Q.1) What are Cratons?

- a) Volcanic mountains formed by subduction
- b) Regions of continental crust that are billions of years old
- c) Large-scale geological structures that form at plate boundaries
- d) Underground cavities formed by the dissolution of limestone

Q.1) Solution (b)

Explanation:

- Volcanic mountains formed by subduction: This option refers to a type of geological formation known as volcanic arc, which is formed by the subduction of oceanic lithosphere beneath continental lithosphere. These regions are characterized by intense volcanic and seismic activity and are often associated with tectonic plate boundaries. Hence Statement 1 is incorrect.
- Cratons, on the other hand, are the oldest and most stable parts of the continental lithosphere, which form the cores of continents. These regions are typically characterized by thick, ancient rocks that have been tectonically stable for billions of years. Cratons are important geological structures because they provide clues about the early history and evolution of the Earth's continents Hence Statement 2 is correct.
- This option is similar to option a) and refers to the tectonic plate boundaries where two plates move towards each other (convergent plate boundaries), apart from each other (divergent plate boundaries), or slide past each other (transform plate boundaries). These regions are characterized by a variety of geological features such as earthquakes, mountain building, and volcanic activity. Hence Statement 3 is incorrect.
- Underground cavities formed by the dissolution of limestone: This option refers to a geological
 formation known as a cave or cavern. These structures are formed by the dissolution of soluble
 rocks such as limestone, dolomite, or gypsum by acidic groundwater. Hence Statement 4 is
 incorrect.

Q.2) Which of the following statements about the peaks of the Himalayas are correct?

- 1. Mount Everest is the highest peak in the Himalayas and but not in the world.
- 2. K2, also known as Mount Godwin-Austen, is the second-highest peak in the Himalayas and the world.
- 3. The Annapurna peak is located in Uttarakhand state of India

Which of the statements given above is/are correct?

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

Q.2) Solution (d)

Explanation:

- Mount Everest is not only the highest peak in the Himalayas but also the highest peak in the world, with an elevation of 8,848 meters (29,029 feet). Hence Statement 1 is incorrect.
- K2, also known as Mount Godwin-Austen, is the second-highest peak in the Himalayas and the world, with an elevation of 8,611 meters (28,251 feet). Hence Statement 2 is correct.
- The Annapurna peak is not located in Uttarakhand state of India but is part of the Annapurna massif, which is located in Nepal. The Annapurna massif has several peaks over 8,000 meters, including Annapurna I, which is the 10th highest peak in the world, with an elevation of 8,091 meters (26,545 feet). Hence Statement 3 is incorrect.

Q.3) Bhutan is surrounded by which of the following Indian States?

- a) Assam, Arunachal Pradesh, West Bengal, Sikkim.
- b) Assam, Mizoram, West Bengal, Bihar.
- c) Arunachal, Pradesh, Meghalaya, West Bengal, Bihar.
- d) Arunachal Pradesh, Sikkim, Bihar, Meghalaya.

Q.3) Solution (a)

- Bhutan shares its borders with the following Indian states:
 - o Arunachal Pradesh approximately 217 km
 - Assam approximately 267 km
 - West Bengal approximately 183 km
 - Sikkim approximately 32 km

Therefore, Bhutan is surrounded by four Indian states, with a total length of approximately 699 kilometers. Hence option a is correct.

Q.4) Which of the following statements about the Western Ghats and Eastern Ghats are correct?

- 1. The Western Ghats are older than the Eastern Ghats.
- 2. The Western Ghats are continuous and uninterrupted, while the Eastern Ghats are discontinuous and fragmented.
- 3. The Western Ghats are taller and more rugged than the Eastern Ghats.
- 4. The Eastern Ghats are closer to the coast than the Western Ghats.
- 5. The Eastern Ghats are more extensive than the Western Ghats.

Which of the statements given above is/are correct?

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

Q.4) Solution (b)

- The Eastern Ghats are older than the Western Ghats. The Eastern Ghats are believed to have formed around 1.2 billion years ago, while the Western Ghats formed around 150 million years ago. Hence Statement 1 is incorrect.
- The Western Ghats are continuous and uninterrupted, stretching for over 1,600 km from Gujarat
 to Tamil Nadu, while the Eastern Ghats are discontinuous and fragmented, running for over 1,750
 km from Odisha to Tamil Nadu. Hence Statement 2 is correct.
- The Western Ghats are taller and more rugged than the Eastern Ghats. The Western Ghats have an average elevation of about 1,200 meters, with several peaks over 2,000 meters, while the Eastern Ghats have an average elevation of about 600 meters, with few peaks over 1,500 meters.
 Hence Statement 3 is correct
- The Western Ghats are closer to the coast than the Eastern Ghats. The Western Ghats run parallel
 to the western coast of India, while the Eastern Ghats are located farther inland, parallel to the
 eastern coast. Hence Statement 4 is incorrect.
- The Western Ghats are more extensive than the Eastern Ghats. The Western Ghats cover a total area of around 140,000 sq km, while the Eastern Ghats cover an area of around 75,000 sq km Hence Statement 5 is incorrect.

Q.5) Consider the following statements

- 1. Assam shares a border with Bhutan and Bangladesh.
- 2. West Bengal shares a border with Bhutan and Nepal.
- 3. Mizoram shares a border with Bangladesh and Myanmar.

Which of the statements given above are correct?

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

Q.5) Solution (a)

Explanation:



- Assam shares its borders with Bhutan to the north and Bangladesh to the south.
- West Bengal shares its borders with Bhutan to the north and Nepal to the northwest.
- Mizoram shares its borders with Bangladesh to the west and Myanmar to the east and south.
- Therefore, all three statements are correct.

Q.6) What is the correct order of occurrence of the following places as one moves from east to west?

- 1. Murshidabad
- 2. Gorakhpur
- 3. Bhopal
- 4. Bhavnagar

Select the correct code.

- a) 2-4-3-1
- b) 4-3-2-1
- c) 1-3-4-2
- d) 1-2-3-4

Q.6) Solution (d)

Explanation:

The correct order of occurrence of the following places, as one moves from east to west are Murshidabad, Gorakhpur, Bhopal and then Bhavnagar.

- Murshidabad is a district located in the Indian state of West Bengal.
- Gorakhpur is a city located in the Indian state of Uttar Pradesh.
- Bhopal is the capital city of the Indian state of Madhya Pradesh.
- Bhavnagar is a city located in the Indian state of Gujarat. Hence option d is correct

Q.7) The Indian Standard Meridian passes through the States and Union territories of:

- 1. Uttar Pradesh
- 2. Odisha
- 3. Andhra Pradesh
- 4. Chhattisgarh
- 5. Madhya Pradesh
- 6. Andaman and Nicobar
- 7. Uttarakhand
- 8. Tamilnadu

Select the correct code.

- a) 1, 2, 3, 4,5
- b) 2, 3, 4, 5, 6
- c) 3, 4, 5, 6, 7
- d) 1, 3, 5, 6, 7

Q.7) Solution (a)

Explanation:

• The Indian Standard Meridian (82.5° E) is a longitude that passes through 5 Indian states, namely Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Odisha, and Andhra Pradesh. It passes through the city of Mirzapur in Uttar Pradesh, which is located at the point of intersection of the Tropic of Cancer and the Indian Standard Meridian.

Hence option a is correct



Q.8) Which one of the following sequences in the ascending order of their geographical size is correct?

- a) Madhya Pradesh West Bengal Telangana Tamil Nadu
- b) West Bengal Telangana Tamil Nadu Madhya Pradesh
- c) Telangana Tamil Nadu West Bengal Madhya Pradesh
- d) West Bengal Madhya Pradesh Tamil Nadu Telangana

Q.8) Solution (b)

Explanation:

West Bengal has an area of 88,752 km², Telangana has an area of 114,840 km², Tamil Nadu has an area of 130,060 km², and Madhya Pradesh has an area of 308,245 km². Therefore, the correct sequence in ascending order of geographical size is West Bengal, Telangana, Tamil Nadu, and Madhya Pradesh. Hence option b is correct.

Here are the states of India listed in ascending order of their geographical size:

Rank	State	Area (in sq. km)
1	Goa	3,702
2	Sikkim	7,096
3	Tripura	10,486
4	Nagaland	16,579
5	Mizoram	21,081
6	Manipur	22,327

7	Meghalaya	22,429
8	Kerala	38,863
9	Haryana	44,212
10	Punjab	50,362
11	Uttarakhand	53,483
12	Himachal Pradesh	55,673
13	Assam	78,438
14	Jharkhand	79,716
15	Arunachal Pradesh	83,743
16	West Bengal	88,752
17	Telangana	1,12,077
18	Tamil Nadu	1,30,058
19	Chhattisgarh	1,35,191
20	Odisha	1,55,707
21	Andhra Pradesh	1,62,968
22	Karnataka	1,91,791
23	Gujarat	1,96,024
24	Uttar Pradesh	2,40,928
25	Maharashtra	3,07,713
26	Madhya Pradesh	3,08,245
27	Rajasthan	3,42,239

Q.9) Consider these pairs

	Tribe	State(s) of presence
1	Bhil	Meghalaya
2	Bodo	Assam
3	Chenchu	Telangana
4	Khasi	Madhya Pradesh

Which of the above pairs are correctly matched?

- a) 1 and 2
- b) 2 and 3
- c) 3 and 4

d) 2 and 4

Q.9) Solution (b)

Tribe	State(s) of presence
Apatani	Arunachal Pradesh
Bhil	Rajasthan, Madhya Pradesh, Gujarat
Bodo	Assam
Chenchu	Andhra Pradesh, Telangana
Gond	Maharashtra, Madhya Pradesh, Chhattisgarh, Telangana, Andhra Pradesh
Но	Jharkhand, Odisha
Khasi	Meghalaya
Kuki	Manipur, Nagaland, Mizoram
Mizo	Mizoram
Naga	Nagaland, Manipur, Arunachal Pradesh
Santhal	Jharkhand, West Bengal, Odisha
Sentinelese	Andaman and Nicobar Islands
Warli	Maharashtra
Yanadi	Andhra Pradesh, Telangana
Zeliangrong	Manipur, Nagaland, Assam
Andamanese	Andaman and Nicobar Islands

Q.10) Which of the following passes and locations is/are wrongly matched?

	Pass Name	State(s)
1	Zojila Pass	Ladakh
2	Baralacha La Pass	Uttarakhand
3	Shipki La Pass	Sikkim
4	Mana Pass	Uttarakhand

Select the appropriate code given below

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

Q.10) Solution (b)

Explanation:

Pass Name	State(s)
Rohtang Pass	Himachal Pradesh
Zojila Pass	Ladakh
Nathu La Pass	Sikkim
Baralacha La Pass	Himachal Pradesh
Chang La Pass	Jammu and Kashmir
Khardung La Pass	Jammu and Kashmir
Shipki La Pass	Himachal Pradesh
Mana Pass	Uttarakhand
Jelep La Pass	Sikkim
Bomdila Pass	Arunachal Pradesh
Niti Pass	Uttarakhand
Lipu Lekh Pass	Uttarakhand

Q.11) Which one of the following is the correct sequence of the given hills starting from the north and going towards the south?

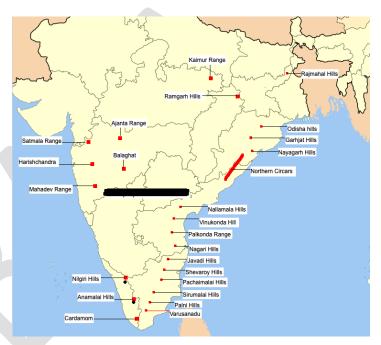
- a) Nallamalai Hills Nilgiri Hills Javadi Hilis Anaimalai Hills Cardamom Hills
- b) Anaimalai Hills Javadi Hills Nilgiri Hills Nallamalai Hills Cardamom Hills
- c) Nallamalai Hills Javadi Hills Nilgiri Hills Anaimalai Hills Cardamom Hills
- d) Anaimalai Hills Nilgiri Hills Javadi Hills Nallamalai Hills Cardamom Hills

Q.11) Solution (c)

Explanation:

The correct sequence of the given hills starting from the north and going towards the south are Nallamalai Hills — Javadi Hills — Nilgiri Hills — Anaimalai Hills — Cardamom Hills.

- Nallamalai Hills Andhra Pradesh
- Javadi Hills Tamil Nadu
- Nilgiri Hills Tamil Nadu and Kerala
- Anaimalai Hills Tamil Nadu and Kerala
- Cardamom Hills Kerala



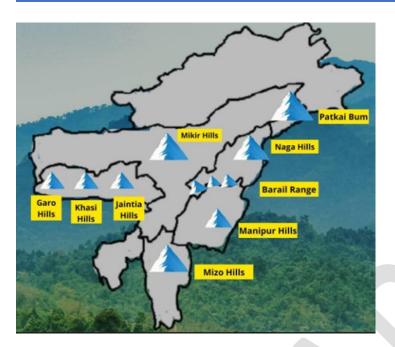
Q.12) Which of the following gives the correct sequence of hills in the east-west direction?

- a) Naga, Mikir, Khasi, Garo
- b) Garo, Khasi, Mikir, Naga
- c) Khasi, Garo, Naga, Mikir
- d) Mikir, Naga, Khasi, Garo

Q.12) Solution (a)

Explanation:

The following that gives the correct sequence of hills in the east-west direction are Naga, Mikir, Khasi and Garo.



Q.13) Which one among the following is nearest to the Tropic of Cancer?

- a) Agra
- b) Delhi
- c) Gwalior
- d) Jhansi

Q.13) Solution (d)

- The city of Agra, is located at a latitude of 27.1767 degrees north.
- The city of Delhi at 28.7041 degrees north
- The city of Gwalior at 26.2183 degrees north
- The city of Jhansi at 25.4484 degrees north. Therefore, the correct answer is:Option d

Q.14) Which Indian state do not share its border with Myanmar?

- a) Arunachal Pradesh
- b) Mizoram
- c) Tripura
- d) Nagaland

Q.14) Solution (c)

Explanation:

Four states in India share their border with Myanmar. They are:

- Arunachal Pradesh: The easternmost state of India shares a 520 km long border with Myanmar.
- Nagaland: The state of Nagaland shares a 215 km long border with Myanmar.
- Manipur: The state of Manipur shares a 398 km long border with Myanmar.
- Mizoram: The state of Mizoram shares a 510 km long border with Myanmar.



Q.15) Consider the following statements:

- 1. Uttar Pradesh shares its borders with the maximum number of other Indian states.
- 2. West Bengal shares its longest border among Indian states with Bangladesh
- 3. China shares its longest border with India

Select the correct answer using the codes given below.

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

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

Q.15) Solution (c)

Explanation:

- Uttar Pradesh is the Indian state that shares its borders with the maximum number of other Indian states. It shares its borders with a total of nine states, including Uttarakhand, Himachal Pradesh, Haryana, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Bihar, and the National Capital Territory of Delhi. Hence Statement 1 is correct.
- Bangladesh and India share a 4,096-kilometre-long (2,545 mi) international border, the fifth-longest land border in the world, including 262 km (163 mi) in Assam, 856 km (532 mi) in Tripura, 318 km (198 mi) in Mizoram, 443 km (275 mi) in Meghalaya, and 2,217 km (1,378 mi) in West Bengal. Hence Statement 2 is correct.
- While China and India share a long international border that stretches for over 3,488 km, it is not the longest border for either country. China's longest international border is with Russia, stretching for over 4,200 km, while India's longest international border is with Bangladesh, stretching for over 4,096 km. Hence Statement 3 is incorrect.

Q.16) Consider the following statements:

- 1) Peninsular Plateau is also known as Deccan Plateau
- 2) Kerala has the largest maritime border among Indian states
- 3) Sir Creek is a disputed territory between India and China

Select the correct answer using the codes given below.

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

Q.16) Solution (a)

Explanation:

- The Peninsular Plateau is also mentioned as Deccan Plateau. Hence Statement 1 is correct.
- Kerala has a significant maritime border along the Arabian Sea, but it is not the largest among Indian states. Gujarat has the largest maritime border among Indian states, stretching over 1,600 km along the Arabian Sea. Hence Statement 2 is incorrect.
- Sir Creek is a disputed territory between India and Pakistan, not India and China. The creek is located in the Rann of Kutch marshlands, and both India and Pakistan claim ownership of the area. Hence Statement 3 is incorrect.

Q.17) With respect to the peninsular plateau, consider the following statements:

- 1. Cauvery River forms the southern boundary of the Peninsular Plateau
- 2. The average height of the Peninsular Plateau is 1500-2000 meters
- 3. Kanha National Park is located in the Peninsular Plateau
- 4. Satpura Range is the highest mountain range in the Peninsular Plateau

Select the correct answer using the codes given below.

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

Q.17) Solution (d)

- The average height of the Peninsular Plateau is 600-900 meters. All the other statements are correct. Hence statement 2 is incorrect
- The Cauvery River is a major river in southern India that originates in the Western Ghats and flows eastward into the Bay of Bengal. The river forms the southern boundary of the Peninsular Plateau, which is a vast region of elevated terrain that covers much of peninsular India. The plateau is bordered by the Eastern and Western Ghats on either side, and the Cauvery River marks its southernmost boundary before flowing into the sea Hence statement 1 is correct

- Kanha National Park is situated in the Peninsular Plateau region of India, which is characterized by a vast expanse of rugged terrain and diverse flora and fauna. The Peninsular Plateau is a large region that stretches across central and southern India and is home to many important national parks and wildlife sanctuaries. Kanha National Park is famous for its population of Bengal tigers, which are among the most iconic and endangered species in the region. Hence statement 3 is correct
- Satpura Range is a mountain range located in central India, which stretches over the states of Maharashtra, Madhya Pradesh, and Gujarat. The range is the highest mountain range in the Peninsular Plateau, with its highest peak, Dhoopgarh, standing at an altitude of 1,350 meters (4,429 feet) above sea level. Hence statement 4 is correct

Q.18) Consider the following statements

- 1. India, Myanmar and Bhutan share the Indo-Gangetic Plain
- 2. Indus, Ganges, and Yamuna are responsible for the formation of the Indo-Gangetic plain

Which of the statements given above is/are correct with respect to Indo-Gangetic plain?

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

Q.18) Solution (b)

- The Indo-Gangetic Plain is a large, fertile plain in northern India and parts of Pakistan, but it does not extend into Bhutan or Myanmar. However, India shares some of its eastern border with Myanmar and Bhutan. Hence statement 1 is incorrect
- The Indo-Gangetic Plain is formed by the sedimentary deposits of the Indus, Ganges, and Brahmaputra river systems. These rivers bring large amounts of sediment and silt down from the Himalayas, which has created the fertile alluvial plain over millions of years. The plain is an important agricultural region in South Asia, supporting the livelihoods of millions of people. Hence statement 2 is correct

Q.19) Which of the following statements about the Thar Desert is true?

- a) The Thar Desert is located primarily in southern India.
- b) The Thar Desert is the largest desert in the world.
- c) The Thar Desert is also known as Marusthali
- d) The Thar Desert receives heavy rainfall throughout the year.

Q.19) Solution (c)

Explanation:

- The Thar Desert is not located primarily in southern India. It is a large arid region that covers parts of northwestern India and eastern Pakistan. **Hence statement a is incorrect**
- The Thar Desert is not the largest desert in the world. It is the seventh largest desert in the world, covering an area of approximately 200,000 square kilometers. **Hence statement b is incorrect**
- The Thar Desert is also known as Marusthali, which means "land of the dead". It is a hot and arid
 region with sparse vegetation and is home to a number of endemic species. Hence statement c is
 correct
- The Thar Desert does not receive heavy rainfall throughout the year. It is a dry region with a low annual rainfall, and much of the rainfall occurs during the monsoon season from July to September. Hence statement d is incorrect

Q.20) Which of the following statements about Coastal Plains and Ghats in India is true?

- a) Coastal Plains are narrow strips of land along the Arabian Sea and Bay of Bengal, while Ghats are mountain ranges running parallel to the coast.
- b) Coastal Plains are characterized by high elevations and rugged terrain, while Ghats are flat and low-lying areas.
- c) Coastal Plains and Ghats are both regions of high rainfall and are important agricultural areas in India.
- d) Coastal Plains and Ghats are both located in northern India and are known for their cold and dry climate.

Q.20) Solution (a)

Explanation:

Coastal Plains are narrow strips of land along the Arabian Sea and Bay of Bengal, while Ghats are
mountain ranges running parallel to the coast. The Western Ghats run parallel to the western coast

- of India, while the Eastern Ghats run parallel to the eastern coast of India. These two mountain ranges are separated by a narrow strip of Coastal Plain. **Hence statement a is correct**
- Coastal Plains are not characterized by high elevations and rugged terrain. They are flat and low-lying areas that are formed by the deposition of sediment by rivers and the sea. Ghats, on the other hand, are characterized by high elevations and rugged terrain. Hence statement b is incorrect
- Coastal Plains and Ghats are regions of high rainfall, but Coastal Plains are not necessarily
 important agricultural areas in India. Some parts of the Coastal Plains are suitable for agriculture,
 but other parts are covered by mangroves and are unsuitable for agriculture. The Ghats are
 important agricultural areas, particularly for the cultivation of tea, coffee, and spices. Hence
 statement c is incorrect
- Coastal Plains and Ghats are not located in northern India, but rather in the southern and western
 parts of the country. The climate in these regions is generally warm and humid, with high levels of
 rainfall. Hence statement d is incorrect.

Q.21) Which of the below given pairs is/are incorrectly matched?

Wetland	State
Vellode Bird Sanctuary	Kerala
Satkosia Gorge	Odisha
Sirpur wetland	Karnataka
Nanda Lake	Tamil Nadu

Choose the correct code:

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

Q.21) Solution (c)

Explanation:

India adds 10 more wetlands designated as Ramsar sites to make total 64 sites covering an area of 12,50,361 ha in the country. The 10 new sites include: Six (6) sites in Tamil Nadu and One (1) each in Goa, Karnataka, Madhya Pradesh and Odisha.

- **Tamil Nadu** Koonthankulam Bird Sanctuary, Gulf of Mannar Marine Biosphere Reserve, Vembannur Wetland Complex, Vellode Bird Sanctuary, Vedanthangal Bird Sanctuary and Udhayamarthandapuram Bird Sanctuary
- Odisha Satkosia Gorge
- Goa Nanda Lake
- Kerala Vembannur Wetland Complex
- Karnataka Ranganathittu Bird Sanctuary
- Madhya Pradesh Sirpur wetland

Source: <u>CLICK HERE</u>

Q.22) Consider the following statements

- 1. Cotton leaf curl disease (CLCuD) is a bacterial disease of plants caused by whitefly attacks.
- 2. The leaves of infected cotton curl both upward and downward.

Choose the incorrect statements:

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

Q.22) Solution (a)

Explanation:

- CLCuD is a **viral disease** that affects the overall growth of the cotton plant and hits its yield. **Hence statement 1** is **not correct**.
- Leaves of infected cotton curl both upward and downward. Hence statement 2 is correct.
- Though farmers are doing recommended sprays, the sprays are not 100 percent effective to control the disease.
- When whiteflies attack the crop, the CLCuD is expected because they transmit the virus further.

Source: CLICK HERE

Q.23) Consider the following statements about Jan Samarth Portal

- 1. It provides a common platform for availing loan under certain credit-linked Government schemes.
- 2. It connects all stakeholders like beneficiaries, financial institutions, Government Agencies on a common platform.
- 3. Aadhaar number is the only document required to avail benefits under any scheme.

Choose the correct statements:

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

Q.23) Solution (c)

Explanation:

Jan Samarth Portal

- Applicants can access 13 credit linked Government Schemes catering to youth, students, entrepreneurs and farmers viz. Education Loans, Agriculture Loans, Business Activity Loans, and Livelihood Loans. It provides a common platform for availing loan under certain credit-linked Government schemes. Hence statement 1 is correct.
- It **connects all stakeholders** like beneficiaries, financial institutions, Central/State Government Agencies, and Nodal Agencies on a common platform. **Hence statement 2 is correct.**
- Each scheme has different Documentation requirement. To apply online on the portal, the basic documents required would be Aadhaar number, PAN, Bank statements etc. Hence statement 3 is not correct.

Source: **CLICK HERE**

Q.24) Consider the following statements about SMILE-75 Initiative

- 1. Under the initiative, 75 identified Municipal Corporations will undertake comprehensive rehabilitation of persons engaged in the act of begging.
- 2. It is being implemented by Ministry of Housing and Urban Affairs.
- 3. The financial assistance of Rs. 1000 is provided by the central government under the initiative to each beneficiary for the period of 3 years.

Choose the incorrect statements:

- a) 1 and 2
- b) 2 and 3

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

Q.24) Solution (b)

Explanation:

- In the spirit of AzadikaAmritMahotsav, the Ministry of Social Justice & Empowerment,
 Government of India, has identified 75 Municipal Corporations to implement comprehensive
 rehabilitation of persons engaged in the act of begging under "SMILE: Support for Marginalised
 Individuals for Livelihood and Enterprise"named as "SMILE75 Initiative". Hence statement 1 is
 correct and statement 2 is incorrect.
- Under the SMILE-75 initiative, seventy five (75) Municipal Corporations in collaboration with NGOs and other stakeholders will cover several comprehensive welfare measures for persons who are engaged in the act of begging with focus extensively on rehabilitation, provision of medical facilities, counselling, awareness, education, skill development, economic linkages and convergence with other Government welfare programmes etc. There is no monetary provisions in the scheme. Hence statement 3 is not correct.

Source: CLICK HERE

Q.25) Consider the following statements about PeVatrons

- 1. They are the source of the highest energy particles that flow across the Milky Way galaxy.
- 2. They consist of protons and also include atomic nuclei.

Choose the correct statements:

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

Q.25) Solution (c)

Explanation:

PeVatrons

• They are the source of some of the highest energy particles that whip across our galaxy. Hence statement 1 is correct.

- Streams of particles called cosmic rays travel at breakneck speeds around our galaxy and strike our planet's atmosphere.
- They typically consist of protons but also include atomic nuclei and electrons. Hence statement 2 is correct.
- They all carry an electric charge, meaning their paths deviate and scramble as they go through our galaxy's magnetic field.
- This means that we cannot track the direction they originally came from, which effectively masks their birthplace.
- However, when the particles that are part of the cosmic rays collide with the gas near supernova remnants, they produce gamma rays.
- These are some of the highest energy forms of radiation that exist.

Source: CLICK HERE

Q.26) Age of mother 10 years ago was 3 times the age of her son. After 10 years, mother's age will be twice that of his son. Find the ratio of their present ages.

- a) 11:7
- b) 9:5
- c) 7:4
- d) 7:3

Q.26) Solution (d)

Explanation:

We are given that; age of mother 10 years ago was 3 times the age of her son

So, let age of son be x and as mother's age is 3 times the age of her son, let it be 3x, three years ago.

At present: Mother's age will be (3x + 10) and son's age will be (x + 10)

After 10 years: Mother's age will be (3x + 10) + 10 and son's age will be (x + 10) + 10

Mother's age is twice that of son

$$(3x + 10) + 10 = 2[(x + 10) + 10]$$

$$(3x + 20) = 2[x + 20]$$

Solving the equation, we get x = 20

We are asked to find the present ratio.

$$(3x + 10)$$
: $(x + 10) = 70:30 = 7:3$

Q.27) Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is?

- a) 3:2
- b) 3:1
- c) 2:3
- d) 3:5

Q.27) Solution (a)

Explanation:

Let the speeds of the two trains be x m/sec and y m/sec respectively

Then, length of the first train = 27x metres and length of the second train = 17y metres

$$(27x+17y) / (x + y) = 23$$

$$27x + 17y = 23x + 23y$$

$$4x = 6y$$

$$x/y = 3/2$$

Q.28) A cat leaps 5 leaps for every 4 leaps of a dog, but 3 leaps of the dog are equal to 4 leaps of the cat. What is the ratio of the speed of the cat to that of the dog?

- a) 15:16
- b) 16:15
- c) 15:11
- d) 11:15

Q.28) Solution (a)

Explanation:

Given, 3 leaps of dog = 4 leaps of cat;

leaps of cat / leaps of dog = 3/4

Let cat's 1 leap = 3 meter and dogs 1 leap = 4 meter.

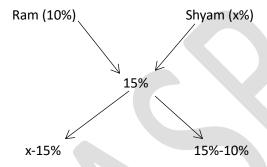
Then, ratio of speed of cat and dog = (3*5) / (4*4) = 15:16.

Q.29) Weights of two friends Ram and Shyam are in the ratio 4:5. If Ram's weight is increased by 10% and total weight of Ram and Shyam become 82.8 kg, with an increase of 15%. By what percent did the weight of Shyam has to be increased?

- a) 10%
- b) 19%
- c) 21%
- d) 25%

Q.29) Solution (b)

Explanation:



Now, given ratio of Ram and Shayam's weight = 4:5

Hence,
$$(x-15)/(15-10) = 4/5$$

Or,
$$x = 19\%$$

Read the following passage and answer the item that follow. Your answer to these items should be based on the passages only

Passage 1

Much has rightly been made of the problem of political polarisation, but not nearly as much has been said about the problem of political homogenisation. Both are toxic to public discourse. While the former makes for awkward conversations at the family dinner table, the latter buries difficult conversations. Where agreement is sought without a decent discussion, opinion corridors form, limiting the range of ideas

tolerated in public discourse. Where all views are not heard in appropriate discussion, the only alternative is inappropriate discussion. And populist rhetoric cuts through this muffled discussion culture like a hot knife through butter, as the pent-up need to be heard surfaces.

Q.30) Which among the following best captures the summary of ideas contained in the passage?

- a) Political ambivalence is as harmful to public discourse as political polarisation.
- b) By subduing discussion, political homogenisation can lead to the rise of populism.
- c) When opinion across the political spectrum is not heard, public discourse is crippled.
- d) Political homogenisation is as much a cause for rise of populism as political polarisation.

Q.30) Solution (b)

Explanation:

The paragraph argues that political homogenisation is as toxic to public discourse as political polarisation. To support this, the paragraph puts forth two main points. The first one is that where agreement is sought without a "decent" or "appropriate" discussion, there are "opinion corridors". The ideas tolerated in public discourse get limited and discussion is subdued. The second point the paragraph makes is that when a culture buries difficult conversations, it sets the stage for the rise of populism as populist rhetoric resonates with those segments of the population that have a pent up need to be heard.

Option b captures both these ideas, and is the best one to sum up the paragraph.

Option a talks of "political ambivalence". This is not discussed in the paragraph.

Option c is very close, but while it speaks of one of the ideas in the paragraph, it doesn't touch upon the point about populist rhetoric.

That political polarisation leads to populism is not clear from this paragraph. So, option d is incorrect.