**CMAT SET-4**

**Q1:** Read the statement about the properties of Stars:

1. These are celestial bodies and very big and hot.
2. Most of them are made up of heavy metals

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

**Answer:** A

**Solution:**

Stars are celestial bodies that are very big and hot. They are made up of gases. They have their own heat and light, which they emit in large amounts. The property of star is also hold by sun. constellation are various patterns formed by different group of stars.

**Q2:** What type of rock formed under great heat and pressure?

1. Igneous rocks
2. Sedimentary rocks
3. Basalt rocks
4. A and B both

**Answer:** D

**Explanation:**

Igneous and sedimentary rocks are formed and can changed into metamorphic rocks under great heat and pressure. The process of transformation of the rock from one to another is called the rock cycle. There are three major type of rocks

* Igneous rocks
* Sedimentary rocks
* Metamorphic rocks

**Q3:** Which of the following planets shape is considered to be as Geoid?

1. Earth
2. Saturn
3. Neptune
4. Uranus

**Answer:** A

**Solution:**

The earth is the fifth planet of the solar system and it is slightly flattened at the poles. Its shape is recognised as a geoid which means an Earth-like shape. It holds a property of unique planet as the condition facvourable to support life are probably found only at this planet as it is neither too cold or hot.

**Q4:** Where is the world’s largest wetland which sprawl over more than 150,000 km?

1. Mongolia
2. Brazil
3. South America
4. China

**Answer:** B

**Solution:**

Pantanal is Brazil is the world’s largest Wetland and sprawls over more than 150,000 sq km. It is also covered area of Bolivia and Paraguay. Recently it is burning as vegetation compacted under the marshy flood water during the wet season dries out as ponds and lagoons evaporate, leaving flammable deposits underground.

**Q5:** Which of the following revolution related to the management of water resources?

1. White revolution
2. Green revolution
3. Blue revolution
4. Brown revolution

**Answer:** A

**Solution:**

Blue revolution refers to the management of water resources efficiently that can steerup to humanity to achieve drinking water and crop irrigation security. In another terms it is related to Aquaculture or fish farming.

**Q6:** Bharatmala Pariyojana is recently in news. The scheme is launched for which year?

1. 2022
2. 2031
3. 2034
4. 2045

**Answer:** A

**Solution:**

**Bharatmala Pariyojana is an umbrella project for the highways sector with Phase I from 2017 to 2022. A** total of around 24,800 km are being considered in Phase I. In addition, Phase I also includes10,000 km of balance road works under National Highways Development Project. Bharatmala Pariyojana consists of 6 components:

o **Economic corridors development**

o Inter-corridor & feeder roads

o National Corridors Efficiency improvements:

o **Border & International connectivity roads**

o **Coastal & port connectivity roads**

o **Expressways**

**Q7:** Which of the following country is considered to be the largest country in terms of area?

1. Russia
2. USA
3. Canada
4. China

**Answer:** A

**Solution:**

Russia is located in the northern most part of the world and considered to be the largest country in the world with covering one-eighth of the entire land area in the world and also it is the populous country. Most of the part of the country is located above the Arctic circle.

**Q8:** Which article of the constitution gives the protection of linguistic diversity?

1. Article 23
2. Article 29
3. Article 41
4. Article 31

**Answer:** A

**Solution:**

**Protection of linguistic diversity**: Article 29 gives every Indian the right to a distinct

language, script & culture. One language should not be imposed coercively but be

promoted by respecting other language and winning heart and mind of the people.

**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 constitutional amendment act provide restriction on scope of Article 359?

1. 27th
2. 44th
3. 47th
4. 87th

**Answer:** B

**Solution:**

**44th Constitutional Amendment Act** restricted scope of Art 359 in 2 ways:

i. **Art 20 & 21 enforcement can't be suspended**.

ii. Only laws related with emergency protected from being challenged.

**Q11:** Which article mention about that executive power of state vest in Governer?

1. Article 242
2. Article 421
3. Article 154
4. Article 167

**Answer:** B

**Solution:**

**Constitutional provisions**

1. Art 154: Executive power of state vest in Governer exercised by him either directly or through officers subordinate to him in accordance with Constitution.

2. Art 163: Council of Minister headed by CM aid & advise Governer in exercise of his functions, except in such cases where required to function in his discretion [not codified & not define].

**Q12:** Nationally determine contributions- transport initiative for Asia (NDC-TIA) project was launched recently for decarbonizing transport. How many countries are engaged in this project?

1. China, India, Nepal
2. China, India, Vietnam
3. China, Bhutan, Nepal
4. Srilanka, India, Nepal

**Answer:** B

**Solution:**

NDC-TIA project aims at promoting a coherent strategy of effective policies for decarbonizing transport that are co-ordinated among various sector ministries, civil society and private sector.

The project engages in China, India and Vietnam over the period 2020-24. Niti Aayog is the implementing agency of this project in India.

**Q13:** Who among the following is also known as ‘The Future Buddha’?

1. Kshitigriha
2. Amitabha
3. Maitreya
4. Vajrapani

**Answer:** Option C

**Solution:**

There are six Bodhisattvas in the Buddhism and they are:

* **Vajrapani:** It is related to Indra who holds a thunderbolt
* **Avlikitesvara:** It means a person who is Kind-hearted
* **Maitreya:** It refer to the Future Buddha
* **Manjushri:** He holds a book describing paramitas
* **Kshitigriha:** Guardian of purgatories
* **Amitabha:** Buddha of Heaven

**Q14:** Which of the following organization organized ‘Pledge Movement’?

1. Arya Samaj
2. Harijan Sevak Sangh
3. Indian Social Conference
4. Servants of India society

**Answer**: Option C

**Solution:**

Indian Social Conference was founded by M.G. Ranade and Raghunath Rao, the conference met annually from its first session in Madras in 1887 at the same time and venue as the Indian National Congress. It focused attention on the social issues of importance; it could be called the social reform cell of the Indian National Congress. It propelled the "Pledge Movement" to inspire people to take a pledge against child marriage.

**Q15:** Recently which folk art form of dance in Kerala is celebrated online due to covid-19 pandemic?

1. Kathakali
2. Mohiniattam
3. Pulikkali
4. Dhum

**Answer:** C

**Solution:**

Pulikkali is a tiger dance and folk art form of Kerala. It is celebrated this year online due to ongoing covid-19 pandemic. Performer from various state paint themselves as tiger and hunters in bright black, red and yellow color. They dance to the beats of instruments like Udukku and Thakil.

**Q16:** Recently government exempt Farmer Producer Organisation with which tax to realise full benefit?

1. Minimum alternate tax
2. Equalisation tax
3. Merchant discount rate
4. Minimum discount rate

**Answer:** A

**Solution:**

FPO realise full benefit with minimum alternate tax (MAT) to provide full benefit to farmers. MAT was created under the direct tax laws, specifically to bring the ‘Zero- tax paying companies’ under the income tax net. It’s objective is to collect minimum tax from the companies which claims exemptions or deductions under various provisions of the income tax act.

**Q17:** Under which of RBI it has power to shared profit with Union Govt. in form of ‘Dividend’?

1. RBI Act Section 47
2. RBI Act Section 23
3. RBI Act Section 40
4. RBI Act Section 42

**Answer:** A

**Solution:**

From its income, RBI allocates funds for

* Staff retirement fund, provisions for bad loans, depreciation in assets…
* Reserves for contingency (emergency): ~₹ 2.5 Lcr.
* Reserves for Exchange Rate Stability (Technically called “Currency & Gold Revaluation Reserve: ~₹7 lakh cr)

**Q18:** CAG is responsible to which of the following

1. Parliament
2. President
3. Prime minister
4. Chief justice of India

**Answer:** A

**Solution:**

CAG is an agent of parliament and conducts audit of expenditure on behalf of parliament. Therefore he is responsible only to parliament. CAG has no control over the issue of money from the consolidate fund and many department are authorized to draw money by issuing cheque by specific authority from CAG.

**Q19:** Which of the following is not a type of demand in economic goods?

1. Individual demand
2. Joint demand
3. Composite demand
4. Traced demand

**Answer:** D

**Solution:**

**Individual Demand-** Demand by one person / household e.g. 10 kg onion.

**Market Demand-**Total Sum of all households’ demands e.g. 1 lakh kg onions + 1 lakh kg Potatoes**.**

**Joint Demand-** Items used together and bought together. E.g. Car-Petrol, Tea-Sugar, Bread-Butter,

Cigarette-lighter. These are examples of ‘joint-demand’. Here, If car becomes expensive then demand of petrol also falls as less people buy car And vice versa.

**Composite Demand-** Total demand of a good with multiple alternative uses.E.g. Steel → demanded by spoons & cutlery factories, pipe makers, automobile

industry etc**.**

**Q20:** Those debentures in which the whole value is converted into equity shares of a firm or company is called?

1. Partly convertible debentures
2. Partly convertible bonds
3. Fully convertible debentures
4. Fully convertible bonds

**Answer:** C

**Solution:**

Fully convertible debentures are those debentures in which the whole value of debentures is convertible into equity shares of a corporate firm/company. In partly convertible fund only some of the part of debentures shall be eligible for conversion into equity shares.

**Q21:**  On the \_\_\_\_\_\_ birth anniversary of Ramkinkar Baij Ministry of Culture's National Gallery of Modern Art will organize a virtual tour?

1. 54
2. 115
3. 67
4. 30

**Answer:** B

**Solution:**

To commemorate the 115th Birth Anniversary of Ramkinkar Baij Ministry of Culture’s National Gallery of Modern Art will organize a virtual tour titled “Ramkinkar Baij, Journey through silent transformation and expressions” on 26th May 2020. Ramkinkar Baij was one of the most seminal artists of modern India. He was born in Bankura West Bengal.

**Q22:** The world Aquatics championships have been postponed from 2021 to 2022. Where it is going to be held?

1. China
2. Japan
3. Canada
4. South Korea

**Answer:** B

**Solution:**

The international swimming federation has announced next year’s world Aquatics championships have been postponed from 2021 to 2022. The event is going to be held in Fukuoka, Japan on May 13-29, 2022 but now scheduled for July 16 to August 1 next year.

**Q23:** Recently which institution get approval by Ministry of civil aviation to use drone?

1. Tata institute of research and technology
2. Indian institute of sugarcane research
3. Indian institute of science
4. Indian institute of medical research

**Answer:** D

**Solution:**

Ministry of civil aviation has granted a conditional exemption to indian institute of sugarcane research, Lucknow for evaluate drone spraying solution for controlling pest and diseases of sugarcane crop. Earlier similar exemption was given to agricultural areas under PM Fasal Bima Yojana.

**Q24:** The fidelity with which the anatomic structures being examined in Radiographic quality are called?

1. Coating on the image
2. Images on the films
3. MRI of Patient
4. CT scan from x rays

**Answer:** B

**Solution:**

Radiographic quality refers to the fidelity with which the anatomic structures being examined are images on the film.

Three main factors included are:

* Film factors
* Geometric factor
* Subject factor

**Q25:** A method of directly computing the index of the table by using suitable mathematical function called:

1. Double hashing
2. Hashing
3. Merging
4. Insertion

**Answer:** B

**Solution:**

Hashing is a method of directly computing the index of the table by using suitable mathematical function which is known as Hash function. In rehashing we find as empty location by modifying hash function to the colliding symbol.