

UPSC PRELIMS 2021

Q1. Water can dissolve more substances than any other liquid because

- a. it is dipolar in nature
- b. it is a good conductor of heat
- c. it has high value of specific heat
- d. it is an oxide of hydrogen

Answer: a

Explanation:

Water is a polar molecule and also acts as a polar solvent. When a chemical species is said to be "polar," this means that the positive and negative electrical charges are unevenly distributed. The positive charge comes from the atomic nucleus, while the electrons supply the negative charge. It's the movement of electrons that determines polarity. Due to dipolar nature

Q2. With reference to street-lighting, how do sodium lamps differ from LED lamps?

- 1. Sodium lamps produce light in 360 degrees but it is not so in the case of LED lamps.
- 2. As street lights, sodium lamps have longer life span than LED lamps.
- 3. The spectrum of visible light from sodium lamps is almost monochromatic while LED lamps offer significant colour advantages in street-lighting.

Select the correct answer using the code given below.

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

Answer: c

Explanation:

Statement 1 is correct: Generally LED lamps emit their light through a full 360 degrees. Sodium vapor lights are one directional.

Statement 2 is incorrect: Lifespan of LED is much greater than the Sodium lamp.

Statement 3 is correct: The spectrum of visible light from sodium lamps is almost monochromatic while LED lamps offer significant colour advantages in street-lighting.

Q3. The term 'ACE2' is talked about in the context of

- a. genes introduced in the genetically modified plants
- b. development of India's own satellite navigation system
- c. radio collars for wildlife tracking
- d. spread of viral diseases

Answer: d

Explanation:

ACE2 (angiotensin converting enzyme 2) is known to be expressed in various human organs, and its organ- and cell-specific expression suggests that it may play a role in the regulation of cardiovascular and renal function, as well as fertility. In addition, the encoded protein is a functional receptor for the spike glycoprotein of the human coronavirus HCoV-NL63 and the human severe acute respiratory syndrome coronaviruses, SARS-CoV and SARS-CoV-2, the latter is the causative agent of coronavirus disease-2019 (COVID-19).

Q4. Bisphenol A (BPA), a cause of concern, is a structural/key component in the manufacture of which of the following kinds of plastics?

- a. Low-density polyethylene
- b. Polycarbonate
- c. Polyethylene terephthalate
- d. Polyvinyl chloride

Answer: b

Explanation:

Bisphenol A (BPA), a colourless crystalline solid belonging to the family of organic compounds; its molecular formula is **C₁₅H₁₆O₂**. BPA is best known for its use in the manufacture of polycarbonate plastics and epoxy resins, particularly those found in water bottles, baby bottles, and other beverage and food containers.

Q5. 'Triclosan', considered harmful when exposed to high levels for a long time, is most likely present in which of the following?

- a. Food preservatives
- b. Fruit-ripening substances
- c. Reused plastic containers
- d. Toiletries

Answer: d

Explanation:

Triclosan (sometimes abbreviated as TCS) is an antibacterial and antifungal agent present in some consumer products, including toothpaste, soaps, detergents, toys, and surgical cleaning treatments.

Q6. Which one of the following is a reason why astronomical distances are measured in light-years?

- a. Distances among stellar bodies do not change.

- b. Gravity of stellar bodies does not change.
- c. Light always travels in straight line.
- d. Speed of light is always same.

Answer: d

Explanation:

- Statement 1 is incorrect: as we know that the universe is ever expanding so distance between two stellar bodies does not change.
- Statement 2 is incorrect: as the Gravitational power is dependent on the mass of the object, it changes with change in mass.
- Statement 3 is incorrect: Though mostly light travels in a straight line, it can be bend by Gravity.
- Statement 4 is correct: the speed of light does not change in vacuum. So, it is a constant that can be used for measurement.

Q7. With reference to recent developments regarding 'Recombinant Vector Vaccines', consider the following statements:

1. Genetic engineering is applied in the development of these vaccines.
2. Bacteria and viruses are used as vectors.

Which of the statements given above is/are correct?

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

Answer: c

Explanation:

- Statement 1 and 2 both are correct: A recombinant vaccine is a vaccine produced through recombinant DNA technology. This involves inserting the DNA encoding an antigen (such as a bacterial surface protein) that stimulates an immune response into bacterial or mammalian cells, expressing the antigen in these cells and then purifying it from them.

Q8. In the context of hereditary diseases, consider the following statements:

1. Passing on mitochondrial diseases from parent to child can be prevented by mitochondrial replacement therapy either before or after in vitro fertilization of egg.
2. A child inherits mitochondrial diseases entirely from mother and not from father.

Which of the statements given above is/are correct?

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

Answer: a

Explanation:

- Statement 1 is correct: Mitochondrial replacement therapy (MRT), sometimes called mitochondrial donation, is the replacement of mitochondria in one or more cells to prevent or ameliorate disease. MRT originated as a special form of in vitro fertilisation in which some or all of the future baby's

mitochondrial DNA (mtDNA) comes from a third party. It can be done before and after in vitro fertilization.

- Statement 2 is incorrect: It is usually inherited from mother but in rare cases it can be inherited from fathers also.

Q9. Bollgard I and Bollgard II technologies are mentioned in the context of

- a. clonal propagation of crop plants
- b. developing genetically modified crop plants
- c. production of plant growth substances
- d. production of biofertilizers

Answer: b

Explanation:

Bollgard Bt cotton (single-gene technology) is India's first biotech crop technology approved for commercialization in India in 2002, followed by Bollgard II – double-gene technology in mid-2006, by the Genetic Engineering Approval Committee (GEAC), the Indian regulatory body for biotech crops.

Bollgard cotton provides in-built protection for cotton against destructive American Bollworm *Heliothis Armigera* infestations, and contains an insecticidal protein from a naturally occurring soil microorganism, *Bacillus thuringiensis* (Bt). Bollgard II technology contains a superior double-gene technology - Cry1Ac and Cry 2Ab which provides protection against bollworms and Spodoptera caterpillar, leading to better boll retention, maximum yield, lower pesticides costs, and protection against insect resistance. Both, Bollgard II and Bollgard insect-protected

cotton are widely planted around the world as an environmentally friendly way of controlling bollworms.

Q10. In a pressure cooker, the temperature at which the food is cooked depends mainly upon which of the following?

1. Area of the hole in the lid
2. Temperature of the flame
3. Weight of the lid

Select the correct answer using the code given below.

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

Answer: a

Explanation:

- Statement 1 is correct: Area of the hole in the lid controls amount of steam which is let out. Larger the hole more steam goes out and thus less pressure which affects the temperature.
- Statement 2 is correct: Temperature of the flame increase the temperature of the cooker.
- Statement 3 is incorrect: Weight of the lid has nothing to do with the pressure in the cooker.

Q11. Consider the following:

1. Bacteria
2. Fungi
3. Virus

Which of the above can be cultured in artificial/synthetic medium?

- a. 1 and 2 only
- b. 2 and 3 only

- c. 1 and 3 only
- d. 1, 2 and 3

Answer: a

Explanation:

Bacteria and other microorganisms can be grown in artificial media whereas viruses cannot be grown on artificial media. Virus need living cells for growing.

Q12. Consider the following statements:

1. Adenoviruses have single-stranded DNA genomes whereas retroviruses have double-stranded DNA genomes.
2. Common cold is sometime caused by an adenovirus whereas AIDS is caused by a retrovirus.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

Statement 1 is incorrect: Adenoviruses have double stranded DNA genomes while Retroviruses have single stranded DNA genomes.

Statement 2 is correct: Adenoviruses are common viruses that cause a range of illnesses. They can cause cold-like symptoms, sore throat, bronchitis, pneumonia, diarrhoea and pink eye (conjunctivitis). AIDS is caused by retrovirus.

Q13. Which one of the following is used in preparing a natural mosquito repellent?

- a. Congress grass
- b. Elephant Grass
- c. Lemongrass
- d. Nut Grass

Answer: c

Explanation:

The Lemongrass plant is known to be an excellent mosquito repellent. According to a study conducted in 2011, around 95% of mosquitoes from a specific range of species were either killed or completely repelled due to the intense odor of lemongrass oil.

Commonly known as Citronella oil, the impact of the essential oil from Lemongrass is known to last for around two and a half hours. For some species of mosquitoes, it is even more.

Q14. Which one of the following ancient towns is well-known for its elaborate system of water harvesting and management by building a series of dams and channelizing water into connected reservoirs?

- a. Dholavira
- b. Kalibangan
- c. Rakhigarhi
- d. Ropar

Answer: a

Explanation:

Dholavira is an archaeological site at Khadirbet in Bhachau Taluka of Kutch District, in the state of Gujarat in western India, which has taken its name from a modern-day village 1 km south of it. This village is 165 km from Radhanpur. Also known locally as Kotada timba, the site contains ruins of a city of the ancient Indus Valley Civilization

The city of Dholavira was located in a semi-arid area and used dams and channels to transfer surplus water from

two seasonal streams Mansar and Manhar to reservoirs.

Q15. From the decline of Guptas until the rise of Harshavardhana in the early seventh century, which of the following kingdoms were holding power in Northern India?

- 1. The Guptas of Magadha
- 2. The Paramaras of Malwa
- 3. The Pushyabhutis of Thanesar
- 4. The Maukharis of Kanauj
- 5. The Yadavas of Devagiri
- 6. The Maitrakas of Valabhi

Select the correct answer using the code given below.

- a. 1, 2 and 5 only
- b. 1, 3, 4 and 6 only
- c. 2, 3 and 4 only
- d. 5 and 6 only

Answer: b

Explanation:

Statement 1 is correct: During 300 to 700 AD, the Gupta kingdom achieved the political unification of a large part of the Indian subcontinent. Magadha, Allahabad and Oudh was dominated by Guptas.

Statement 3, 4 and 6 are correct: Between the fall of Guptas and rise of Harshvardhanas, many new ruling dynasties emerged in different parts of Northern India. Which were the Pushyabhutis of Thaneshwar, Maukharis of Kannauj, Maitrakas of Vallabhi, etc.

Statement 2 is incorrect: The Paramara dynasty ruled in west-central India between 9th and 14th centuries.

Statement 5 is incorrect: Yadava dynasty ruled in Deccan between 12th–14th-century AD.

Q16. With reference to the history of ancient India, which of the following statements is/are correct?

1. Mitakshara was the civil law for upper castes and Dayabhaga was the civil law for lower castes.
2. In the Mitakshara system, the sons can claim right to the property during the lifetime of the father, whereas in the Dayabhaga system, it is only after the death of the father that the sons can claim right to the property.
3. The Mitakshara system deals with the matters related to the property held by male members only of a family, whereas the Dayabhaga system deals with the matters related to the property held by both male and female members of a family.

Select the correct answer using the code given below.

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

Answer: b

Explanation:

- **Statement 1 is incorrect:** Both Dayabhaga and Mitakshara are the basic to the upper castes alone. Mitakshara school is followed in most of India while Dayabhaga is followed in Bengal.
- **Statement 2 is correct:** In Dayabhaga system, sons obtain rights to property only at the death of the father and in the Mitakshara school the sons and grandsons have right over his property even while he is alive.

- **Statement 3 is incorrect:** Both Dayabhaga system and Mitakshara system deals with property held with women.

Q17. With reference to medieval India, which one of the following is the correct sequence in ascending order in terms of size?

- a. Paragana-Sarkar-Suba
- b. Sarkar-Paragana-Suba
- c. Suba-Sarkar-Paragana
- d. Paragana-Suba-Sarkar

Answer: a

Explanation:

In ascending order in terms of size - paraganas, sarkars and subas. Groups of villages formed paraganas, then sarkars, and finally subahs.

Q18. According to the Portuguese writer Nuniz, the women in Vijayanagara Empire were expert in which of the following areas?

1. Wrestling
2. Astrology
3. Accounting
4. Soothsaying

Select the correct answer using the code given below.

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

Answer: d

Explanation:

All the statements are correct

Being employed in a Royal Household of Vijayanagar empire implies that women served a variety of roles and were crucial

to the workings of the palace. It was during the zenith of the Vijayanagar empire that female artists were encouraged to contribute to literature. Krishnadevaraya, besides having dominion over peninsular India, patronized female writers and poets. Vijayanagara Kingdom had women wrestlers, astrologers, sooth-sayers, clerks and accountants.

Q19. Consider the following statements:

1. It was during the reign of Ilutmish that Chengiz Khan reached the Indus in pursuit of the fugitive Khwarezm prince.
2. It was during the reign of Muhammad-bin-Tughluq that Taimur occupied Multan and crossed the Indus.
3. It was during the reign of Deva Raya II of Vijayanagara Empire that Vasco da Gama reached the coast of Kerala.

Which of the statements given above is/are correct?

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

Answer: a

Explanation:

- Statement 1 is correct: Alauddin Muhammad, the Khwarizm Shah, had to flee due to the Mongol menace under the leadership of Changez Khan. He came looking for help from Ilutmish, who refused the request of Jalaluddin for asylum.
- Statement 2 is incorrect: Timur crossed the Indus and laid siege to Multan in September 1398. It was

during the reign of Firoz Shah Tughluq that Taimur occupied Multan and crossed the Indus.

- Statement 3 is incorrect: Vasco da Gama arrived at Calicut in 1498 whereas Deva Raya II was died in 1446.

Q20. With reference to India, the terms 'Halbi, Ho and Kui' pertain to

- a. Dance forms of Northwest India
- b. Musical instruments
- c. Pre-historic cave paintings
- d. Tribal languages

Answer: d

Explanation:

Halbi, Ho and Kui are tribal languages. Halabi is spoken in Maharashtra and Madhya Pradesh.

Q21. With reference to the history of ancient India, Bhavabhuti, Hastimalla and Kshemeshvara were famous

- a. Jain monks
- b. Playwrights
- c. Temple architects
- d. Philosophers

Answer: b

Explanation:

- Bhavabhuti, was a major dramatist of the later Sanskrit dramatic period and the court poet of King Yashovarman of Kannauj. Hastimalla was a court poet of the Hoysalas. Kshemeshwara was the court poet of Mahipala of Kannauj.

Q22. Which one of the following statements is correct?

- a. Ajanta Caves lie in the gorge of Waghora River.

- b. Sanchi Stupa lies in the gorge of Chambal River.
- c. Pandu-lena Cave Shrines lie in the gorge of Narmada River.
- d. Amaravati Stupa lies in the gorge of Godavari River.

Answer: a

Explanation:

Ajanta consists of several caves nestled in a curving section of the Sahyadri hills, overlooking the Waghora river.

Q23. With reference to Chausath Yogini Temple situated near Morena, consider the following statements:

- 1. It is a circular temple built during the reign of Kachchhapaghata Dynasty.
- 2. It is the only circular temple built in India.
- 3. It was meant to promote the Vaishnava cult in the region.
- 4. Its design has given rise to a popular belief that it was the inspiration behind the Indian Parliament building.

Which of the statements given above are correct?

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

Answer: c

Explanation:

Statement 1 is correct: The Chausath Yogini temple is in Mitaoli village in Morena district 40 kilometres (25 mi) from Gwalior. According to an inscription dated to 1323 CE the temple was built by the Kachchhapaghata king Devapala (r.

c. 1055 – 1075). It is externally circular in shape with a radius of 170 feet and within its interior part it has 64 small chambers.

Statement 2 is incorrect: This circular temple is one among the very few such temples in India. This is a yogini temple dedicated to sixty-four yoginis.

Statement 3 is incorrect: The Chausath Yogini Temple, Morena, also known as Ekattarso Mahadeva Temple, Standing atop an isolated hill of about hundred feet high, this circular temple commands a splendid view of the cultivated fields below. This temple is so named because of the presence of multitude of shivalingas inside its cells.

Statement 4 is correct: Its design has given rise to a popular belief that it was the inspiration behind the Indian Parliament building.

Q24. Consider the following pairs:

(Historical place) (Well-known for)

- 1. Burzahom: Rock-cut shrines
- 2. Chandraketugarh: Terracotta art
- 3. Ganeshwar: Copper artefacts

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

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

Answer: d

Explanation:

Statement 1 is incorrect: The Burzahom site is a prehistoric settlement in the village of the same name in the Srinagar District.

Statement 2 is correct: Chandraketugarh is a 2,300 years old archaeological site located near the Bidyadhari river, about 35 kilometres (22 mi) north-east of Kolkata, India, in the district of North 24 parganas, near the township of Berachampa and the Harua Road railhead. Chandraketugarh was a major centre of terracotta craft.

Statement 3 is correct: Ganeshwar is a village in Neem-Ka-Thana Tehsil (Mandal) in the Sikar District of the Indian state of Rajasthan. Ganeshwar is 7.9 kilometres (4.9 mi) distance from Neem-Ka- Thana town, 66.4 kilometres (41.3 mi) from Sikar city and 83 kilometres (52 mi) from Jaipur. Excavations in the area revealed the remains of a 4,000-year-old civilization. It was a major site of copper manufacture. Hundreds of copper artefacts, e.g., arrowheads, rings, bangles, spearheads, chisels, balls, and celts were found.

MODERN HISTORY

Q25. Consider the following statements:

1. Francis Xavier was one of the founding members of the Jesuit Order.
2. Francis Xavier died in Goa and a church is dedicated to him there.
3. The Feast of St. Francis Xavier is celebrated in Goa each year.

Which of the statements given above are correct?

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

Answer: c

Explanation:

Statement 1 is correct: St. Francis Xavier was a Spanish Jesuit who lived as a Roman Catholic missionary in the 1500s. He was one of the first seven members of the Jesuit order.

Statement 2 is incorrect: He did not die in Goa but at Sachian, an island off the coast of China. A church in memory of St. Xavier, called the Church of Bom Jesus, is located in Goa with his mortal remains.

Statement 3 is correct: A feast in honor of St. Xavier is celebrated annually in Goa.

Q26. Consider the following statements:

1. The Montagu-Chelmsford Reforms of 1919 recommended granting voting rights to all the women above the age of 21.
2. The Government of India Act of 1935 gave women reserved seats in legislature.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

- Statement 1 is incorrect: The Montagu-Chelmsford Reforms of 1919 recommended granting voting rights to only few women not all the women.
- Statement 2 is correct: The Government of India Act, 1935 extended the principle of communal representation by providing separate electorates for

depressed classes, women and labourers.

Q27. With reference to 8th August, 1942 in Indian history, which one of the following statements is correct?

- The Quit India Resolution was adopted by the AICC.
- The Viceroy's Executive Council was expanded to include more Indians.
- The Congress ministries resigned in seven provinces.
- Cripps proposed an Indian Union with full Dominion Status once the Second World War was over.

Answer: a

Explanation:

On 8th August 1942, Mahatma Gandhi launched the Quit India Movement for freedom from British rule in Mumbai (then Bombay). The Quit India Movement, also known as the August Movement was a Civil Disobedience Movement launched by Gandhi for Satyagraha (independence).

Q28. Who among the following is associated with 'Songs from Prison', a translation of ancient India religious lyrics in English?

- Bal Gangadhar Tilak
- Jawaharlal Nehru
- Mohandas Karamchand Gandhi
- Sarojini Naidu

Answer: c

Explanation:

Songs from Prison is a translation of Hindu devotional songs into English by Mahatma Gandhi done in jail. It was published in 1934.

Q29. Who among the following was associated as Secretary with Hindu Female School which later came to be known as Bethune Female School?

- Annie Besant
- Debendranath Tagore
- Ishwar Chandra Vidyasagar
- Sarojini Naidu

Answer: c

Explanation:

Ishwar Chandra Vidyasagar was associated as Secretary with Hindu Female School which later came to be known as Bethune Female School. As the secretary of the Bethune School established in 1849, Ishwar Chandra Vidyasagar did important work in the field of higher education for women in India.

Q30. In the context of Colonial India, Shah Nawaz Khan, Prem Kumar Sehgal and Gurbaksh Singh Dhillon are remembered as

- Leaders of Swadeshi and Boycott Movement
- Members of the Interim Government in 1946
- Members of the Drafting Committee in the Constituent Assembly
- Officers of the Indian National Army

Answer: d

Explanation:

The three were officers of the Indian National Army and were put together on trial by the British government in November 1945.

Q31. With reference to Indian history, which of the following statements is/are correct?

1. The Nizamat of Arcot emerged out of Hyderabad State.
2. The Mysore Kingdom emerged out of Vijayanagara Empire.
3. Rohilkhand Kingdom was formed out of the territories occupied by Ahmad Shah Durrani.

Select the correct answer using the code given below.

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

Answer: b

Statement 1 is incorrect: Nizamat of Arcot was established by Aurangzeb and was the legal dependency of the Nizam of Hyderabad, it did not emerge from the Hyderabad state.

Statement 2 is correct: The Mysore Kingdom emerged out of Vijayanagara Empire. After Vijayanagar fell in 1565, the ruling dynasty of Wodeyars of Mysore asserted their independence.

Statement 3 is incorrect: The states of Rohilakhand was fall out of the Afghan migration into India which took place in mid-18th century. Ali Muhammad Khan took advantage of the collapse of authority in north India following Nadir Shah's invasion, to set up a petty kingdom, Rohilakhand.

Q32. In the first quarter of seventeenth century, in which of the following was/were the factory/factories of the English East India Company located?

1. Broach
2. Chicacole
3. Trichinopoly

Select the correct answer using the code given below.

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

Answer: a

Explanation:

In West coast, the English established factories at Agra, Ahmadabad, Baroda and Broach by 1619.

In South-eastern Coast, the English established the Factories at Masulipatam and Armagaon.

In Eastern India, the English established the Factories at Hariharpur, Balasore, Hugli, Patna, Dacca, Kasimbazar.

There was no factory at Chicacole and Trichinopoly

Q33. With reference to Madanapalle of Andhra Pradesh, which one of the following statements is correct?

- a. Pingali Venkayya designed the tricolor Indian National Flag here.
- b. Pattabhi Sitaramaiah led the Quit India Movement of Andhra region from here.
- c. Rabindranath Tagore translated the National Anthem from Bengali to English here.
- d. Madame Blavatsky and Colonel Olcott set up headquarters of Theosophical Society first here.

Answer: c

Explanation:

Rabindranath Tagore translated Jan Gana Mana from Bengali to English at the Besant Theosophical College in Madanapalle.

Q34. Under the Indian Constitution, concentration of wealth violates

- a. the Right to Equality
- b. the Directive Principles of State Policy
- c. the Right to Freedom
- d. the Concept of Welfare

Answer: b

Explanation:

Article 39 comes under the ambit of the socialist type of moral principle. Along with Article 39 (certain policies shall be taken into consideration by the state), Article 38 (protection of social order), Article 41(Right to work and education and in public assistance), Article 42 (maternity relief and human condition) Article 43 (participation of workers in industries management) and Article 45 (for childhood care especially, educations for the children below six years of age) are the part of this type of principle.

Article 39 states that the Indian constitution shall be directing this policy for securing citizens following –

(a) The first part gives adequate livelihood to every citizen, including all men and women, and these rights are equal.

(b) Secondly, resource distribution of community (including ownership and control) for the common good as for the welfare of the society.

(c) thirdly, the economic system operation shall not result in the concentration of wealth and means of production to the common detriment in short safety of the person who is citizens of the country,

(d) Every person has equal pay for equal work irrespective of sex.

(e) the fifth point defines that the strength of the men or women or workers who get

involve themselves in working is not going to be abused including the tender age of children, and also no citizens including the children were not actually got fore bt any type of economic necessity in involving any avocation which not suits to their ages or strength.

(f)that the last point explains about the children safety that every child are must get an opportunity or facilities to develop themselves in a very healthy manner, and along with with that every children’s reputation or dignity in another word shall be secured against any kind of exploitations or immoral and material abandonment.

Q35. What is the position of the Right to Property in India?

- a. Legal right available to citizens only
- b. Legal right available to any person
- c. Fundamental Right available to citizens only
- d. Neither Fundamental Right nor legal right

Answer: b

Explanation:

300A. Persons not to be deprived of property save by authority of law.

It states that No person shall be deprived of his property save by authority of law.

Q36. What was the exact constitutional status of India on 26th January, 1950?

- a. A Democratic Republic
- b. A Sovereign Democratic Republic
- c. A Sovereign Secular Democratic Republic
- d. A Sovereign Socialist Secular Democratic Republic

Answer: b

Explanation:

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC.

REPUBLIC and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this 26th day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

Word Socialist was added by 42nd amendment 1976.

Q37. Constitutional government means

- a representative government of a nation with federal structure
- a government whose Head enjoys nominal powers
- a government whose Head enjoys real powers
- a government limited by the terms of the Constitution

Answer: d

Explanation:

A constitutional government is a government that is structured according to a written document called a constitution. In a constitutional government, the constitution is the supreme law of the land. Nothing can contradict it. Most constitutions not only specify how the government is to be structured but also guarantee citizens a

number of rights and liberties. The vast majority of countries in the world has a constitutional government. This is because people have found that these sorts of governments bring about order by specifically stating how government power should be used.

Q38. Consider the following statements in respect of Bharat Ratna and Padma Awards:

- Bharat Ratna and Padma Awards are titles under the Article 18(1) of the Constitution of India.
- Padma Awards, which were instituted in the year 1954, were suspended only once.
- The number of Bharat Ratna Awards is restricted to a maximum of five in a particular year.

Which of the above statements are *not* correct?

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

Answer: d

Explanation:

Statement 1 is incorrect: The national awards such as Bharat Ratna, Padma Vibhushan, Padma Bhushan and Padma Shri do not amount to titles within the meaning of Article 18(1) of the Constitution.

Statement 2 is incorrect: Padma awards were instituted in the year 1954 and have been suspended in year 1978, 1979, 1993, and 1997.

Statement 3 is Incorrect: The number of Bharat Ratna Awards is restricted to a maximum of three in a particular year.

Q39. With reference to India, consider the following statements:

1. Judicial custody means an accused is in the custody of the concerned magistrate and such accused is locked up in police station, not in jail.
2. During judicial custody, the police officer in charge of the case is not allowed to interrogate the suspect without the approval of the court.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

Statement 1 is correct: Judicial custody means an accused is in the custody of the concerned magistrate and such accused is locked up in police station, not in jail.

Statement 2 is incorrect: During judicial custody, the police officer in charge of the case is not allowed to interrogate the suspect without the approval of the court because in judicial custody the suspect is lodged in a jail and in police custody the suspect is in a police station lockup.

Q40. With reference to India, consider the following statements:

1. When a prisoner makes out a sufficient case, parole cannot be denied to such prisoner because it becomes a matter of his/her right.
2. State Governments have their own Prisoners Release on Parole Rules.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

Statement 1 is incorrect: While Parole is not a matter of right, it is a legal sanction that lets a prisoner leave the prison for a short duration. Parole is a discretionary power to the prison authorities.

Statement 2 is correct: State Governments have their own Prisoners Release on Parole Rules.

Q41. At the national level, which ministry is the nodal agency to ensure effective implementation of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006?

- a. Ministry of Environment, Forest and Climate Change.
- b. Ministry of Panchayati Raj
- c. Ministry of Rural Development
- d. Ministry of Tribal Affairs

Answer: d

Explanation:

At the national level, Ministry of Tribal Affairs is the nodal agency to ensure effective implementation of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

Q42. A legislation which confers on the executive or administrative authority an unguided and uncontrolled discretionary power in the matter of application of law

violates which one of the following Articles of the Constitution of India?

- a. Article 14
- b. Article 28
- c. Article 32
- d. Article 44

Answer: a

Explanation:

Every human being is born equally and therefore the makers of the Indian Constitution had also made provision for equality of the people. Article 14 is one of the most important Articles of the Indian constitution and it is also regarded as part of the golden triangle of the Constitution along with Article 19 and 21.

In India, this right is very important because there has been a widespread socio-economic difference which has been in existence from a long time. People have been discriminated on the basis of their gender or the religion they follow, therefore Article 14 was included in the Constitution to remove such inequalities and bring all the people under the equal protection of the law.

Therefore, if the law confers vague and wide discretionary power on any administrative authority, it may be declared ultra vires Article 14, Article 19 and other provisions of the Constitution.

Q43. Which one of the following in Indian polity is an essential feature that indicates that it is federal in character?

- a. The independence of judiciary is safeguarded.
- b. The Union Legislature has elected representatives from constituent units.

- c. The Union Cabinet can have elected representatives from regional parties.
- d. The Fundamental Rights are enforceable by Courts of Law.

Answer: a

Explanation:

Independence of Judiciary is an important federal feature of the Indian Constitution. The Supreme Court is a federal court.

The Union Legislature has elected representatives from constituent units and the Union Cabinet can have elected representatives from regional parties are features of both union and federal government.

The Fundamental Rights are enforceable by Courts of Law are related to the enforcement of fundamental rights of people and not related to federal features.

Q44. Which one of the following best defines the term 'State'?

- a. A community of persons permanently occupying a definite territory independent of external control and possessing an organized government.
- b. A politically organized people of a definite territory and possessing an authority to govern them, maintain law and order, protect their natural rights and safeguard their means of sustenance
- c. A number of persons who have been living in a definite territory for a very long time with their own culture, tradition and government
- d. A society permanently living in a definite territory with a central authority, an executive responsible

to the central authority and an independent judiciary

Answer: a

Explanation:

A community of persons permanently occupying a definite territory independent of external control and possessing an organized government best defines the term 'State'.

A state is a centralized political organization that imposes and enforces rules over a population within a territory.

Q45. With reference to Indian judiciary, consider the following statements:

1. Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with prior permission of the President of India.
2. A High Court in India has the power to review its own judgement as the Supreme Court does.

Which of the statements given above is/are correct?

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

Answer: c

Explanation:

Statement 1 is correct: Attendance of retired Judges at sittings of the Supreme Court Notwithstanding anything in this chapter, the Chief Justice of India may at any time, with the previous consent of the president, request any person who has held the office of a Judge of the Supreme

Court or of the Federal Court or who has held the office of a Judge of a High Court and is duly qualified for appointment as a Judge of the Supreme Court to sit and act as a Judge of the Supreme Court, and every such person so requested shall, while so sitting and acting, be entitled to such allowances as the President may by order determine and have all the jurisdiction, powers and privileges of, but shall not otherwise be deemed to be, a Judge of that Court: Provided that nothing in this article shall be deemed to require any such person as aforesaid to sit and act as a Judge of that Court unless he consents so to do

Statement 2 is correct: The Supreme Court of India has power to review its own judgement or order. Thus, it is not bound by its previous decision and can depart from it in the interest of justice or community welfare. As a court of record, a high court also has the power to review and correct its own judgement or order.

Q46. With reference to India, consider the following statements:

1. There is only one citizenship and one domicile.
2. A citizen by birth only can become the Head of State.
3. A foreigner once granted the citizenship cannot be deprived of it under any circumstances.

Which of the statements given above is/are correct?

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

Answer: a

Explanation:

Statement 1 is correct: In Pradeep Jain v. Union of India, the Supreme Court has held that in India, Article 5 recognizes only one domicile of India.

Statement 2 is incorrect: No person shall be eligible for election as President unless he

(a) is a citizen of India,

(b) has completed the age of thirty five years, and

(c) is qualified for election as a member of the House of the People.

It is not necessary that a person should have citizenship by birth for the head of state.

Statement 3: The Citizenship Act, 1955, prescribes three ways of losing citizenship whether acquired under the Act or under the Constitution – Renunciation, Termination, Deprivation.

Q47. Which one of the following factors constitutes the *best* safeguard of liberty in a liberal democracy?

- a. A committed judiciary
- b. Centralization of powers
- c. Elected government
- d. Separation of powers

Answer: d

Explanation:

Separation of power ensures checks and balances on different wings - legislative, executive and judiciary and prevents concentration of power and thereby ensuring safeguard to liberty.

Q48. We adopted parliamentary democracy based on the British model, but how does our model differ from that model?

- 1. As regards legislation, the British Parliament is supreme or sovereign but in India, the power of the Parliament to legislate is limited.
- 2. In India, matters related to the constitutionality of the Amendment of an Act of the Parliament are referred to the Constitution Bench by the Supreme Court.

Select the correct answer using the code given below.

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

Answer: c

Explanation:

Statement 1 is correct: The British system is based on the doctrine of the sovereignty of Parliament. The Parliament is not supreme in India and enjoys limited and restricted powers due to a written Constitution, federal system, judicial review and fundamental rights.

Statement 2 is correct: In India the power to legislate is limited by Art 13 of judicial review. So, matters related to the constitutionality of the Amendment of an Act of the Parliament are referred to the Constitution Bench by the Supreme Court.

Q49. With reference to the Union Government, consider the following statements:

- 1. Gopaldaswamy Iyengar Committee suggested that a minister and a secretary be designated solely for pursuing the subject of administrative reform and promoting it.

2. In 1970, the Department of Personnel was constituted on the recommendation of the Administrative Reforms Commission, 1966, and this was placed under the Prime Minister's charge.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

Statement 1 is incorrect: 1st Administrative reforms committee not the Gopalaswamy Iyengar Committee suggested that a minister and a secretary be designated solely for pursuing the subject of administrative reform and promoting it.

Statement 2 is correct: In 1970, the Department of Personnel was constituted on the recommendation of the Administrative Reforms Commission, 1966, and this was placed under the Prime Minister's charge.

Q50. 'Right to Privacy' is protected under which Article of the Constitution of India?

- a. Article 15
- b. Article 19
- c. Article 21
- d. Article 29

Answer: c

Explanation:

In Puttaswamy Case of 2017, Supreme Court of India has held that right to

privacy is a Fundamental Right and it is protected under Article 21 of the Constitution of India.

Q51. Consider the following statements:

- 1. In India, there is no law restricting the candidates from contesting in one Lok Sabha election from three constituencies.
- 2. In 1991 Lok Sabha Election, Shri Devi Lal contested from three Lok Sabha constituencies.
- 3. As per the existing rules, if a candidate contests in one Lok Sabha election from many constituencies, his/her party should bear the cost of bye-elections to the constituencies vacated by him/her in the event of him/her winning in all the constituencies.

Which of the statements given above is/are correct?

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

Answers: b

Explanation:

Statement 1 is incorrect: According to Representation of People Act 1951, a person shall not be nominated as a candidate for election, in the case of a general election to the House of the People, from more than two Parliamentary constituencies.

Statement 2 is correct: In 1991 Lok Sabha Election, Shri Devi Lal contested from three Lok Sabha constituencies.

Statement 3 is incorrect: There is no such provision that if a candidate contests in

one Lok Sabha election from many constituencies, his/her party should bear the cost of bye-elections to the constituencies vacated by him/her in the event of him/her winning in all the constituencies.

Q 52. The money multiplier in an economy increases with which one of the following?

- Increase in the Cash Reserve Ratio in the banks
- Increase in the Statutory Liquidity Ratio in the banks
- Increase in the banking habit of the people
- Increase in the population of the country

Answer: c

Explanation:

An increase in the banking habit of the population will increase the lending, thereby will lead to more deposits in the banking system, hence increasing the money multiplier.

In the financial system, banks can enhance money supply by expanding loans out of the deposits they receive. The deposit received by commercial banks are part of base money. But after receiving the deposits, banks create money by expanding loans and cheque facilities. Here, the banking system as a whole can create additional money impact through deposit acceptance and loan disbursal. The multiple in which the banking system can expand deposits received in the form of base money into broad money is called money multiplier. From a practical sense, money multiplier shows what is the proportion of broad money compared to base money.

Money multiplier is expressed as a ratio between broad money and base money.

For example, the base money as on March 31, 2017 was Rs 19405.97 billion, whereas broad money was Rs 121815.26 billion. This means a money multiplier of 6.2.

Q 53. With reference to Indian economy, demand-pull inflation can be caused/increased by which of the following?

- Expansionary policies
- Fiscal stimulus
- Inflation-indexing wages
- Higher purchasing power
- Rising interest rates

Select the correct answer using the code given below.

- 1, 2 and 4 only
- 3, 4 and 5 only
- 1, 2, 3 and 5 only
- 1, 2, 3, 4 and 5

Answer: a

Explanation:

Demand-pull inflation is the upward pressure on prices that follows a shortage in supply. Economists describe it as "too many dollars chasing too few goods." Demand-pull inflation is a tenet of Keynesian economics that describes the effects of an imbalance in aggregate supply and demand.

1 and 2 are correct: Expansionary policies and fiscal stimulus will lead to more money with people so more demand for goods and services leading to inflation.

4 is correct: Higher purchasing power will increase the demand of supply and goods thus more inflation.

Q54. With reference to India, consider the following statements:

1. Retail investors through demat account can invest in 'Treasury Bills' and 'Government of India Debt Bonds' in primary market.
2. The 'Negotiated Dealing System-Order Matching' is a government securities trading platform of the Reserve Bank of India.
3. The 'Central Depository Services Ltd.' is jointly promoted by the Reserve Bank of India and the Bombay Stock Exchange.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

Statement 1 is correct: Yes, Retail investors through demat account can invest in 'Treasury Bills' and 'Government of India Debt Bonds' in primary market.

Statement 2 is correct: The 'Negotiated Dealing System-Order Matching' is a government securities trading platform of the Reserve Bank of India.

Statement 3 is incorrect: Central Depository Services (India) Ltd (CDSL) is the first listed Indian central securities depository based in Mumbai.

Q55. In India, the central bank's function as the 'lender of last resort' usually refers to which of the following?

1. Lending to trade and industry bodies when they fail to borrow from other sources
2. Providing liquidity to the banks having a temporary crisis

3. Lending to governments to finance budgetary deficits

Select the correct answer using the code given below.

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

Answer: b

Explanation:

A central bank is the lender of last resort because, in any country, its central bank offers an extension of credit to financial institutions experiencing financial difficulty that cannot obtain necessary funds elsewhere.

The main task in front of the lender of last resort is to preserve the stability of the banking and financial system by protecting individuals' deposited funds and preventing panic-ridden withdrawing from banks with temporarily limited liquidity. For more than a century and a half central banks have been trying to avoid great depressions by acting as lenders of last resort in times of financial crisis.

Q56. Consider the following statements:

1. The Governor of the Reserve Bank of India (RBI) is appointed by the Central Government.
2. Certain provisions in the Constitution of India give the Central Government the right to issue directions to the RBI in public interest.
3. The Governor of the RBI draws his power from the RBI Act.

Which of the above statements are correct?

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

Answer: c

Explanation:

Statement 1 is correct: The Governor of the Reserve Bank of India is appointed by the Central Government.

Statement 2 is incorrect: as Central Government can give directions to RBI as per section 7 of RBI Act 1934 and not as per constitutional Provisions.

Statement 3 is correct: The Governor of the RBI draws his power from the RBI Act.

Q 57. With reference to casual workers employed in India, consider the following statements:

- 1. All casual workers are entitled for Employees Provident Fund coverage.
- 2. All casual workers are entitled for regular working hours and overtime payment.
- 3. The government can by a notification specify that an establishment or industry shall pay wages only through its bank account.

Which of the above statements are correct?

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

Answer: c

Explanation:

Statement 1 is correct: All casual workers are entitled for Employees Provident Fund coverage.

Statement 2 is incorrect: there is no provision of regular work for worker but they are entitled to overtime.

Statement 3 is correct: The government can by a notification specify that an establishment or industry shall pay wages only through its bank account.

Q 58. Which among the following steps is most likely to be taken at the time of an economic recession?

- a. Cut in tax rates accompanied by increase in interest rate
- b. Increase in expenditure on public projects
- c. Increase in tax rates accompanied by reduction of interest rate
- d. Reduction of expenditure on public project

Answer: b

Explanation:

Increase in expenditure on public projects so that people can get employment and thus reducing the impact of recession on people as more and more people will be losing their job during recession.

Q59. Consider the following statements:

Other things remaining unchanged, market demand for a good might increase if

- 1. Price of its substitute increase
- 2. Price of its complement increase
- 3. The good is an inferior good and income of the consumers increases
- 4. Its price falls

Which of the above statements are correct?

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

Answer: a

Explanation:

Statement 1 is correct: as price of a substitutes of a product increases people will prefer the product more.

Statement 2 is incorrect: as complement of a product is used together, so with increase in its price the demand of the product will fall.

Statement 3 is incorrect: demand of Inferior goods decreases as income increases.

Statement 4 is correct: if price of a good falls its demand increases.

Q60. With reference to 'Urban Cooperative Banks' in India, consider the following statements:

- 1. They are supervised and regulated by local boards set up by the State Governments.
- 2. They can issue equity shares and preference shares.
- 3. They were brought under the purview of the Banking Regulation Act, 1949 through an Amendment in 1966.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

Statement 1 is incorrect: Through an amendment in 2020 the Urban Cooperative Banks' were brought under the RBI.

Statement 2 is correct: Urban Cooperative Banks can issue equity shares and preference shares.

Statement 3 is correct: They were brought under the purview of the Banking Regulation Act, 1949 through an Amendment in 1966.

Q 61. Indian Government Bond Yields are influenced by which of the following?

- 1. Actions of the United States Federal Reserve
- 2. Actions of the Reserve Bank of India
- 3. Inflation and short-term interest rates

Select the correct answer using the code given below.

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

Answer: d

Explanation:

Statement 1 is correct: Increase in rates of US Federal reserve shifts all the investments to US which result in decline in investment in India. This may decrease the bond yield.

Statement 2 is correct: Reserve Bank actions change the interest rates and interest rates impact the bond yield.

Statement 3 is correct: In case of inflation RBI increases the interest rates and interest rates impact the bond yield.

Q62. Consider the following:

1. Foreign currency convertible bonds
2. Foreign institutional investment with certain conditions
3. Global depository receipts
4. Non-resident external deposits

Which of the above can be included in Foreign Direct Investments?

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

Answer: a

Explanation:

Statement 1, 2 and 3 are correct: Foreign currency convertible bonds, Foreign institutional investment with certain conditions and Global depository receipts are included in Foreign Direct Investments.

Statement 4 is incorrect: Non-Resident external deposits are a 'debt creating' flow in balance of payments accounts and therefore, not part of Foreign Direct investments.

Q63. Consider the following statements:

The effect of devaluation of a currency is that it necessarily

1. Improves the competitiveness of the domestic exports in the foreign markets
2. Increases the foreign value of domestic currency
3. Improves the trade balance

Which of the above statements is/are correct?

- a. 1 only
- b. 1 and 2 only
- c. 3 only

- d. 2 and 3 only

Answer: a

Explanation:

Statement 1 is correct: devaluation of a currency means a weak domestic currency which makes a nation's exports more competitive in global markets as now buyer can buy more in same amount.

Statement 2 is incorrect: devaluation of a currency makes the domestic currency cheaper relative to other currencies.

Statement 3 is incorrect: the devaluation of currency improves trade balance only for net exporter country. Since India is net importer so its not beneficial for India.

Q64. Which one of the following effects of creation of black money in India has been the main cause of worry to the Government of India?

- a. Diversion of resources to the purchase of real estate and investment in luxury housing
- b. Investment in unproductive activities and purchase of precious stones, jewellery, gold, etc.
- c. Large donations of political parties and growth of regionalism
- d. Loss of revenue to the State Exchequer due to tax evasion

Answer: d

Explanation:

Loss of revenue to the State Exchequer due to tax evasion has been the main cause of worry to the Government of India due to creation of black money in India.

Q65. Which of the following is likely to be the most inflationary in its effects?

- a. Repayment of public debt

- b. Borrowing from the public to finance a budget deficit
- c. Borrowing from the banks to finance a budget deficit
- d. Creation of new money to finance a budget deficit

Answer: d

Explanation:

Creation of new money to finance a budget deficit is likely to be the most inflationary in its effects.

Q66. Consider the following statements:

- 1. 'Right to the City' is an agreed human right and the UN-Habitat monitors the commitments made by each country in this regard.
- 2. 'Right to the City' gives every occupant of the city the right to reclaim public spaces and public participation in the city.
- 3. 'Right to the City' means that the State cannot deny any public service or facility to the unauthorized colonies in the city.

Which of the statements given above is/are correct?

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

Answer: d

Explanation:

Statement 1 is correct: Right to the City' is an agreed human right. The Right to the City is the right of all inhabitants, present and future, to occupy, use, and produce just, inclusive, and sustainable cities, defined as a common good essential to the quality of life. Also, the UN Habitat

monitors the commitments made by each country in this regard.

Statement 2 is correct: 'Right to the City' gives every occupant of the city the right to reclaim public spaces and public participation in the city.

Statement 3 is correct: 'Right to the City' means that the State cannot deny any public service or facility to the unauthorized colonies in the city.

Q67. Consider the following statements:

- 1. The Global Ocean Commission grants licences for seabed exploration and mining in international waters.
- 2. India has received licences for seabed mineral exploration in international waters.
- 3. 'Rare earth minerals' are present on seafloor in international waters.

Which of the statements given above are correct?

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

Answer: b

Explanation:

Statement 1 is incorrect: The International Sea Bed Authority grants licences for seabed exploration and mining in international waters.

Statement 2 is correct: Since 2014, India has received licences from International Sea Bed Authority for seabed mineral exploration in international waters.

Statement 3 is correct: 'Rare earth minerals' are present on seafloor in international waters.

Q68. Consider the following statements:

1. 21st February is declared to be the International Mother Language Day by UNICEF.
2. The demand that Bangla has to be one of the national languages was raised in the Constituent Assembly of Pakistan.

Which of the above statements is/are correct?

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

Answer: b

Explanation:

Statement 1 is incorrect: International Mother Language Day is observed on 21 February every year. It is declared by UNESCO and not UNICEF.

Statement 2 is correct: The demand that Bangla has to be one of the national languages was raised in the Constituent Assembly of Pakistan.

Q69. With reference to 'Water Credit', consider the following statements:

1. It puts microfinance tools to work in the water and sanitation sector.
2. It is a global initiative launched under the aegis of the World Health Organization and the World Bank.
3. It aims to enable the poor people to meet their water needs without depending on subsidies.

Which of the statements given above are correct?

- a. 1 and 2 only

- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer: c

Explanation:

Statement 1 is correct. Water Credit puts microfinance tools to work in the water and sanitation sector.

Statement 2 is incorrect. It is a global initiative launched under the aegis of the Water.org. Water.org is a global non-profit organization working to bring water and sanitation to the world.

Statement 3 is correct. It aims to enable the poor people to meet their water needs without depending on subsidies.

Q70. Consider the following statements in respect of the Laureus World Sports Award which was instituted in the year 2000:

1. American golfer Tiger Woods was the first winner of this award.
2. The award was received mostly by 'Formula One' players so far.
3. Roger Federer received this award maximum number of times compared to others.

Which of the above statements are correct?

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

Answer: c

Explanation:

Statement 1 is correct: American golfer Tiger Woods was the first winner of Laureus World Sports Award.

Statement 2 is incorrect: Tennis players have received more Laureus World Sports Award compared to other sports.

Statement 3 is correct: Roger Federer received this award maximum number of times compared to others.

Q71. Consider the following statements in respect of the 32nd Summer Olympics:

1. The official motto for this Olympics is 'A New World'.
2. Sport Climbing, Surfing, Skateboarding, Karate and Baseball are included in this

Which of the above statements is/are correct?

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

Answer: b

Explanation:

- Statement 1 is incorrect: 'United by Emotion' is the motto for this year's 2020 Tokyo Olympics. "The motto emphasises the power of sport to bring together people from diverse backgrounds of every kind and allow them to connect and celebrate in a way that reaches beyond their differences."
- Statement 2 is correct: Skateboarding, surfing, climbing, karate and baseball/softball are the five new sports included for the 2020 Olympics in Tokyo.

Q72. Consider the following statements in respect of the ICC World Test Championship:

1. The finalists were decided by the number of matches they won.
2. New Zealand was ranked ahead of England because it won more matches than England.

Which of the above statements is/are correct?

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

Answer: d

Explanation:

- Statement 1 is incorrect: The ICC will consider percentage of points earned from the contested matches in deciding the finalists of the inaugural World Test Championship (WTC)
- Statement 2 is incorrect: New Zealand was ranked ahead of England because they had better percentage of points.

Q73. The vegetation of Savannah consists of grassland with scattered small trees, but extensive areas have no trees. The forest development in such areas is generally kept in check by one or more or a combination of some conditions. Which of the following are such conditions?

1. Burrowing animals and termites
2. Fire
3. Grazing herbivores
4. Seasonal rainfall
5. Soil properties

Select the correct answer using the code given below.

- a. 1 and 2
- b. 4 and 5

- c. 2, 3 and 4
- d. 1, 3 and 5

Answer: c

Explanation:

Statement 1 is incorrect: Burrowing activities increases the levels of soil nutrients and greater degree of water infiltration, which facilitates the forestry activity.

Statement 2 and 3 are correct: Nutrient and soil moisture availability are usually the limiting factors affecting the biomass growth in savannas, and overall biomass is impacted by competition, fire, grazing, and harvesting.

Statement 4 is correct: Savanna receives less rainfall and that too is seasonal so it limits the forestry activity.

Q74. With reference to the water on the planet Earth, consider the following statements:

1. The amount of water in the rivers and lakes is more than the amount of groundwater.
2. The amount of water in polar ice caps and glaciers is more than the amount of groundwater.

Which of the statements given above is/are correct?

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

Answer: b

Explanation:

Statement 1 is correct and statement 2 is incorrect:

Water source	Water volume, in cubic miles	Water volume, in cubic kilometers
Oceans, Seas, & Bays	321,000,000	1,338,000
Ice-caps, Glaciers, & Permanent Snow	5,773,000	24,064
Groundwater	5,614,000	23,400
Fresh	2,526,000	10,530
Saline	3,088,000	12,870
Soil Moisture	3,959	16,500
Ground Ice & Permafrost	71,970	300,000
Lakes	42,320	176,400
Fresh	21,830	91,000
Saline	20,490	85,400
Atmosphere	3,095	12,900
Swamp Water	2,752	11,400
Rivers	509	2,120
Biological Water	269	1,120
Total	332,500,000	1,386,000

Source: Gleick, P. H., 1996: Water resources. In Encyclopaedia of Climate Change, Oxford University Press, New York, vol. 2, pp.8-12.

Q75. Consider the following statements:

1. Moringa (drumstick tree) is a leguminous evergreen tree.
2. Tamarind tree is endemic to South Asia.
3. In India, most of the tamarind is collected as minor forest produce.
4. India exports tamarind and seeds of moringa.
5. Seeds of moringa and tamarind can be used in the production of biofuels.

Which of the statements given above are correct?

- a. 1, 2, 4 and 5
- b. 3, 4 and 5
- c. 1, 3 and 4
- d. 1, 2, 3 and 5

Answer: b

Explanation:

- Statement 1 is incorrect: Depending on the species and climate, Moringa trees may be evergreen or semi-deciduous.
- Statement 2 is incorrect: Tamarind is native to tropical Africa. It is widely cultivated in tropical and subtropical regions.
- Statement 3 is correct: In India, most of the tamarind is collected as minor forest produce.
- Statement 4 is correct: India exports tamarind and seeds of moringa.
- Statement 5 is correct: Seeds of moringa and tamarind can be used in the production of biofuels.

Q76. The black cotton soil of India has been formed due to the weathering of

- a. brown forest soil
- b. fissure volcanic rock
- c. granite and schist
- d. shale and limestone

Answer: b

Explanation:

Black soil is formed due to the weathering or erosion of the basalt rocks or fissure volcanic rock.

Q77. How is permaculture farming different from conventional chemical farming?

1. Permaculture farming discourages monocultural practices but in conventional chemical farming, monoculture practices are predominant.
2. Conventional chemical farming can cause increase in soil salinity but the occurrence of such

phenomenon is not observed in permaculture farming.

3. Conventional chemical farming is easily possible in semi-arid regions but permaculture farming is not so easily possible in such regions.
4. Practice of mulching is very important in permaculture farming but not necessarily so in conventional chemical farming.

Select the correct answer using the code given below.

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

Answer: b

Explanation

Statement 1 is correct: Permaculture farming discourages monocultural practices but in conventional chemical farming, monoculture practices are predominant.

Statement 2 is correct: Conventional chemical farming can cause increase in soil salinity but the occurrence of such phenomenon is not observed in permaculture farming.

Statement 3 is incorrect: Due to its focus on water conservation and region-specific crops, permaculture farming is very much suitable for arid and semi-arid regions.

Q78. With reference to 'palm oil', consider the following statements:

1. The palm oil tree is native to Southeast Asia.
2. The palm oil is a raw material for some industries producing lipstick and perfumes.

3. The palm oil can be used to produce biodiesel.

Which of the statements given above are correct?

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

Answer: b

Explanation:

Statement 1 is incorrect: The palm oil tree is native to hills of guinea.

Statement 2 is correct: The palm oil is a raw material for some industries producing lipstick and perfumes.

Statement 3 is correct: The palm oil can be used to produce biodiesel.

Q79. With reference to the Indus River system, of the following four rivers, three of them pour into one of them which joins the Indus direct. Among the following, which one is such river that joins the Indus direct?

- a. Chenab
- b. Jhelum
- c. Ravi
- d. Sutlej

Answer: a

Explanation:

Jhelum, Ravi and Satluj meets in Chenab and Chenab joins the Indus directly.

Q80. With reference to India, Didwana, Kuchaman, Sargol and Khatu are the names of

- a. glaciers
- b. mangrove areas
- c. Ramsar sites

- d. saline lakes

Answer: d

Explanation:

Didwana, Kuchaman, Sargol and Khatu are the names of saline lakes.

Q81. Consider the following rivers:

- 1. Brahmani
- 2. Nagavali
- 3. Subarnarekha
- 4. Vamsadhara

Which of the above rise from the Eastern Ghats?

- a. 1 and 2
- b. 2 and 4
- c. 3 and 4
- d. 1 and 3

Answer: b

Explanation:

Subarnarekha originates in Jharkhand.

The Brahmani is formed by the confluence of the Sankh and South Koel rivers, and flows through the districts of Sundargarh, Deogarh, Angul, Dhenkanal, Cuttack, Jajapur and Kendrapara.

The Nagavali and Suvarnamukhi rivers originate in the Eastern Ghats while Nagavali in Vangara Mandal and the confluence joins the Bay of Bengal at Kallepalli near Srikakulam Rising in Pachipenta hills the Vegavathi river flows from west to east, ultimately joining the river Suvarnamukhi, Gomukhi joins Suvarnamukhi at Sirlam Village of Vizianagaram District and Mahendratanya which is Atributory of Vamsadhara joins the later at Komanapalli Village in Hiramandalam Mandal.

Q82. Among the following, which one is the *least* water-efficient crop?

- a. Sugarcane
- b. Sunflower
- c. Pearl millet
- d. Red gram

Answer: a

Explanation:

Sugarcane is a highly water intensive crop. Sugarcane is a water-intensive crop that remains in the soil all year long. As one of the world's thirstiest crops, sugarcane has a significant impact on many environmentally sensitive regions

Q83. Consider the following statements:

1. In the tropical zone, the western sections of the oceans are warmer than the eastern sections owing to the influence of trade winds.
2. In the temperate zone, westerlies make the eastern sections of oceans warmer than the western sections.

Which of the statements given above is/are correct?

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

Answer: c

Explanation:

Statement 1 is correct: In the tropical zone, the western sections of the oceans are warmer than the eastern sections owing to the influence of trade winds.

Statement 2 is correct: In the temperate zone, westerlies make the eastern

sections of oceans warmer than the western sections.

Q84. "Leaf litter decomposes faster than in any other biome and as a result the soil surface is often almost bare. Apart from trees, the vegetation is largely composed of plant forms that reach up into the canopy vicariously, by climbing the trees or growing as epiphytes, rooted on the upper branches of trees." This is the most likely description of

- a. coniferous forest
- b. dry deciduous forest
- c. mangrove forest
- d. tropical rain forest

Answer: d

Explanation:

The tropical rainforest is a hot, moist biome found near Earth's equator. The world's largest tropical rainforests are in South America, Africa, and Southeast Asia. Tropical rainforests receive from 60 to 160 inches of precipitation that is fairly evenly distributed throughout the year. The combination of constant warmth and abundant moisture makes the tropical rainforest a suitable environment for many plants and animals. Tropical rainforests contain the greatest biodiversity in the world. Over 15 million species of plants and animals live within this biome.

The hot and humid conditions make tropical rainforests an ideal environment for bacteria and other microorganisms. Because these organisms remain active throughout the year, they quickly decompose matter on the forest floor. In other biomes, such as the deciduous forest, the decomposition of leaf litter adds nutrients to the soil. But in the tropical rainforest, plants grow so fast that they rapidly consume the nutrients

from the decomposed leaf litter. As a result, most of the nutrients are contained in the trees and other plants rather than in the soil. Most nutrients that are absorbed into the soil are leached out by the abundant rainfall, which leaves the soil infertile and acidic.

Q85. Consider the following statements:

Statement 1: The United Nations Capital Development Fund (UNCDF) and the Arbor Day Foundation have recently recognized Hyderabad as 2020 Tree City of the World.

Statement 2: Hyderabad was selected for the recognition for a year following its commitment to grow and maintain the urban forests.

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

- Both Statement 1 and Statement 2 are correct and Statement 2 is the correct explanation for Statement 1
- Both Statement 1 and Statement 2 are correct but Statement 2 is not the correct explanation for Statement 1
- Statement 1 is correct but Statement 2 is not correct
- Statement 1 is not correct but Statement 2 is correct

Answer: d

Explanation:

- Statement 1 is incorrect. It is FAO and Arbour, not UNCDF.
- Statement 2 is correct.

Q86. In the context of India's preparation for Climate-Smart Agriculture, consider the following statements:

- The 'Climate-Smart Village' approach in India is a part of a project led by the Climate Change, Agriculture and Food Security (CAAFS), an international research programme.
- The project of CCAFS is carried out under Consultative Group on International Agricultural Research (CGIAR) headquartered in France.
- The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India is one of the CGIAR's research centres.

Which of the statements given above are correct?

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

Answer: d

Explanation:

Statement 1 is correct: The 'Climate-Smart Village' approach in India is a part of a project led by the Climate Change, Agriculture and Food Security (CAAFS), an international research programme.

Statement 2 is correct: The project of CCAFS is carried out under Consultative Group on International Agricultural Research (CGIAR) headquartered in France.

Statement 3 is correct: The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India is one of the CGIAR's research centres.

Q87. Consider the following kinds of organisms:

- Copepods
- Cyanobacteria
- Diatoms

4. Foraminifera

Which of the above are primary producers in the food chains of oceans?

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

Answer: b

Explanation:

Statement 1 is incorrect: Copepods are a group of small crustaceans found in nearly every freshwater and saltwater habitat. Copepods are major secondary producers in the World Ocean.

Statement 2 is correct: Diatom refers to any member of a large group comprising several genera of algae, specifically microalgae, found in the oceans, waterways and soils of the world. They are major primary producers in the food chains of oceans.

Statement 3 is correct: Cyanobacteria, also known as Cyanophyta, are a phylum of Gram-negative bacteria that obtain energy via photosynthesis. They are major primary producers in the food chains of oceans.

Statement 4 is incorrect: Foraminifera are single-celled organisms, members of a phylum or class of amoeboid protists characterized by streaming granular ectoplasm for catching food and other uses; and commonly an external shell of diverse forms and materials. They are consumer.

Q88. Consider the following animals:

- 1. Hedgehog
- 2. Marmot
- 3. Pangolin

To reduce the chance of being captured by predators, which of the above organisms rolls up/roll up and protects/protect its/their vulnerable parts?

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

Answer: d

Explanation:

1 is correct: A hedgehog is a spiny mammal of the subfamily Erinaceinae, in the eulipotyphlan family Erinaceidae. They roll up to themselves from predators.

2 is incorrect: When a marmot spots a potential predator it releases a sharp whistle, alerting all other animals in the vicinity to take cover. They do not roll up.

3 is correct: Pangolins, sometimes known as scaly anteaters, are mammals of the order Pholidota. They roll up and protect their sensitive parts.

Q89. With reference to the 'New York, Declaration on Forests', which of the following statements are correct?

- 1. It was first endorsed at the United Nations Climate Summit in 2014.
- 2. It endorses a global timeline to end the loss of forests.
- 3. It is a legally binding international declaration.
- 4. It is endorsed by governments, big companies and indigenous communities.
- 5. India was one of the signatories at its inception.

Select the correct answer using the code given below.

- a. 1, 2 and 4 only

- b. 1, 3 and 5 only
- c. 3 and 4 only
- d. 2 and 5 only

Answer: a

Explanation:

Statement 1 is correct: New York, Declaration on Forests was first endorsed at the United Nations Climate Summit in 2014.

Statement 2 is correct: It endorses a global timeline to end the loss of forests.

Statement 3 is incorrect: It is a not legally binding international declaration.

Statement 4 is correct: It is endorsed by governments, big companies and indigenous communities.

Statement 5 is incorrect: The Declaration is currently endorsed by over 190 entities but it is not endorsed by India.

Q90. Magnetite particles, suspected to cause neurodegenerative problems, are generated as environmental pollutants from which of the following?

- 1. Brakes of motor vehicles
- 2. Engines of motor vehicles
- 3. Microwave stoves within homes
- 4. Power plants
- 5. Telephone line

Select the correct answer using the code given below.

- a. 1, 2, 3 and 5 only
- b. 1, 2 and 4 only
- c. 3, 4 and 5 only
- d. 1, 2, 3, 4 and 5

Answer: d

Explanation:

Magnetite also is produced from peridotites and dunites by serpentinization. Lodestones were used as an early form of magnetic compass. Magnetite has been a critical tool in paleomagnetism, a science important in understanding plate tectonics and as historic data for magnetohydrodynamics and other scientific fields. It is also produced from Brakes of motor vehicles, engines of motor vehicles, telephone line, Microwave stoves, and power plants.

Q91. Which one of the following is a filter feeder?

- a. Catfish
- b. Octopus
- c. Oyster
- d. Pelican

Answer: c

Explanation:

Filter feeders are a sub-group of suspension feeding animals that feed by straining suspended matter and food particles from water, typically by passing the water over a specialized filtering structure. Some animals that use this method of feeding are clams, krill, sponges, baleen whales, and many fish (including some sharks). Some birds, such as flamingos and certain species of duck, are also filter feeders. Filter feeders can play an important role in clarifying water, and are therefore considered ecosystem engineers. They are also important in bioaccumulation and, as a result, as indicator organisms. Oyster is one of the filter feeder.

Q92. In case of which one of the following biogeochemical cycles, the weathering of rocks is the main source of release of nutrient to enter the cycle?

- a. Carbon cycle

- b. Nitrogen cycle
- c. Phosphorus cycle
- d. Sulphur cycle

Answer: c

Explanation:

The phosphorus cycle is the biogeochemical cycle that describes the movement of phosphorus through the lithosphere, hydrosphere, and biosphere. The weathering of rocks is the main source of release of phosphorus to enter the cycle.

Q93. Which of the following are detritivores?

- 1. Earthworms
- 2. Jellyfish
- 3. Millipedes
- 4. Seahorses
- 5. Woodlice

Select the correct answer using the code given below.

- a. 1, 2 and 4 only
- b. 2, 3, 4 and 5 only
- c. 1, 3 and 5 only
- d. 1, 2, 3, 4 and 5

Answer: c

Explanation:

Earthworms, millipedes, woodlice are examples of detritivores. Jellyfish and seahorses are not examples of detritivores.

Q94. The 'Common Carbon Metric', supported by UNEP, had been developed for

- a. Assessing the carbon footprint of building operations around the world

- b. Enabling commercial farming entities around the world to enter carbon emission trading
- c. Enabling governments to assess the overall carbon footprint caused by their countries
- d. Assessing the overall carbon footprint caused by the use of fossil fuels by the world in a unit time

Answer: a

Explanation:

'Common Carbon Metric', supported by UNEP, had been developed for Assessing the carbon footprint of building operations around the world.

Q95. Which of the following have species that can establish symbiotic relationship with other organisms?

- 1. Cnidarians
- 2. Fungi
- 3. Protozoa

Select the correct answer using the code given below.

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

Answer: d

Explanation:

All three Cnidarians, Fungi, Protozoa can establish symbiotic relationship with other organisms.

Q96. 'R2 Code of Practices' constitutes a tool available for promoting the adoption of

- a. Environmentally responsible practices in electronics recycling industry.
- b. Ecological management of 'Wetlands of International Importance' under the Ramsar Convention.
- c. Sustainable practices in the cultivation of agricultural crops in degraded lands.
- d. 'Environmental Impact Assessment' in the exploitation of natural resources.

Answer: a

Explanation:

'R2 Code of Practices' constitutes a tool available for promoting the adoption of a Environmentally responsible practices in electronics recycling industry.

Q97. Why is there a concern about copper smelting plants?

1. They may release lethal quantities of carbon monoxide into environment.
2. The copper slag can cause the leaching of some heavy metals into environment.
3. They may release sulphur dioxide as a pollutant.

Select the correct answer using the code given below.

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

Answer: d

Explanation:

Statement 1 is correct: They may release lethal quantities of carbon monoxide into environment.

Statement 2 is correct: The copper slag can cause the leaching of some heavy metals into environment.

Statement 3 is correct: They may release sulphur dioxide as a pollutant.

Q98. With reference to furnace oil, consider the following statements:

1. It is a product of oil refineries.
2. Some industries use it to generate power.
3. Its use causes sulphur emissions into environment.

Which of the statements given above are correct?

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

Answer: d

Explanation:

Statement 1 is correct: It is a product of oil refineries.

Statement 2 is correct: Some industries use it to generate power.

Statement 3 is correct: Its use causes sulphur emissions into environment.

Q99. What is blue carbon?

- a. Carbon captured by oceans and coastal ecosystems.
- b. Carbon sequestered in forest biomass and agricultural soils.
- c. Carbon contained in petroleum and natural gas.
- d. Carbon present in atmosphere.

Answer: a

Explanation:

Blue Carbon" designates carbon that is fixed via coastal ocean ecosystems, rather than traditional land ecosystems, like forests. Although the ocean's vegetated habitats cover less than 0.5% of the seabed, they are responsible for more than 50%, and potentially up to 70%, of all carbon storage in ocean sediments.

Q100. In the nature, which of the following is/are most likely to be found surviving on a surface without soil?

1. Fern
2. Lichen
3. Moss
4. Mushroom

Select the correct answer using the code given below.

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

Answer: c

Explanation:

2 and 3 are correct: Lichens and mosses are found almost everywhere, these are most common in damp places such as rainforests and temperate forests, and places where there is little or no sunlight.

1 and 4 are incorrect: Fern and Mushroom require soil to grow.