**CMAT SET-5**

**Q1:** Which of the following is a group of seven stars that forms a part of URSA Major constellation?

1. Saptarishi
2. Dhruv
3. Big Bear
4. Titan

**Answer:** A

**Solution:**

The Saptarishi constellation is a group of seven stars that forms a part of Ursa major constellation. The north star indicates the north direction. It is also called the pole star. It always remain in the same position in the sky. We can locate the pole star with the help of Saptarishi.

**Q2:** Below given are the following factor related to soil, from the following which does not effect in making soil more acidic?

1. High annual rainfall

2. Overuse of nitrogen fertilisers

3. Percolation of ground water in leguminous crops

Which of the following would be the correct option from it?

1. 1 only
2. 1 and 3 only
3. 1,2 and 3 only
4. 1 and 2 only

**Answer:** D

**Explanation:** Alkaline elements reached when it’s rain which include magnesium, potassium and calcium from the soil into runoff water, leaving acidic elements like Aluminium, manganese and hydrogen to replace the bases. It means that areas which falls under high annual rainfall amounts generally have more acidic soil. So, Statement 1 is correct.

By Applying the Nitrogen Fertilizers to soil the acidity of soil will increase. If the nitrogen fertilization rate is greater, then its soil acidification rate becomes also greater. So, Statement 2 is correct.

**Q3:** Which of the following is not a physiological division in which India is not divided?

1. The Himalayas
2. The northern plain
3. The islands
4. The Great Himalayan zone

**Answer:** D

**Explanation:**

Physiography of a particular area is determined by its geological structure and process that operate on an area. The physiological division of India divided into divisions:

* The Himalayas
* The northern plains
* The peninsular Plateau
* The Indian deserts
* The Coastal Plains
* The Islands

**Q4:** Given below are the following climatic regions:

1. Warm Temperate Eastern Margin

2. Cool Temperate Western Margin

3. Warm Tropic southern Margin

From The climatic regions which are mentioned above which of the following Faces rainfall during the whole year?

1. 1 and 2 only
2. 1 and 3 only
3. 3 only
4. 1, 2 and 3

**Answer:** C

**Explanation:** Cool Temperate Western Margin Climate or British Type Climate or North-West European Maritime Climate are under the effect of the Western is all-around the year. These are the regions of Temperate Cyclones also called frontal cyclonic activity. The British climate has adequate rainfall around the whole year with a tendency towards a slight winter maximum (due to the effect of frontal cyclones). So, Statement 1 is correct.

In Warm temperate Eastern Margin, there is fairly uniform or constant distribution of rainfall during the whole year. Rain comes either from the sources which are convectional or as orographic rain in summer, or from depressions in prolonged showers in winter. During the summer, the regions comes under the influence of moist and maritime airflow which blows from the subtropical anti-cyclonic cells. Local storms, like typhoons (which refer to tropical cyclones), & hurricanes, also occur. So, Statement 2 is correct.

**Q5:** Which of the following technological factor not help in the enhancement of agricultural production and advancement?

1. Chemical pesticides
2. Hybrid crops
3. Farmer procurement
4. Genetically modified crops

**Answer:** C

**Explanation:** Technology allows much greater production (surplus) with less human Labor, But often has high social and environmental costs.

* Metal plows, reapers, cotton gin
* Tractors (internal combustible engine)
* Combines
* Chemical pesticides /fertilizer
* Hybrid crops
* Genetically modified crops

**Q6:** Given below the following Indian States please consider them:

1. Madhya Pradesh

2. Karnataka

3. Maharashtra

4. Bihar

Put all the following states which were mentioned above in the decreasing order of the % of their Urban population.

1. 1-3-2-4
2. 3-2-1-4
3. 3-1-2-4
4. 2-4-1-3

**Answer:** B

**Explanation:** In Bihar the urban population is 11.29 %. (4)

In Madhya Pradesh urban population is 27.63 %. (1)

In Karnataka the urban population is 38.67 % (2)

In Maharashtra the urban population is 45.22 % (3)

So, we can say that Option b is correct.

• Among all the Union territories and states, The National Capital and Union Territory of India, Delhi and the territory of Chandigarh are most urbanized with 97.5 percent & 97.25 percent urban population, they are followed by Daman and Diu (75.2 percent) and Puducherry (68.3 percent). In among the States, in recent time Goa is the most Urbanised State with 62.2 % urban population, an increase since 2001 when the urban population of Goa was 49.8%. Another significant impact of rapid Urbanisation is that of Kerala, its urban population is now 47.7 per cent, while a decade ago it was just 25.9 percent.

**Q7:** Which of the following mountain formed the boundary between Europe and Asia in Russia?

1. Mount Visuvious
2. Mount Kilimanjaro
3. Ural mountain
4. Mount Etna

**Answer: C**

**Explanation:**

Russia contain the largest size hence it covered a variety of natural resources and features. The country is a part of Eurasian landmass and located on the northeastern portion. The country is bordered in north by Arctic ocean, by Pacific ocean in east and in south by Black Sea and Caspean sea. Ural Mountain is stretched from North to south and formed the boundary Between Europe and Asia.

**Q8:** Which among the following statement does represent false statement about the ideals of fundamental rights enshrined in part-3 of Indian constitution?

1. The fundamental rights are guaranteed to all persons irrespective of their nationality in India without any discrimination. That’s why it called as Magna Carta of constitution.
2. They can be suspended during the operation of national emergency except the rights guaranteed under article 19, 20 and 21.
3. They act as a protective mechanism against arbitrary action of the state and act as a limitation on state’s tyranny.
4. They are not absolute but qualified, that is the state can impose some reasonable restriction on their operation and it is for the court to decide upon its reasonableness.

**Answer: B**

**Explanation:**

Only article 20 and 21 are not suspended during national emergency. Hence option B is correct. The six fundamental rights given in constitution under article 19 can be suspended only when the national emergency is declared on the ground of war or external aggression but not on the ground of armed rebellion. The 44th amendment act of 1978 restricted the scope of article 359 in two ways. Firstly the president cannot suspend the right to move the court for the enforcement of Fundamental rights guaranteed by article 20 & 21.

**Q9:** Under which article of constitution Anglo Indians are defined?

1. Article 366
2. Article 365
3. Article 364
4. Article 366 (2)

**Answer:** D

**Solution:**

According to Article 366(2), An Anglo-Indian means a person whose father or any of whose other male progenitors in the male line is or was of European descent but who is domiciled within the territory of India and is or was born within such territory of parents habitually resident therein and not established there for temporary purposes only.

**Q10:** Which of the following statement is correct about emergency in India?

1. During emergency the federal structure converts into the unitary structure without a formal amendment in constitution
2. During emergency in state, permission should be required by the state legislative assembly by special majority
3. Article 356 related to the emergency in external aggression.
4. During emergency the permission should be granted by either house of state.

**Answer:** A

**Solution:**

The emergency provision are given under Article 352 to 360. During this the federal structure into a unitary one without a formal amendment of constitution. **Dr. B.R. Ambedkar said that:** Constitution of India can be both unitary as well as federal according to requirements of time and circumstances.

**Q11:** Which of the following power is not vest with the governer in the constitution?

1. Executive power
2. Legislative power
3. Financial power
4. Emergency power

**Answer:** D

**Solution:**

**Judicial power-**

* Governer can grant Pardon, reprieve, respites, Remissions
* He can do appointment, posting, promotions of district judges of highcourt.
* Consulted president in appointing judges of state highcourt.
* He can consult with state highcourt in formation of judicial service in state.

**Financial power-**

* Finance commission
* Contingency fund
* Money bills
* Annual financial statements

**Q12:** Census 2021 will be conducted in how many phases?

1. Single phase
2. 2 phase
3. 3 phase
4. 4 phase
5. 5 phase

**Answer:** B

**Solution:**

* Census-2021 will be conducted in two phases:
  + **Population Enumeration**: 9th February to 28th February 2021.
  + **House listing and Housing Census:** April to September 2020.

In this phase, parallely, National Population Register will also be updated for entire India except Assam. NPR exercise done under Citizenship Act, 1955).

**Q13:** That of the subsequent is said to Madhyamika and Yogachara Schools?  
  
A. Hinayana Buddhism  
B. Mahayana Buddhism  
C. Vajrayana Buddhism  
D. Vanprastha Buddhism  
  
**Answer:** B  
  
**Explanation:** The Madhyamika and Yogachara colleges square measure associated with Mahayana. Yogachara, (In Sanskrit, it means “Practice of Yoga [Union]”) and also known as Vijnanavada (“Doctrine of Consciousness”) or Vijnaptimatra (“Consciousness Only”), A prestigious and idealistic faculty related to Mahayana. Madhyamika, (in Sanskrit it means “Intermediate”), important faculty within the Mahayana (“Great Vehicle”) Buddhist tradition.

**Q14:** Consider the following statements about the Non-Cooperation Movement with reference to the Indian freedom struggle:

1. During this movement M. Gandhi founded 'Rashtriya Vidyapith' in Ahmedabad.
2. During this movement the merchants & mill owners get good profits.

Which of the statements given above is/are correct?

1. 1 only
2. 2 only
3. Both
4. None

**Answer:** B

**Explanation:** ‘Rashtriya Vidyapith' was founded by mahatma Gandhi in Ahmedabad during the movement in 1920. So, Statement 2 is incorrect.

Due to the boycott of British goods indian merchants and mill owners get a good profit in this period. So, Statement 3 is correct.

The programme of Non-Cooperation movement was to include—

• Government schools and colleges should be boycotted;

• law courts and dispensation of justice should be boycott through panchayats instead;

• use of khadi and foreign clothes should be boycotted instead; also hand spinning process is done

• Abdication of government honours and titles; the 2nd phase could include mass civil disobedience including people resign from government service, and non-payment of taxes.

**Q15:** Warli paintings expresses daily and social events of Warli tribes. Where these tribes are located?

1. Madhya Pradesh
2. Maharashtra
3. West Bengal
4. Tripura

**Answer:** B

**Solution:**

Warli paintings of Maharashtra expresses daily and social events of Warli tribe. The paintings depict the images of social life and do not depict mythological characters or images of dieties. Images of human beings and animals, along with scenes from daily life are created in a loose rhythmic pattern. Women are mainly take part and engaged in the creation of these paintings.

**Q16:** Which of the following is a channel introduced by the Reserve Bank of India (RBI) to enable FPIs to invest in debt markets in India?

1. Viable retention route
2. Voluntary retention route
3. Participatory equity investor route
4. Voluntary liquidity trap route

**Answer:** B

**Solution:**

Under VRR route, investment are free of the regulatory norms applicable to FPI investments in debt market, provide FPIs voluntarily commit to retain a required minimum percentage if their investments in India for a period. The minimum retention period is 3 years, or as decided by RBI for each allotment by tap or auction . The investment cap through VRR has been doubled to 1.5 lakh crore.

**Q17:** Consider the following statements regarding Reserve Bank of India (RBI):

1. It was set up on the basis of recommendations of the Hilton Young Commission
2. It was set up as a shareholder’s bank, but was nationalized in 1949

Select the correct answer using the code given below:

1. 1 only
2. 2 only
3. Both 1 & 2
4. Neither 1 nor 2

**Answer:** B

**Explanation:**

The Reserve Bank of India (RBI) was set up on the basis of the recommendations of the Hilton Young Commission. The Reserve Bank of India Act, 1934 provides the statutory basis of the functioning of the RBI, which commenced operations on April 1, 1935. After the partition of India, the Reserve Bank served as the central bank of Pakistan up to June 1948 when the State Bank of Pakistan commenced operations. The Reserve Bank, which was originally set up as a shareholder’s (private) bank, was nationalised in 1949.

**Q18:** How many types of report are submitted by Comptroller and auditor general of India to president?

1. Two
2. Three
3. Four
4. Five

**Answer: B**

**Explanation:**

CAG submits three audit reports to the president of India.

* Audit reports on appropriation accounts
* Audit reports on finance accounts
* Audit report on public undertaking

President lays these reports before both the houses of parliament.

**Q19:** Consider the points about foreign direct investment and choose correct option?

1. It is less stable and more volatile in nature with respect to foreign portfolio investment.
2. FDI is preferable over debt financing.
3. It can measure income growth by demand and supply.
4. Only 1
5. Only 2
6. Only 3
7. all

**Answer:** B

**Explanation:**

Foreign direct investment (FDI) involves establishing a direct business interest in a foreign country, such as buying or establishing a manufacturing business, building warehouses, or buying buildings. So it is less volatile compare to FPI. Hence Point 1 is incorrect.

FDI is preferable over debt financing as it does not create interest obligations. Hence point 2 is correct.

**Q20:** Which of the following holders get the return in form of interest?

1. Share holders
2. Debenture holders
3. Debtor
4. Creditor

**Answer:** B

**Explanation:**

The debentures holders provide loan, thus, debentures holders are creditors of a company. The debentures holders get the return in form of interest. Person holding a debenture is known as debenture holders. The rate of interest in fixed and need to be paid either there is no profit.

**Q21:** Which organization recently mapped numerous envelop of gases known as Halo around Andromeda galaxy?

1. JAXA
2. NASA
3. ISRO
4. ROSCOSMOS

**Answer:** B

**Solution:**

NASA has recently mapped the immense envelop of gases ‘Halo’ surrounding Andromeda galaxy from its Hubble space telescope. This galaxy also known as M31 and is a spiral shape including 1 trillion stars and comparable in size to Milky Way.

**Q22:** Jamie Hampton is related to which sports who retired in May 2020?

1. Hockey
2. Cricket
3. Tennis
4. Golf

**Answer:** C

**Explanation:**

Jamie Lee Hampton is a former professional tennis player from America. She is the world’s number 24 tennis player. Due to some numerous type of injuries in the past few years, as these operationa are not successful. So, this is the reason of her retirement from professional tennis.

**Q23:** 8000 years old it is the world’s oldest carbon that had been found in the deepest Blue hole and also recently in news. Which of the following statement among best express the meaning of blue hole?

1. It is called as the 1st stage of a clouded star as it holds more amounts of particles of carbon with centrifugal force
2. It is an ancient fossil which got extracted from Adichanallur site which was naturally holds radioactive Carbon-14
3. It is a marine cavern which gets isolated from the ocean & doesn’t receive fresh rainwater
4. It is an exploded galaxy from which the microwaves were emitted and In space it remains to be the farthest discovered object

**Answer:** C

**Explanation:** Blue holes refer to a marine caverns which is filled with water and formed following dissolution of carbonate rocks, usually get influence from the global sea level rise or fall. From the surrounding ocean most of its water is isolated and it receive little fresh water from rainfall, which make it a rare spot to study the chemistry of oxygen-deprived marine ecosystems.

What separated and distinguished them from the other aquatic caverns is that they are isolated from the ocean and they don’t get fresh rainwater. They are generally circular, steep-walled and open to surface. So, Option (c) is correct.

**Q24:** Which of the following radiography is used in the compensating filters?

1. Chiropractic radiography
2. Paediatric radiography
3. Chromonal radiography
4. Obsteric radiography

**Answer**: A

**Explanation:**

Chiropractic radiography is a leader in the use of compensating filters. We have total control over compensating filtration. In areas of the body with high subject contrast or wide differences in density, compensating films improve image quality and reduce patient exposure.

**Q25:** By which a data summary of the information is created?

1. Hash function
2. Algorithm
3. DBMS
4. Data piracy

**Answer: A**

**Explanation:**

A data summary of the information (called a message digest) is created through the use of a Hash function called the (Secure hash standard, or SHS and specified in FIPS 180).