**CMAT Set 1**

**Q1:** What is the reason due to which we can see the moon and Bright tiny objects during the night only?

1. During the day the light of the sun does not allow us to see all these objects of the night sky.
2. During the day the clear sky provide clear visibility to the bright objects
3. The light emitted from the sun in night seems to be reflected from the outer surface of the earth.
4. The moon and other planet and bright tiny objects emit their light only in night

**Answer:** A

**Explanation:**

Stars are present in sky at both day and night. However, we can not see them during the day time because of the glare of the sun. During the day, the light of the sun makes our sky so bright that we cannot see the much dimmer stars. At night, in the sun absence, the sky becomes dark and the light of the stars can be seen. That is why, we are able to see the stars clearly only at night. So statement 1 is correct.

**Q2:** Which of the following is the best option suited for the importance of tropical rain forests?

1. These are found in hot and wet areas
2. They provide a homeland for human communities
3. There Canopy layer prevents leaching
4. They are rare forest found in equatorial zone and temperate zone
5. 1,2,3
6. 2,3
7. 1,3,4
8. 3,4

**Answer: A**

**Explanation:**

These are found in hot and wet areas, e.g. South America, Western Africa, Indonesia, Australia, and South-EastAsia. Many trees are being cut down to provide land for **farming** and **housing**. The large scale, permanent removal of forests is called **deforestation.**

* Provide a unique **habitat** for many plant and animal species. Many would face extinction without them.
* Carbon dioxide taken in by trees in photosynthesis reduces carbon dioxide in air, reducing the **greenhouse** effect.
* Wide varieties of plants are a valuable source of **medicines**.
* Provide a **homeland** for human communities.
* Canopy layer prevents leaching.
* Trees provide **dead material** for decomposersto change into **nitrates.** This keeps the soil **fertile.** Water vapour released intranspiration causes **rain** in areas far from the sea.

**Q3:** The sharp break in the crustal rocks is called:

1. Friction
2. Strata
3. Crustaceous
4. Fault

**Answer: D**

**Explanation:** The study of seismic waves provides a complete picture of the layered interior. The release of energy occurs along a fault. A fault is a sharp break in thee crustal rocks. Rocks along a fault tend to move in opposition directions. (as in case of Indian and Eurasia plate happen during Nepal Earth quack).

**Q4:** A prolonged dry period in the natural climate cycle that can occur anywhere in the World is called?

1. Percolation
2. Drought
3. Draught
4. Climate vulnerability

**Answer: B**

**Explanation:**

Drought is a slow-onset disaster characterized by the lack of precipitation, resulting in a water

shortage. Drought can have a serious impact on health, agriculture, economies, energy and the

environment. Draught is a prolonged dry period in the natural climate cycle that can occur anywhere in the World

**Classification of Drought**

**Meteorological drought** it is a situation with significant decrease from normal

precipitation over an area (i.e. more than 10 %).

H**ydrological drought** is prolonged meteorological drought which leads to depletion of

surface and sub-surface water resources.

**Agricultural drought** is a situation when soil moisture and rainfall are inadequate to

support healthy crop growth.

**Q5:** Podu cultivation system is practiced by which of the following tribes?

1. Dongaria Kondh

2. Bonda

3. Gond

Which of the statements given above are correct?

1. Only 1
2. Only 2
3. Both 1 & 2
4. Only 3

**Answer:** C

**Explanation:**

Shifting cultivation is an age-old practice, particularly being practised in the Eastern

Ghats. Orissa accounts for the largest area under shifting cultivation in India. Shifting cultivation is locally known as the podu cultivation. Podu cultivation is generally on the hills. Shifting cultivation is prevalent in Kalahandi, Koraput, Phulbani and other southern and western districts

The tribal communities, viz. Kondha, Kutia Kondha, Dongaria Kondha, Lanjia Sauras,

Paraja, Godaba, Koya, Didayi, Bonda, Jhang and Pauri Bhuyan, Peranga and Erenga Kolha are involved in this practice.

**Q6:** Consider the following about Maize crop production in India.

1. Maize is cultivated throughout the year in all states of the country.

2. It is the only crop for which no “cross hybrids” have been introduced for field trials or commercial production.

Which of the above option is correct?

1. Only 1
2. Only 2
3. Both
4. None

**Answer: A**

**Explanation:**

The maize is cultivated throughout the year in all states of the country. Maize can be grown in all seasons viz; Kharif (monsoon), post monsoon, Rabi (winter) and spring. The predominant maize growing states that contribute more than 80 % of the total maize production are Andhra Pradesh (20.9 %), Karnataka (16.5 %), Rajasthan (9.9 %) etc. Maize can be grown successfully in variety of soils ranging from loamy sand to clay loam. However, soils with good organic matter content having high water holding capacity with neutral pH are considered good for higher productivity.

**Q7:** The portion of Russia which is in east part of Ural Mountain is called:

1. Europe
2. Siberia
3. Moscow
4. Vladivostok

**Answer: B**

**Explanation:** The west part of Russia which is beyond the Ural Mountain is quite similar to the Eastern Europe in comparison of culture. The East part of Russia of the Ural Mountain is known as Siberia.

**Q8:** Which of the following article guarantees equal treatment under law in matters of public employment?

1. Article 14
2. Article 15
3. Article 16
4. Article 17

**Answer:** C

**Solution:**

**Article 16 of the Indian Constitution:** Guarantees equal treatment under law in matters of public employment prohibits the state from discriminating on grounds of place of birth or residence.

**Article 16(2):** No citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them, be ineligible for, or discriminated against in respect or, any employment or office under the State.

**Article 16(3):** In an exception, the Parliament may make a law “prescribing” a requirement of residence for jobs in a particular state. This power lies in the Parliament only, not state legislatures.

**Q9:** Which of the following article is related to the Attorney general of India and introduce its office in it?

1. Article 81
2. Article 94
3. Article 322
4. Article 76

**Answer:** D

**Solution:**

The Constitution (Article 76) has provided for the office of the **Attorney General for India (AG)**. He is the highest law officer in the country. In addition to the AG, there are the solicitor general of India and the additional solicitor general of India. But only the office of the AG is created by the Constitution.

**Q10:** Which of the following article deals with the suspension of Fundamental rights under article 19 during national emergency?

1. Article 132
2. Article 241
3. Article 358
4. Article 231

**Answer:** C

**Solution:**

**Article 358**: Deals with **suspension of FR** under **Art 19**.

a. **Fundamental Rights under 19A automatically suspended** — No separate order for their suspension is required.

b. 44 Constitutional Amendment Act restricted scope of Article 358 in 2 ways:

1. Fundamental Rights under Art 19 suspended **only when National Emergency** declared on ground of **External emergency i.e. external aggression** or **war**.

2. Only laws & executive action related to emergency protected from being challenged and not other laws. Ex: Govt pass X law or take X action under emergency then, that X can't be challenged.

**Q11:** Which constitutional amendment act provide for appointment of governer for two or more state?

1. 7th amendment act, 1956
2. 49th amendment act, 1978
3. 67th amendment act, 2009
4. 93th amendment act, 1987

**Answer:** C

**Solution:**

1. **Article 153 to 167** under **Part VI** provide **Constitutional Provisions & Articles for governer. He plays dual Role** as Head of State & Representative of Centre.

State Executive run as = Governor + CM + Council of Minister + Advocate General.

4. **Constitutional provision provide Governer for each state** but **7th CAA, 1956** provide for appointment of same person as Governor for 2 or more State.

**Q12:** Under which of the following act Gram Nyayalayas are established?

1. Gram Nyayalayas act 1987
2. Gram Nyayalayas act 2002
3. Gram Nyayalayas act 1963
4. Gram Nyayalayas act 2008

**Answer:** D

**Solution:**

Gram Nyayalayas are established under the Gram Nyayalayas Act, 2008 for speedy and easy

access to justice system in the rural areas of India. The Law Commission of India in its 114th report recommended the establishment of Gram Nyayalayas for providing speedy, substantial and inexpensive justice. Subsequently, the Parliament of India passed the Gram Nyayalayas Act, 2008 providing for its establishment.

**Q13:** Consider the following pairs:

(Ancient text) (Author)

1. Ratnavali - Kalidasa

2. Saundarananda - Ashvaghosha

3. Devichandraguptam - Vishakhadatta

Which of the pairs given above is/are not correctly matched?

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

**Answer:** A

**Explanation:** Harshavardhana wrote three plays in Sanskrit namely Ratnavali, Priyadarsika and Nagananda. Ashvaghosha was a Buddhist philosopher, dramatist, poet and orator. He wrote an epic life of the Buddha called Buddhacharita. Vishakhadatta was one of the famous Sanskrit poet and play writer. He wrote magnum opus two plays, the Mudraraksasa and the Devichandraguptam.

**Q14:** Which of the following act was enacted based on the recommendation of the ‘Raleigh commission?

1. Indian Universities Act, 1904
2. Indian Council Act, 1909
3. Calcutta Corporation Act, 1899
4. Sharda Act, 1930

**Answer**: Option A

**Solution:**

In 1902, Raleigh Commission was set up to go into conditions of universities in India: to suggest measures for improvement in their constitution and working. The commission not allowed from reporting on primary or secondary education. Based on its commendations, the Indian Universities Act was passed in 1904.

**Q15:** Consider the following about school of painting.

1. It has miniature paintings inspired from Vaishnavite traditions.

2. It witnessed migration of Mughal artists to the hills from the plains following Nadir Shah’s invasion

Which of the following schools of painting matches this description?

1. Kangra
2. Mathura
3. Bengal Patcitra
4. Kaavi

**Answer**: Option A

**Explanation:** Nadir Shah’s invasion and the conquest of Delhi in 1739 resulted in the migration of Mughal artists to the hills to escape the uncertainties of the plains. Here they establish ready patrons which led to the founding of the Kangra school of painting.

**Q16:** People invest in Mutual Funds and exchange traded funding. They both are created by?

1. Market debt
2. Pooled funding
3. Viability gap funding
4. External debt

**Answer:** B

**Explanation:**

By Pooled fund investing concept Mutual funds and exchange-traded funds (ETFs) both are created, It often stuck to a passive, indexed strategy that tries to trace or replicate representative benchmark indices. Pooled funds bundle securities together to offer investors the benefit of a diversified portfolio.

**Q17:** RBI control monetary policy so, the reserve ratio based on the extent of growth in resources is called?

1. SLR
2. Incremental CRR
3. LTRO
4. MSF

**Answer:** B

**Explanation:**

The incremental CRR prescribes the reserve ratio based on the extent of growth in resources (i.e deposits). In the late 90s, a 10% incremental CRR was in operation, on the non-resident deposits to regulate (reduce) the flow of funds from overseas Indians.

**Q18:** When was a separate office of Audit board was established under CAG?

1. 1968
2. 1985
3. 1955
4. 1999

**Answer**: Option A

**Solution:**

**In 1968**, an Audit board was established as a part of the office of CAG to associate outside specialists and experts to handle the technical aspects of audit specialized enterprises like engineering, iron and steel, chemicals and so on.

**Q19:** Which of the following determined the price of the foreign currency, in terms of local currency?

1. Supply
2. Demand
3. Marginal rate
4. Supply and Demand

**Answer**: Option D

**Solution:**

The exchange rate is the price of the foreign currency, in terms of the local currency. **This price** **is determined by supply and demand**. However, in some nations central bank decide the

exchange rate. Example,

Mr. Tron wants to spend in India. He goes to RBI to exchange his $ with ₹. RBI offered

him ₹”‖ for $. However, due to increase in demand, people agree to exchange their $ with

₹“„ or ₹“‛. To increase demand of $, RBI purchase $.

Mr. Tron incurred heavy loses in India & decided to escape. He came to RBI & offered

them ₹ to convert them into $. He paid ₹”‖ to buy back $. With increase in demand of $,

people started to exchange $ for ₹”‛ or ₹„‖ to quickly escape. RBI to decrease demand

[manage exchange rate] infuse $ in the market by selling $.

**Q20:** Which of the following is the security issued by corporate firms for long term or more than 1 year?

1. G.Sec
2. Promissory notes
3. Debenture
4. Bills of exchange

**Answer**: Option D

**Solution:**

|  |  |  |
| --- | --- | --- |
| **Borrower** | **Government** | **Corporate** |
| **Short term**  **(less than 1**  **year)** → | Treasury bills, Cash Management  bills | Bill of Exchange, Commercial  Papers, Promissory Notes. |
| **Long term**  **(1 year/>)** → | G-Sec, Sovereign Bonds | Bonds / Debentures |
| **Interest rate** | Usually lower than Corporates’  because risk is low | Depends on different factors |

**Q21:** Renowned saint Purandara Dasa during the time of Vijayanagara empire belong to which state?

1. Kerala
2. Karnataka
3. Tamilnadu
4. Andhra Pradesh

**Answer:** B

**Explanation:**

Karnataka government will commence field research at Keshavapura in Karnataka to solve the mystery regarding the birth place of Purandara Dasa. Till now, it was believed that Purandara Dasa was born in Purandaragarh near Pune, Maharashtra. Purandara Dasa (1484- 1564) was a saint, poet and singer during the Vijayanagara empire.He was the disciple of Vyasatirtha, Rajaguru of Vijayanagara empire.

**Q22:** India and which country recently named as jointly gold medal winners of the online chess Olympiad?

1. USA
2. UAE
3. Russia
4. UK

**Answer:** Russia

**Solution:**

Armageddon is the final decisive clincher in chess and is similar to a super over in cricket or a penalty shootout in hockey or football. Recently, India and Russia were named joint gold medal winners of the online chess Olympiad.

**Q23:** Recently ministry of environment, forest and climate change give approval to Vadhavan port. Where it is located?

1. Assam
2. Madhya Pradesh
3. Maharashtra
4. Delhi

**Answer:** C

**Solution:**

Recently, Ministry of environment, forest and climate change has given green light to vadhavan port. Vadhavan will be setup as a corporate port under companies act. It would be developed as a landlord port, with the port company building the basic port infrastructure.

**Q24:** Which of the following statement given about Radiography is correct?

1. It produce high resolution two dimensional images.
2. Radiography is used in water treatment
3. Radiography is accurate means of evaluating gastric by pass surgery
4. Radiography can be used widely in analyzing transcription process in vascular plant.

**Answer**: Option C

**Solution:**

Radiography produces high resolution two dimensional images and provides a rapid and low cost means of assessing bone and joint disease and soft tissue calcification.

**Q25:** In which process the hash function is used by which a condensed version of data obtained?

1. Message sending
2. Signature generation
3. Blue print
4. Data encryption

**Answer: B**

**Explanation:** A hash function is used in the signature generation process to obtain a condensed version of data, called a message digest. The message digest is then input to the DSA to generate the digital signature.