area of our feet is smaller, therefore, the pressure of our body is greater hence, we go deep into the soil but when we lie down on the sand then the area of our body is larger, therefore it exerts a smaller pressure and we do not go deep in the soil. Hence, we apply more pressure while standing than the lying down due to less area of contact (Force=weight=constant).

96. Ans. D.

Given,

Diameter of a circular track= 100m

Radius=
$$\frac{d}{2} = \frac{100}{2} = 50$$
m

Time taken by the athlete to complete one round of circular track = 20 seconds

Now, time = 1min 10 sec= $(1 \times 60) + 10 = 70$ seconds

Number of rounds covered by the athlete = $\frac{Total \ time}{time \ taken \ to \ complete \ one \ round} = \frac{70}{20} = 3.5$

Circumference of a circle= $2\pi r$

Distance covered in 1 round = Circumference of the circular track

Thus, the circumference of the circular track = $\frac{2 \times \frac{22}{7} \times 50}{7}$

Distance travelled in 70 seconds = $\frac{Number\ of\ rounds\ covered \times Circumference\ of\ the\ track}{2}$

$$= \frac{3.5 \times 2 \times \frac{22}{7} \times 50}{= 0.5 \times 2 \times 22 \times 50} = 1100 \text{m}$$

Thus, the distance covered by the athlete is 1100m.

47 | Page



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For each complete round the displacement is zero.

The displacement will be zero because of 3 complete rounds,.

At the end of his motion, the athlete will be in the diametrically opposite position. That is, displacement = diameter = 100 m.

Hence, the distance covered is 1100 m and the displacement is 100 m.

97. Ans. A.

Speed of sound wave, $v = v\lambda = 4000 \times 0.30 = 1200$ m/s

Distance, d= 2.4km= 2400m

Time, t=
$$\frac{d}{v} = \frac{2400}{1200} = 2$$
seconds

98. Ans. C.

Given,

Voltage, V= 110V

Current, I= 0.2A

Power, P=?

We know that,

 $P = V \times I$

 $=110 \times 0.2$

P= 22W

99. Ans. B.

Initial velocity, u= 0 km/h

Final velocity, v= 20 km/h

48 | Page



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Time= 10 minutes

By using formula,

$$a = \frac{v - u}{t} = \frac{20 - 0}{10} = 2 \text{ km/m}$$

To convert minutes into hour

$$= 2 \times 60 = 120 \text{ km} / h^2$$

100. Ans. C.

The speed of light is different in different media due to the difference in resistance provided by the medium to the light rays. This changes the speed of light and is termed as refraction. Even though its phase velocity is changed, the frequency remains constant in refraction.

101. Ans. D.

A universal indicator is a pH indicator made of a solution of several compounds that exhibits several smooth colour changes over a wide range pH values to indicate the acidity or alkalinity of solutions.

Universal indicator is a mixture of many different indicators which gives different colours at different pH values of the entire pH scale. It is used to obtain an idea of how acidic or basic a substance is.

So, all the three statements are correct for universal indicator hence, option D is correct.

102. Ans. C.

Only allotrope of carbon which is good conductor of electricity is graphite. This electrical conductivity in graphite arises due to the presence of free electron, generally the 4th electron of the valence shell.

On the other hand, diamond and fullerene aur insualting as they don't have any free electron which can make them conducting.

49 | Page



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The correct answer is Cupric carbonate. Copper reacts with moist carbon dioxide in the air to form green-colored cupric carbonate. The green color of copper appears due to the corrosion of copper due to reaction with oxygen and carbon dioxide for copper carbonate. Cupric carbonate is a green color compound.

104. Ans. B.

Alloys commonly used for electrical soldering are 60/40 Sn-Pb, which melts at 188 °C (370 °F), and 63/37 Sn-Pb used principally in electrical/electronic work. This mixture is a eutectic alloy of these metals, which: has the lowest melting point (183 °C or 361 °F) of all the tin-lead alloys.

105. Ans. B.

Roasting is a process of heating a sulfide ore to a high temperature in the presence of air. It is a step in the processing of certain ores. More specifically, roasting is often a metallurgical process involving gas–solid reactions at elevated temperatures with the goal of purifying the metal components.

Calcination, the heating of solids to a high temperature for the purpose of removing volatile substances, oxidizing a portion of mass, or rendering them friable. Calcination, therefore, is sometimes considered a process of purification.

Smelting is a form of extractive metallurgy to produce a metal from its ore. Smelting uses heat and a chemical reducing agent to decompose the ore, driving off other elements as gasses or slag and leaving just the metal behind.

Incineration is a waste treatment process that involves the combustion of substances contained in waste materials

106. Ans. A.

Dilute acids react with relatively reactive metals such as magnesium, aluminium, zinc and iron. The products of the reaction are a salt plus hydrogen gas.





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The reactivity of these metals with dilute hydrochloric acid depends upon the reduction potential of the corresponding metal which can also be inferred from the positions of these metals in reactivity series.

Mg lies at the top, so will be most reactive than comes Al then Zn and Fe least reactive.

107. Ans. A.

Leaves of the nettle plant secrete methanoic acid which causes a painful sting on touching.

Citric acid is an organic compound with the chemical formula HOC(CH₂CO₂H)₂. Usually encountered as a white solid, it is a weak organic acid. It occurs naturally in citrus fruits.

Tartaric acid is a white, crystalline organic acid that occurs naturally in many fruits, most notably in grapes, but also in bananas, tamarinds, and citrus.

Acetic acid, systematically named ethanoic acid, is an acidic, colourless liquid and organic compound with the chemical formula CH₃COOH. Vinegar is no less than 4% acetic acid by volume.

108. Ans. C.

Alkali is a base that dissolves in water. So, all alkali are bases but all bases cannot be an alkali as some of them may not dissolve in water. So the first statement is incorrect but second statement is correct.

Also, alkalis are soapy to touch, butter in taste and are corrosive in nature.

109. Ans. A.

Small amounts of HCl gas for laboratory use can be generated in an HCl generator by dehydrating hydrochloric acid with either sulfuric acid or anhydrous calcium chloride. Alternatively, HCl can be generated by the reaction of sulfuric acid with sodium chloride: $NaCl + H2SO4 \rightarrow NaHSO4 + HCl$.

Here, other calcium salts with other halogens cannot be used as this may create disturbance in the reaction due to the presence of different types of halide ions.

51 | Page



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110. Ans. C.

Tall and dwarf in the ratio of **1**: **1**. Crossing of homozygous tall TT with a homozygous dwarf (tt), is called Monohybrid cross. In this, all F1 progeny are heterozygous tall (Tt). In the F2 generation, 1 homozygous tall (TT), 2 heterozygous tall (Tt), homozygous dwarf (tt), genotypically. Phenotypically, 3 tall and 1 dwarf plants are present.

111. Ans. C.

All ecosystem is characterized by two basic features- the unidirectional flow of energy and cycling of materials.

At each tropic level, most of the energy available is utilized for life processes and only ten percent of the available energy is passed on to the next level so because of this the higher trophic levels have substantially less energy content and the number of trophic levels in a food chain is limited.

112. Ans. B.

All variations in a species do not have equal chances of survival. Some variations may be so drastic that the new DNA copy cannot work with the cellular apparatus it inherits. Such, a newborn cell dies soon. Variations can be beneficial or harmful according to the ecological niche of the organism.

113. Ans. A.

A population is the number of organisms of the same species that live in a particular *geographic area* at the same time, with the capability of *interbreeding*.

114. Ans. A.

The oxygenated blood is carried from lungs to the left side of the heart. From lungs, pulmonary vein carries oxygenated blood to the left atrium. From there oxygenated blood is circulated to the systemic circulation again.

115. Ans. A.

The bread mould, yeast and mushroom shows **saprophytic mode of nutrition**. Saprophytes undergo extracellular digestion to digest the dead and decaying matter. They

52 | Page



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secrete digestive substances into the surrounding environment and break down the organic matter into simpler substances. The nutrients thus produced are absorbed directly through the cell membranes of the organisms.

116. Ans. A.

Fertilizers provide three main macronutrients: Potassium, Nitrogen, and Phosphorous are normally which are consumed in larger quantities and derived from the soil in the form of inorganic salts. Iron is a micronutrient for plant growth which is not available in fertilizers.

117. Ans. A.

Insects are characterized by having **three pairs of jointed legs** from other arthropods; an abdomen that is divided into 11 segments and lacks any legs or wings; and a body split into three sections with one pair of antennae on the head (head, thorax, and abdomen). Sometimes, insects also have one or two wing pairs.

118. Ans. B.

Characteristics of protochordate are as follows-

- 1. They are generally found in marine water.
- 2. Their body is bilaterally symmetrical, triploblastic, and coelomated.
- 3. At a certain stage of their lives, their body develops a long, rod-like structure for support called the notochord.
- 4. They exhibit organ system level of organization.

119. Ans. A.

It is located in the leaves and internodes at the intercalary position.

These help to increase the length of the internode.



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